VOLUME 2 ISSUE 8
AUGUST 2024

ISSN: 2984-9942

Google Scholar

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH

Ignatian International Journal for Multidisciplinary Research supports UNESCO in

PROMOTING LIBERATING & INCLUSIVE LANGUAGES

ISSN: 2984-9942

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH

Google Scholar

Explore the vast realm of human knowledge and innovation through the pages of Ignatian International Journal for Multidisciplinary Research (IIJMR).

Established in 2023, IIJMR aims to provide a venue for the researchers across the globe to get their articles published for network and further study purposes.

This journal is a collection of research articles that transcends the boundaries of individual disciplines to present a harmonious symphony of ideas, insights, and discoveries. It opens exchange of ideas with experts across various fields coming together to unravel the mysteries of our world.

Published monthly, IIJMR bridges the gap between disciplines, fostering a deeper understanding of the complex tapestry of human existence.

Hence, discover the future of research, where collaboration is boundless, networking is borderless, and innovation is limitless.

a publication of

IGNATIAN CENTER FOR CONTINUING EDUCATION

ISSN: 2984-9942

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH

Google Scholar

The Ignatian International Journal for Multidisciplinary Research is a monthly publication published by Ignatian Center for Continuing Education, a training institution recognized by the Philippine government through the Department of Trade and Industry, the Bureau of Internal Revenue, and the Office of Quezon City Mayor

research@ignatianph.com

www.icceph.com/research-journal

Blk 1 Lot 14 Gillian Hills Subdivision, Brgy. 167,
Caloocan City, Philippines 1400

a publication of

IGNATIAN CENTER FOR CONTINUING EDUCATION

EDITORIAL BOARD

MARK POL M. CASTRO, CLSSBB
Chairman

Mr. Castro is the Managing Director of Ignatian Center for Continuing Education (ICCE) which oversees the Ignatian International Journal for Multidisciplinary Research (IIJMR). He is a Certified Lean Six Sigma Black Belt whose 12-year leadership & management experience extends from operation, marketing to product development.

ROXAN T. BAYAN, EdD
Vice Chairman

Dr. Bayan is an Associate Professor and currently the Dean of the College of Education of Isabela State University - Jones Campus.

She obtained her post graduate diploma, Doctor of Education in Language Education Major in English at the Isabela State University where her dissertation "Prospective ESL Teachers' International Certification: Input to Language Teacher Education Curriculum" was awarded as Best Research & Best Dissertation.

Her solid 22 years of teaching experience which includes coaching & training Campus Journalists and giving lectures on Basic English to Technical Writing to Research to Basic Grammar even to law students paved the way for her becoming an accreditor under the Accrediting Agency of Chartered Colleges and Universities of the Philippines (AACCUP).

Dr. Bayan's extensive contribution in the academe specifically in the English language teaching stemmed from her being an outstanding student back in her college days at the Philippine Normal University - Northern Luzon Campus where she graduated Cum Laude. Her prowess in writing and speaking can be traced to her multiple awards in Campus Journalism & Extemporaneous Speaking.

FREDERICK EDWARD T. FABELLA, Phd
Editor-in-Chief

Dr. Fabella is the Research Director of Ignatian Center for Continuing Education, Editorial Board of Novelty Journals based in India, and Peer Reviewer of Science PG based in New York, USA,

Being published in 46 studies internationally and in 11 journals made him chosen by the Philippine Outstanding Delegates as the Most Promising International Social Scientist of 2023.

INTERNATIONAL PEER REVIEWERS

ASIA

NEPAL

Dr. LOK RAJ SHARMA, FMIOASD, FSASS
Associate Professor of English Language & Literature

INDIA

Dr. MANEESH VILAS DESHPANDE
Ph. D. in Computer Science

INDIA

Dr. DURGESH R ANJAN KAR
Ph. D. in Pharmacy

INDIA

Dr. ANIL KUMAR VERMA
MD,Community Medicine

INDIA

Dr. M M BAGALI
PhD in Management / PhD in Social Work / Post Doc in HRM
Senior Professor of Management and Human Resources
Director-Management Studies, MBA Program
East Point College of Higher Education
East Point Group of Institutions

BANGLADESH

Dr. ZAKARIA AHMED
Ph. D in Applied Microbiology & Biotechnology

AFRICA

TANZANIA

Dr. JOHNSON NZAU MAVOLE
Ph. D. in Public health

CAPE VERDE

Dr. EUCLIDES MANUEL LOPES FURTADO
PhD in Psychology

ETHIOPIA

Dr. JUHAR ABRAR SULORO
Senior Researcher and Public Health Emergency Management Expert

EUROPE

Dr. RADMILA JOVANOVIC
Doctor in GeoSciences
Postdoctoral Researcher, Department of Geography
Faculty of Tourism. University of Malaga,
Malaga, Spain

SPAIN

NORTH AMERICA

ALEXANDER G. FOWLER
M.S. Clinical Psychology

USA

CONTENTS

Articles	Pages
3R'S EVERY HOUR: UNMASKING THE VIEWS OF SENIOR HIGH SCHOOL STUDENTS TOWARDS PROPER WASTE MANAGEMENT – Aaliyah Robin Jaque, Mark Andrei Balingit, Kathrina Irish Liam, Jermineryn Canlas, John Abraham Liwanag, Emelita De Jesus, Diana Roxette Dela Cruz, Tyron Jay Membrado, John Louise Marcaida and Carlo Don Daz Perez	1
AUTOMATED ENERGY CUTOFF SYSTEM FOR AUDITORIUM SUSTAINABILITY USING IOT – Margarita Giner, Joel B. Garcera, Mariano Lañada, Rowena Donaire Galzote and Ian Ragodon	14
AWARENESS AMONG THE ELECTIVE OFFICIALS FROM SELECTED BARANGAYS ON THE DEVOLVED FUNCTIONS, SERVICES, AND FACILITIES IN THE PROVINCE OF BATANGAS: BASIS FOR CAPACITY DEVELOPMENT PLAN – Celio C. Francia	27
BEEP BEEP BEEP: STEERING THE PERCEPTION OF JEEPNEY DRIVERS TOWARDS JEEPNEY MODERNIZATION – Mara Raine P. Cunanan, Joshua L. Rosel, Arelly Angel O. Balilo, Louie C. Lugue Jr., Angelo P. Sandot, Renz M. Pamintuan, Sean Danielle D. David, John Louise M. Marcaida and Dexk Michael N. Tayag	48
BEST PRACTICES OF MOTHER TONGUE BASED-MULTILINGUAL EDUCATION IN SAN ANTONIO DISTRICT – Melvin Paul Aunzo-Sinay	64
BOOKLET ON LANGUAGE LEARNING ARTICULATION DEVELOPMENT (BOOKLLAD): ENHANCING READING SKILLS – Claire D. Cadiao and Marie Candy L. Celeste	83
CAPABILITY, OPPORTUNITY, AND MOTIVATION LEVEL IN TABLE TENNIS THROUGH CLUB MODE TEACHING – Qin Weifeng and Janette C. Magalona	94
CARING FOR CANCER PATIENTS AND THEIR FAMILIES: THE LIVED EXPERIENCES OF NURSING STUDENTS – Alexie Rose P. Depacaquivo, Nica Bettina A. Ruaya and Christian Emmanuel Enriquez	108
CHATBOT APPLICATION AND ACADEMIC PERFORMANCE IN PHYSICS – Joselito Y. Bulabos and Victoria C. Millanar	119
CORE BEHAVIORAL COMPETENCIES AND TEACHERS' JOB SATISFACTION: BASIS FOR TEACHER COMPETENCY DEVELOPMENT PLAN – Rosalie W. Ambasa and Gina F. Labitad	132
CULTIVATING CLIMATE CHANGE CONSCIOUSNESS: ASSESSING TEACHERS' AWARENESS AND MITIGATION PRACTICES IN ADDRESSING CLIMATE CHANGE – Sherylene S. Reyes and Bryan DC. Gabriel	178

DESIGN, DEVELOPMENT, VALIDATION AND ASSESSMENT OF PROPOSED COMPETENCY-BASED CURRICULUM FOR BUTTERFLY PRODUCTION LEVEL II – Laurito J. Morales and Liza Marie M. Pacia 191

DEVELOPMENT AND ACCEPTABILITY OF HYDROPONIC GARDEN – Maria Virginia S. Hugo 220

DEVELOPMENT AND VALIDATION OF A SELF-LEARNING MODULE IN ARALING PANLIPUNAN 9 – Aiza Salacup-Policay and Judith R. Garcia 236

DIGITAL LEARNING REVOLUTION: IDENTIFYING THE INFLUENCE OF DEPENDENCY ON ARTIFICIAL INTELLIGENCE TOOLS TOWARDS THE KNOWLEDGE ACQUISITION OF STUDENTS – Daniella Louise D.L. Bacallo, Paul Edward G. Bie, Rhiann Yshin C. Tulabut, Alellie Jireh M. Pineda, Andrei P. Vicente, Arizelle R. De Vera, Ethan Jmiel F. Sawal, John Louise M. Marcaida and Ryan C. Dizon 269

DURABILITY OF LAKATAN (MUSA ACUMINATA) PSEUDO-STEM AS A SUSTAINABLE SOURCE FOR PAPER PRODUCTION: A COMPARATIVE STUDY OF TENSILE STRENGTH, ABRASION, AND THICKNESS – Charlie T. Anselmo, Reygime I. Corpuz, Marjorie A. Aguilar, Jenna Mae B. Boral and Ma. Andrea G. Ingente 294

EDUCATION AND COVID 19 IN THE LENS OF WORKING STUDENTS OF LANTON HIGH SCHOOL: BASIS FOR PROJECT POSITIVE (PEER OUTREACHING OF WORKING STUDENTS AND SPECIALIZED INTERVAL OF TIME SCHEDULE TO INTENSIFY AND VALIDATE EDUCATION IN THIS NEW NORMAL) – Chiloren Mark Y. Parohinog 306

EDUCATORS' MENTAL HEALTH STATE, COPING MECHANISMS AN EDUCATIONAL MILIEU IN THE DISTANCE MODE OF LEARNING – Christian N. Domingo and Maria Elisa T. Alvaro 316

ENHANCING TEACHER PRODUCTIVITY THROUGH SCHOOL SUPPORTS – Cerisa M. Bautista 356

EVALUATION OF THE ONE SAFE FUTURE (1SF) PROGRAM OR OPLAN LIKAS IN CAMARIN RESIDENCES 1, CALOOCAN CITY: A BASIS FOR THE DEVELOPMENT OF AN ACTION PLAN – Lea V. Evangelista and Raul Roland R. Sebastian 379

EXPLORING THE ENTREPRENEURIAL ACUMEN OF YOUNG WOMEN START-UP ENTREPRENEURS IN CALAMBA CITY, LAGUNA – Frances Nicole O. Sanchez and Marie Joy Q. Elomina 401

FORMULATION OF CALAMANSI (Microcarpa) SOAP ENHANCED WITH BLUE TERNATE FLOWER (Clitoria ternatea) – Rebecca Ruiz-Apoy 415

HAMON NG MAG-AARAL KAUGNAY SA PAGKATUTO AT PAGPAPAHALAGA NG PANITIKAN SA FILIPINO – Irish B. Espinosa and Cristina P. Calisang 432

HUMAN RESOURCE PROGRAM IMPLEMENTATION, MOTIVATING STRATEGIES, AND EMPLOYEE PERFORMANCE IN THE GOLDENHIGH-GARMENTS MANUFACTURING CORPORATION: BASIS FOR ENHANCED PROGRAM – Stephen Paulo T. Recinto 458

IMPACT OF STUDENT INTEREST AND MULTIMEDIA INSTRUCTION ON ACADEMIC PERFORMANCE IN MATHEMATICS IN THE MODERN WORLD – Kristine Rayza Amor A. Maputi, Maricar T. Balaba, Czar Aljes Abecia, Welcez Hannah C. Ramos, Julia A. Obedencio, John Ryl M. Rangillas and Paul John B. Panganiban 506

IMPLEMENTATION OF TECHNOLOGY AND LIVELIHOOD EDUCATION (TLE) PROGRAM IN TACURONG CITY DIVISION: ITS IMPACT ON THE HIGH SCHOOL STUDENTS' CAREER PREPAREDNESS – Cherubim C. Cerdana and Jaime Boy U. Ngag, Jr. 523

IMPORTANCE-PERFORMANCE ANALYSIS OF A RESTAURANT MOBILE BOOKING AND RESERVATION APPLICATION – Franz Joseph I. Clemente, Gail Bien Aubrey S. Diño, Nelson S. Gonzales Jr., Raven Jewell Rodilas, Michelle T. Rojas, and John Paul G. Buenaventura 535

IMPROVING DINING SERVICE TO FOSTER CUSTOMER DELIGHT IN RESTAURANTS: AN EXAMINATION OF KEY INFLUENTIAL FACTORS – Analyn F. Sundo 565

IMPROVING THE READING LEVEL OF GRADE VI GRAPPLING READERS THROUGH PROJECT SEL-P (Strategic Enhancement Learning-Package) – Juvy M. Bataliran, Loida M. Villasin and Joy SB Gaza 584

IN-SERVICE TRAINING PROGRAM AND ACADEMIC QUALITY: BASIS FOR TEACHER DEVELOPMENT PLAN – Marivic B. Priolo and Gina F. Labitad 604

KAKAYAHAN SA PAGBIGKAS, PALATULDIKAN AT PAG-UNAWA SA PAGBASA SA FILIPINO – Jessamae V. Recto 630

LEVEL OF AWARENESS OF THE RESIDENTS IN THE IMPLEMENTATION OF DISASTER RISK REDUCTION AND MANAGEMENT PROGRAMS IN POBLACION 1, MABINI, BOHOL, PHILIPPINES – Ily Mae M. Bernales 651

LEVEL OF COMPETENCE AND PERFORMANCE OF NON-TEACHING PERSONNEL IN THE CITY DIVISION OF ILAGAN: A BASIS FOR AN UPSKILLING PROGRAM – Ruby B. Guerrero 658

MALE NURSES' INTENTION TO STAY IN A SPECIFIC HOSPITAL: A CASE STUDY – Czarina Julia C. Montañer, Edil Fe B. Sumile, Lalaine D. Undag, Ian C. Abordo, Donna Belle P. Sumugat and Amelyn Grace M. Maghanoy 715

MARKET STATUS OF UKAY-UKAY AND READY-TO- WEAR BUSINESS IN TAGBILARAN CITY – Michelle C. Cahucom 733

MASTER TEACHERS' INSTRUCTIONAL SUPERVISORY SKILLS AND TEACHERS PERFORMANCE: BASIS FOR SCHOOL SUPERVISORY PLAN – Rosanna Damacino Concepcion and Gina F. Labitad 747

MEDIA EXPOSURE AND PARENTAL MEDIATION: IMPLICATIONS ON KINDERGARTNERS' DEVELOPMENTAL SKILLS – Rezzel Mae A. Montecillo	801
NEWSROOM TO GOVERNMENT: THE CONTRIBUTIONS OF FORMER MEDIA PRACTITIONERS TO PUBLIC SERVICE DELIVERY TOWARDS THE ENHANCEMENT OF TRANSPARENCY AND ACCOUNTABILITY IN THE BUREAUCRACY – Charissa Luci-Atienza	814
PAGSUSURI SA KATEGORYA, KAMALIAN, AT DANAS SA PAGSASALIN MULA SA PILING MAG-AARAL NG SAN NICOLAS NATIONAL HIGH SCHOOL – Necel V. Cagampan and Freddielyn B. Pontemayor	916
PHYSICOCHEMICAL ANALYSIS OF CHARRU MUSSEL (Mytella strigata) POWDER AND ITS ACCEPTABILITY AS KROPEK – Mary Cris J. Gemoros, Junnafe D. Daleon and Nivea Louwah D. Sermona	931
POTENTIALS, RISKS, AND ETHICAL IMPLICATIONS IN THE UTILIZATION OF AI-POWERED TOOLS IN EDUCATION – Genevieve J. Bongcac and Asuncion P. Pabalan	944
PROCESS EVALUATION FOR THE 8-WEEK READING REMEDIATION: A BASIS FOR ENHANCEMENT – Edwin M. Balderas Jr. and Edilhynie M. Jambangan	964
Project BALAY: A NEEDS ASSESSMENT FOR BASIC LITERACY AMONG YOUNG AND ADULT INDIGENOUS PEOPLE – Lorie Jane R. Delos Santos, Dr. Eva V. Briñosa and Enrique T. Magalay, Jr.	1009
READINESS ON ONLINE DISTANCE LEARNING: ITS IMPACT TO THE MATHEMATICS ACHIEVEMENT OF FIRST-YEAR STUDENTS – Jerwin L. Repollo, Jennifer C. Burlado and Romulo G. Doronio	1020
'READ LIKE ME' TO INCREASE THE READING COMPREHENSION OF GRADE IV STRUGGLING READERS – John Kelly F. Madeja, Rizalyn A. Merindad, Jhonnylyn G. Masungca, Krisciel Joy Gonzales, Abigail F. Fruelda and Aboven F. Galacan	1029
REVISITING GRAMMAR-TRANSLATION AND INDEPENDENT LEARNING METHODS IN TEACHING ENGLISH IN THE NEW NORMAL EDUCATION – Reynante M. Enriquez and Eva V. Brinosa	1035
SCHOOL PRINCIPALS' SUPPORT PRACTICES ON TEACHERS' PROFESSIONAL DEVELOPMENT, TEACHERS' COMMITMENT, AND PERFORMANCE: BASIS FOR PROFESSIONAL DEVELOPMENT PROGRAM – Raul B. Chua Jr.	1057
SCIENCE LABORATORY ASSESSMENT: BASIS FOR AN ACTION PLAN – Dionisio E. Briñosa	1075
SECOND LANGUAGE TEACHING ANXIETY, EFFICACY BELIEFS AND MOTIVATION AMONG K-12 ENGLISH TEACHERS – Ericson Macatangay Macapuno and Dolores D. Borras	1095

SENIOR HIGH SCHOOL STUDENTS' MOTIVATION TOWARD SCIENCE LEARNING AND SCIENCE ACADEMIC PERFORMANCE – Hazel T. Mempin, MJ Christian S. Lazaro and Bryan DC. Gabriel 1197

SHARON IN FILIPINO COLLOQUIAL CONTEXT: A SEMANTIC AND LEXICAL DISCOURSE ANALYSIS – James de Jesus, Hazel Ann Pabro, Julie Mae Sapanta, Shantalmae Bacarro and John Louie P. Guimaras 1212

SIPAT-SURI: ALIGNMENT NG MGA KAGAMITANG PAMPAGTATAYA SA FILIPINO SA K TO 12 MOST ESSENTIAL LEARNING COMPETENCIES (MELCs) – Melle L. Mongcopa and Cristina P. Calisang 1225

SNUMBOOK AS HOME TASKS FOR AN ENHANCED NUMERACY LEVEL OF GRADE 7 STUDENTS – Mary Grace M. Buenviaje 1248

SOCIAL MEDIA MARKETING IN THE SELECTED ENTERPRISES IN THE CITY OF SAN PABLO, LAGUNA – Daryl Aimiel A. Amante and Maria Kristina M. Cay 1270

SOLID WASTE MANAGEMENT AWARENESS AND PRACTICES AMONG JUNIOR HIGH SCHOOL STUDENTS – Aira V. Corporal, Charles M. Pangilinan and Bryan DC. Gabriel 1289

SPECIAL SCIENCE SCHOOL SYSTEM (SSSS): IMPLEMENTATION AND CHALLENGES – Cristine M. Cagas and Vera A. Villocido 1308

STATUS OF HEALTH PROGRAMS, ACTIVITIES AND CHALLENGES EXPERIENCED OF PERSONS DEPRIVED OF LIBERTY (PDLS) IN THE CORRECTIONAL FACILITIES IN METRO MANILA – Ma. Ellaine Keith F. Dela Paz, Elrick Arnel G. Acevedo, Clover D. Mendoza, Jannah Nicole M. Rosales, Martin Angelo G. Sales and Elwyn Brian Javier 1326

STRATEGIC ADAPTATION IN THE MODERN ERA: LEVERAGING INTERNAL AUDITOR FOR ENHANCED RISK MANAGEMENT IN ORGANIZATIONAL CHANGE – Antonette Recodig Ranara and Erwin Babaran Quendangan 1351

TEACHERS ENGAGED IN ONLINE BUSINESS IN RELATION TO JOB PERFORMANCE – Nerissa B. Cabarubias 1368

TEACHERS' PRACTICES AND STUDENTS' ACADEMIC ACHIEVEMENT: BASIS FOR SCHOOL DEVELOPMENT PROGRAM – Chiminie R. Salva and Gina F. Labitad 1384

TEACHERS' WORK TASK MOTIVATION, SELF-EFFICACY, AND EFFECTIVENESS: BASIS FOR PROFESSIONAL DEVELOPMENT PROGRAM – Jordan G. Saner and Arnie Christian D. Villena 1421

TEST QUESTIONNAIRE DEVELOPMENT ON SELECTED TOPICS IN CALCULUS 1 – Matthew E. Cañeda, Jonh Jade F. Logrono and Christian D. Culibra 1524

THE EFFECTS OF NEGOTIATION BEHAVIOR ON THE DECISION-MAKING PROCESS OF DISTRIBUTORS WHILE PROVIDING THE PREFERRED CUSTOMER STATUS TO THE WHOLESALER IN BATANGAS – Lea G. Latorre 1538

THE ROLE OF SCHOOL LEADERS IN ENHANCING DIGITAL LITERACY: FOR TEACHERS AND STUDENTS – Lemar A. Ablasa and Rogene K. Liwan 1567

THE TEACHING-LEARNING ENVIRONMENT OF SENIOR HIGH SCHOOL IN THE CITY DIVISION OF ILAGAN: ITS EFFECT ON THE LEVEL OF MOTIVATION AND PERFORMANCE OF STUDENTS AND TEACHERS – Bonabel B. Dacquil 1573

TRANSITIVITY ANALYSIS IN THE 2021 STATE OF THE COLLEGE ADDRESS (SOCA) OF ASSCAT PRESIDENT, DR. JOY C. CAPISTRANO – Mikeen V. Sawe, Evangeline H. Alvarez, Roxan R. Remorosa and Shiryl T. Ytoc 1622

UNDERGRADUATE STUDENTS' SCIENCE ENGAGEMENT IN USING CHATBOT AS PREDICTOR TO THEIR ACADEMIC PERFORMANCE IN CHEMISTRY – Shane T. Sumaway, Reynalyn L. Diaz and Bryan DC. Gabriel 1633

UTILIZATION OF SUBSTITUTION, AUGMENTATION, MODIFICATION, AND REDEFINITION MODEL FOR BACHELOR OF SCIENCE IN TOURISM MANAGEMENT STUDENTS' SPEAKING AND WRITING SKILLS – Ryan Marquez Hilario 1650

WORK ENGAGEMENT, ORGANIZATIONAL COMMITMENT, AND EMPLOYEE DEVELOPMENT PROGRAMS OF RESEARCH AND DEVELOPMENT COMPANIES IN METRO MANILA: BASIS FOR EMPLOYEE RETENTION FRAMEWORK – Edward Jan Paul E. Ebreo 1682

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

3R'S EVERY HOUR: UNMASKING THE VIEWS OF SENIOR HIGH SCHOOL STUDENTS TOWARDS PROPER WASTE MANAGEMENT

Aaliyah Robin Jaque[1], Mark Andrei Balingit[1], Kathrina Irish Liam[1], Jermineryn Canlas[1], John Abraham Liwanag[1], Emelita De Jesus[1], Diana Roxette Dela Cruz[1], Tyron Jay Membrado[1], John Louise Marcaida[2], Carlo Don Daz Perez[2]

[1] Senior High School Department, Our Lady of Fatima University, Philippines
[2] Department of Physical Education, Our Lady of Fatima University, Philippines

https://doi.org/10.5281/zenodo.13373364

ABSTRACT

This study was geared to unmask the views of senior high school students towards proper waste management in a private institution in Pampanga, Philippines. The researchers interviewed 30 senior high school students who voluntarily participated by responding to an open-ended questionnaire. The findings of the open-ended questionnaire deciphered the views of the senior high school students towards proper waste management. This study utilized Braun and Clarke's Thematic analysis. The study revealed five emerging themes that described the views of the senior high school students towards proper waste management, namely: (1) Trash Breaks: Applying Intervals to Classroom Cleanup. (2) Inconsistent Commitment to Continuous Workplace Cleanliness. (3) Disciplinary Measures and Academic Consequences of Inadequate Trash Disposal. (4) Promoting responsible waste management and environmental initiatives (5) Educational Engagement and Behavior Adjustment About Proper Waste Management. The findings offer actionable insights for private institutions, recommending the initiation of eco-friendly programs and educational workshops to improve waste management practices.

Keywords: *3Rs, Senior High School Student, Waste management, School*

INTRODUCTION

Proper waste management presents a significant challenge globally, especially within educational institutions, where fostering responsible citizenship is a priority. The world generates over 2 billion tons of municipal solid waste annually, with a substantial portion ending up in landfills, incinerators, or polluting oceans and natural habitats. As populations grow, so does waste production due to increased consumption, packaging, and use of disposable items. In countries like the Philippines, inadequate waste management persists despite regulations lacking infrastructure, limited resources, and enforcement challenges, resulting in environmental degradation and health risks. Effective waste management is essential for a clean, healthy, and sustainable environment, particularly within educational settings, where students play a pivotal role in shaping sustainable behaviors. The World Bank's (2018) projection of global waste nearly doubling by 2050 underscores the urgent need for effective waste management practices. Students' perspectives on waste management in educational institutions are crucial for understanding and promoting sustainable behaviors, according to Reno (2015). However, despite efforts such as the "CLAYGO" policies, students still struggle with proper waste disposal, as noted by Owojori (2022). Current research lacks a comprehensive study of the impacts of allocating specific break times for teachers, during which students are given dedicated opportunities to properly dispose of their trash and waste materials.

Moreso, interventions are needed to address these challenges, focusing on shaping students' attitudes and perceptions toward waste management, as Owojori (2022) emphasized. Amasuomo and Baird (2015) highlights the importance of education in promoting proper waste disposal practices and increasing awareness. Addressing the gaps in waste management studies, particularly in basic education, is crucial, as highlighted by Bashir (2020). This study aims to fill these gaps by directly investigating student perspectives in private institutions. It seeks to understand student attitudes and behaviors towards the 3Rs (Reduce, Reuse, Recycle) and the factors influencing their participation through surveys and interviews. Additionally, the study aims to identify challenges and barriers hindering student participation, potentially revealing discrepancies between school policies and student practices. By involving the community and fostering a sense of shared responsibility, the researchers aim to contribute to building a sustainable future. To enhance waste management practices in schools, disciplinary measures for improper waste disposal among students are recommended. Allowing sufficient time for waste disposal in appropriate bins and organizing eco-friendly initiatives regularly can promote the principles of the 3Rs. Educating both schools and the public on the value of waste and its impact on the environment is also crucial, as suggested by Kumar et al (2017) implementing these measures can significantly improve waste management practices in educational institutions, contributing positively to the environment. The findings of this research paper aim to add insights to the existing literature on waste management and encourage students to take an active role in sustainability.

Research Questions

The purpose of this study is to unmask students' views towards proper waste management. Specifically, it seeks answers to the following questions:

1. What are the perceptions of students regarding proper waste management practices, including their understanding, attitudes, and behaviors toward waste disposal and recycling?
2. What challenges or barriers do senior high school students face in adopting and practicing the 3Rs (Reduce, Reuse, and Recycle) principles consistently throughout the school day?
3. How satisfied are students with the current waste management practices at the private institution located at San Fernando, Pampanga?

METHODOLOGY

This study utilized a qualitative research design to investigate the depth, richness, and complexity inherent in students' perceptions, opinions, and attitudes toward waste management practices. By employing qualitative methods, the researchers aim to capture the nuanced and multifaceted views of senior high school students regarding waste management, including reducing, reusing, and recycling practices. Previous research underscores the importance of understanding student perspectives on environmental initiatives within educational settings (Brown, 2020). Brown's (2020) study highlights that students' attitudes and behaviors toward waste management can significantly influence the success of such initiatives. To comprehend how students experience waste management in their schools, this study employed a phenomenological approach. This method, as described by Team (2023), prioritizes capturing the unique perspectives, beliefs, and feelings of students. It aims to go beyond data collection, seeking to grasp the subjective meaning students attach to waste management practices.

Meanwhile, the participants for this study were 30 senior high school students from a specific private institution, purposively selected based on specific criteria relevant to the research question. The focus was on students aged 15 to 18 years old, typically in Grades 11th and 12th, within this institution. Senior high school students represent a critical stage in developing environmental consciousness and personal responsibility (DeJonckheere, 2019). Participants of this study were chosen using purposive sampling technique. Purposive sampling, as described by Arikunto (2014), involves selecting samples based on specific objectives rather than random selection. With purposive sampling, the researcher selected participants based on the needs and goals of the study. The use of purposive sampling in this study is appropriate because it allows the researcher to establish specific criteria for selecting potential participants. For this study, semi-structured interviews were conducted with senior high school students to explore their views on proper waste management. This method balances flexibility and structure, allowing for in-depth exploration of predetermined themes while permitting participants to

express their perspectives freely. Before each interview, the researchers ensure informed consent and schedule sessions in private settings to create a comfortable environment. Using open-ended questions, the researchers discussed students' perceptions, experiences, challenges, and suggestions regarding waste management practices within their school environment (Nandan, 2017). The information obtained from the participants' feedback was systematically collected, transcribed, arranged, scrutinized, and interpreted to draw meaningful insights, employing Braun and Clarke's (2006) thematic analysis approach. According to Braun and Clarke (2006), this method is frequently used in qualitative research because it provides insightful and comprehensive findings. These key steps include “familiarization, coding the data, generating initial themes, reviewing the themes, naming and defining the themes, and writing up the report.”

RESULTS AND DISCUSSION

Theme 1: Trash Breaks: Applying Intervals to Classroom Cleanup.

In the bustling atmosphere of classrooms, where curiosity fuels learning and collaboration, the importance of cleanliness often fades into the background amid ongoing discussions. However, it's vital to acknowledge that implementing "trash breaks" is essential. Cluttered spaces can impede collaborative learning, while disorganization and a lack of hygiene can cause discomfort and stress, disrupting student focus and motivation. Neglected classrooms may even suggest an indifference toward the learning environment, shaping students' perceptions of school and their educational journey. Therefore, integrating "Trash Breaks" emerges as a practical solution to effectively address these challenges. Mian et al. (2017) highlights that the physical condition of both home and school environments reflects students' attitudes towards their surroundings. A cleaning rota, particularly beneficial for primary school students, as proposed by the Fidelis Group, assigns each student a day to tidy the classroom, fostering a sense of responsibility for maintaining a conducive learning space. Moreover, the authority of the teacher within the classroom is paramount in initiating such initiatives. Debrah (2020) emphasizes that teachers' knowledge and awareness play a crucial role in promoting sustainable education and environmental sustainability goals. Sacrificing just five minutes of class time for a trash break, led by the teacher, can significantly contribute to maintaining a clean and organized learning environment, while also instilling in students the importance of environmental responsibility.

Subtheme 1.1: Empowering Teachers as Environmental Stewards

Within the classroom environment, teachers wield significant influence not only in imparting knowledge but also in shaping students' attitudes toward their surroundings. By taking proactive steps such as initiating "Trash Breaks," teachers can actively foster environmental stewardship among students. According to Joshi and Ahmed (2016), teachers play a pivotal role in shaping the lives of their students, influencing not only their

academic development but also their personal growth and character formation. Beyond the classroom, teachers often serve as mentors, guides, and role models, leaving an indelible impact that extends far beyond the curriculum.

Theme 2: Inconsistent Commitment to Continuous Workplace Cleanliness

Adhering to the "clay-go" or "clean as you go" policy should be a universal standard expected of everyone in any environment, not just schools. This simple principle of properly disposing of one's waste and leaving a space clean after using it is a fundamental aspect of environmental stewardship and personal accountability. However, in schools, many students blatantly disregard this policy, leaving classrooms, hallways, and common areas littered with trash and debris. Discarded food wrappers, drink containers, and other refuse litter surfaces, quickly undoing custodial efforts to maintain cleanliness. This pervasive lack of personal responsibility severely undermines schools' ability to achieve continuous cleanliness standards. Cultivating a culture where the clay-go policy is universally accepted as the baseline expectation and holding individuals accountable is crucial, as failing to implement even this basic tenet findings in unsightly, unsanitary conditions between cleaning cycles. Moreover, research studies have shed light on the alarming disregard for proper waste disposal practices among students in educational settings. According to Okoye (2015), undergraduate students frequently engage in the illicit and improper disposal of waste materials within their institutions, heedless of the potential ramifications for human health and the environment. This behavior demonstrates a lack of environmental consciousness and a disregard for cleanliness standards. Furthermore, Alberto et al. (2020) emphasizes that the principle of "clean as you go," which involves properly disposing of one's waste and leaving spaces tidy after use, should be a universally upheld practice, transcending specific environments. However, many students fail to adhere to this fundamental tenet, contributing to the cycle of uncleanliness that custodial staff must continually address. These research findings underscore the need to cultivate a culture of personal accountability and environmental stewardship among the student body to uphold basic cleanliness protocols.

Subtheme 2.1 Cultivating Environmental Stewardship and Accountability in Students

A lack of environmental awareness and personal accountability plagues many students, leading them to disregard proper waste disposal protocols like the "clean as you go" policy. This finding is based on littered campuses and unsanitary conditions. Research highlights the importance of addressing this issue holistically. Syah & Edinov (2019) found student discipline to be a key factor influencing clean behavior and adherence to waste management guidelines. Additionally, Gusti (2016) revealed a relationship between students' knowledge levels and their attitudes towards sustainable waste management practices. To cultivate a culture of environmental stewardship, schools must integrate environmental education across curricula, implement incentive systems for positive behaviors, promote student-led cleanliness initiatives, and encourage collaborative solutions developed by students, faculty, and staff. Tackling both disciplinary aspects and knowledge gaps can foster a generation of environmentally conscious individuals who

take personal responsibility for maintaining clean surroundings.

Theme 3 Disciplinary Measure and Academic Consequences of Inadequate Trash Disposal

In educational settings, maintaining a clean and hygienic environment is essential for fostering a conducive learning environment. However, inadequate trash disposal practices among students pose significant challenges to this endeavor. By examining disciplinary actions taken by educators in response to improper waste management, the researchers aim to understand the implications for student behavior and academic performance. This does not only emphasize the importance of promoting responsible waste management habits among students but also draws attention to the possible consequences for educational institutions. A study by Gouge (2019) found that improper waste management in schools impacts students' concentration and academic performance. Moreover, the study revealed a correlation between the cleanliness of school environments and students' sense of pride and responsibility, highlighting the need for effective waste management strategies to promote positive behavior among students.

Subtheme 3.1 Student Accountability and Responsibility.

This sub-theme focuses on exploring the extent to which students are held accountable for their trash disposal habits and the influence of this accountability on their behavior and academic performance. According to Utami, (2020), they found that students who perceived themselves as accountable for maintaining a clean environment were more likely to adhere to waste management guidelines and engage in responsible disposal practices. Furthermore, the study revealed a positive correlation between students' sense of accountability and their academic performance, suggesting that responsible behavior extends beyond environmental stewardship to encompass broader aspects of student conduct and achievement. In a related study, Mayjaro (2018), investigated the effectiveness of disciplinary measures in promoting accountability among students with regard to waste management. Additionally, educators emphasized the importance of fostering a sense of responsibility among students through positive reinforcement and proactive communication about the consequences of improper waste disposal.

Theme 4: Promoting Responsible Waste Management and Environmental Initiatives

Waste segregation, or the separation of different types of waste at the source, plays a crucial role in responsible waste management and environmental initiatives, particularly in school settings. Proper waste segregation ensures that recyclables, organic waste, and non-recyclables are handled appropriately. Within schools, effective waste segregation practices can have far-reaching impacts on reducing overall waste volume, cultivating environmental awareness, enabling recycling and composting efforts, and influencing the broader community's waste management approach. The potential benefits of improving waste segregation in schools are significant. Schools play a pivotal role in promoting responsible waste management through effective segregation practices. Dedicated bins

for separating recyclables, organic waste, and non-recyclables must be placed strategically across campus.

Moreover, educational initiatives like workshops and activities foster understanding among students about proper segregation and its environmental impact. Involving student-led environmental clubs cultivates ownership and peer learning. Partnering with local waste management stakeholders ensures streamlined collection and processing of segregated waste streams. Regular assessments identify areas for improvement, enabling continuous program optimization. By addressing these key aspects, schools can ingrain sustainable waste segregation habits from an early age. Implementing effective waste segregation in schools involves several key components supported by recent research. Providing proper infrastructure like clearly labeled bins for separating recyclables, organics, and non-recyclables across campus is essential (Kaza et al. 2018). Educational initiatives through workshops and activities raise awareness of segregation's importance. Crucially, "student-led initiatives and peer education are effective in promoting waste segregation practices and instilling a sense of environmental responsibility". Involving student clubs and green teams cultivates ownership and drives engagement. Collaborating with local waste authorities streamlines segregated waste handling. Regular monitoring evaluates program efficacy for continual improvement. By combining infrastructure, education, student leadership, partnerships, and monitoring mechanisms, schools can successfully institutionalize comprehensive waste segregation, as demonstrated by the latest studies.

Subtheme 4.1 Empowering Youth for Sustainable Waste Management

The involvement of young people is crucial in preserving and sustainably managing natural resources. According to Bundhoo, (2018) empowering the youth to embrace responsible waste management and environmental stewardship is essential. By instilling environmental consciousness, knowledge, and individual responsibility, we can nurture a generation committed to safeguarding our planet. Ardoin et al. (2022) emphasize that environmental education goes beyond simply imparting information; it involves enhancing environmental attitudes, awareness, knowledge, and skills to inspire proactive environmental engagement.

Theme 5: Educational Engagement and Behaviors Adjustment About Proper Waste Management

Waste management is a major problem that impacts the environment, human health, and the next generation. The purpose of this research study is to Senior high school students about appropriate waste management techniques. In this study, participants will gain knowledge about the advantages of proper waste handling as well as the consequences of incorrect disposal through engaging in workshops, educational seminars, putting more trash bins, and practical exercises. The goal is to encourage a change in wasteful attitudes and actions. The aim is to make student’s future cleaner, greener, and more sustainable. Throughout the educational activity, students will be exposed to a myriad of learning opportunities aimed at broadening their perspectives on waste management.

According to Monegro (2024), Effective recycling is not merely a matter of collecting waste; it also requires meticulous categorization to maximize the potential for reusing material and minimizing waste sent to landfills. Workshops will offer hands-on experiences, allowing students to actively engage with waste sorting, recycling processes, and composting methods. Educational seminars will delve into the environmental and health impacts of improper waste disposal, shedding light on the urgency of adopting sustainable waste management practices. Practical exercises will provide students with the chance to apply their newfound knowledge in real-world scenarios, reinforcing the importance of responsible waste handling.

Subtheme 5.1 Awareness and Knowledge of the 3R's Among the Senior High School Students

Awareness and knowledge of the 3Rs (reduce, reuse, and recycle) among the senior high school students. This sub-theme explores the effects of integrating senior high school student perceptions and attitudes in terms of the 3Rs (reduce, reuse, recycle) and waste segregation education for senior high school students. And examines how the teacher affects the student waste segregation practices and the significant impact on adding senior high school students' drive and motivation towards learning because, according to Ike et al. (2018), educating people through information dissemination on how to handle produced solid waste has become essential.

Conclusions

Based on the study's findings the following conclusions were formulated:

1. This study reveals diverse student attitudes toward waste management. Many students understand its importance and support recycling, but challenges include a need for more awareness and limited recycling facilities. Improving education and accessibility and fostering responsibility can enhance sustainable behaviors on campus.
2. Infrequent breaks for trash disposal hinder senior high school students' consistent practice of the 3Rs (Reduce, Reuse, Recycle) during the school day. Providing structured breaks or designated times for waste disposal could improve adherence to sustainable practices and foster a more environmentally conscious school culture. Addressing these practical challenges is crucial to promoting sustainable behaviors among students.
3. Based on the findings, the researchers conclude that student's express dissatisfaction with the current waste management practices. They observe inconsistencies in trash segregation by waste custodians and note similar issues in the cafeteria. Additionally, students advocate for the introduction of classroom

trash bins and urge teachers to take a more active role in waste management initiatives.

Recommendations

The findings and discussions of this study offer practical and theoretical suggestions for (a) educational practices and (b) forthcoming research endeavors in the field of effective waste management.

1. Students can organize and participate in awareness campaigns within their schools to promote proper waste segregation practices. These campaigns can include informative sessions, posters, and interactive activities to educate their peers about the importance of separating recyclable materials from non-recyclables. Students can take the initiative to establish and maintain recycling programs within their school premises. They can collaborate with school administrators to set up recycling bins in strategic locations and coordinate regular collections. Additionally, students can organize recycling drives to collect recyclable materials from their classmates and ensure they are properly processed for reuse or recycling.
2. Environmental advocates should actively collaborate with educational institutions to develop and implement comprehensive environmental education and awareness programs. These programs should be tailored to address the specific needs and challenges identified in the study, such as enhancing students' knowledge of proper waste management practices, promoting the 3Rs (Reduce, Reuse, and Recycle), and fostering a culture of responsibility towards environmental stewardship. Environmental advocates can leverage their expertise and resources to create engaging and informative educational materials, organize workshops, and provide training for educators. Additionally, they should encourage and support the involvement of student organizations in environmental initiatives, fostering a sense of ownership and empowerment among the student community.
3. Waste custodians can actively demonstrate responsible waste management practices by consistently segregating their trash properly and using designated recycling bins. By being visible proponents of waste segregation, they can also encourage others to adopt similar behaviors through positive reinforcement and by highlighting the environmental benefits of waste segregation.
4. Educational institutions bear a significant responsibility in promoting sustainable waste management practices among there. They should prioritize the implementation of structured break times or designated periods during the school day, allowing students ample opportunity to dispose of their trash properly. This measure directly addresses the identified barrier hindering students' consistent adoption of sustainable practices. Furthermore, institutions should provide adequate and accessible recycling facilities on campus, ensuring that students have convenient options for recycling various materials.
5. Clear labeling and guidance on recycling procedures should be provided to encourage
   active participation. Institutions should also review and enhance their overall waste

management strategies, addressing concerns raised by students regarding inconsistencies in trash segregation and the lack of classroom trash bins. Regular training and monitoring of janitorial staff, as well as the installation of appropriate waste receptacles in classrooms, could help address these issues

6. Future researchers concentrate on informing school premises about the significance of trash reduction, segregation, and recycling. Additionally, future researchers should collaborate with local businesses to implement sustainable practices and encourage students to participate in community clean-up initiatives, fostering a culture of environmental responsibility both within and beyond the school walls. Future researchers examine the viewpoints of different school community stakeholders, such as students, instructors, administrators, and janitors, in order to learn about their experiences, worries, and recommendations for waste management procedures. In addition to developing methods for sustainable resource management and conservation, research may concentrate on comprehending the effects of environmental degradation on ecosystems and human beings.

Compliance with Ethical Standards

This research strictly adheres to the ethical standards set by the institution and the body of knowledge. All information and data coming from the respondents are solely for academic purposes only. In line also with the Data Privacy Act of 2012, the researchers strictly preserved the anonymity and confidentiality of the respondents.

Acknowledgments

We extend our sincere appreciation to the individuals and organizations whose steadfast support and encouragement have been the cornerstone of this paper. Their unwavering commitment and invaluable assistance in various capacities have been pivotal in bringing this action research to fruition. To Mr. John Louise Marcaida, our esteemed subject teacher, whose guidance has made the research process to second nature, we are profoundly grateful. Your dedication to teaching and your passion for research have been a source of inspiration and admiration. To Mr. Jefferson Andaya, we extend our heartfelt gratitude for your invaluable support in approving our letter to conduct this study. Without your endorsement, this paper would not have come to fruition, and we are deeply appreciative of your assistance. We would also like to express our sincere gratitude to the participants of the study. Their invaluable cooperation and assistance were integral to the successful completion of the paper. Lastly, we wish to convey our heartfelt appreciation to our families and friends, whose unwavering support has been our source of strength throughout this endeavor. Their moral, physical, and financial support have

been our pillars of strength, and we are profoundly grateful for their unwavering encouragement.

REFERENCES

Alberto et al. (2020). Effectiveness of “Clean as You Go” Policy in Improving the Cleanliness of the Classroom in Bestlink College of the Philippines. Ascendens Asia Singapore – Bestlink College of the Philippines Journal of Multidisciplinary Research, 2(1).

Amasuomo, E., & Baird, J. (2016). The concept of waste and waste management. *J. Mgmt. & Sustainability*, *6*, 88.

Ardoin, N. M., Bowers, A. W., & Gaillard, E. (2020). Environmental education outcomes for conservation: A systematic review. Biological Conservation, 241, 108224. https://doi.org/10.1016/j.biocon.2019.108224

Arikunto, S. (2014). Dasar-dasar Evaluasi Pendidikan. Bumi Aksara, Jakarta.

Bashir, M.J.K., Jun, Y.Z., Yi, L.J. et al. Appraisal of students’ awareness and practices onwastemanagement and recycling in the Malaysian University’s student hostel area. J Mater Cycles Waste Manag 22, 916–927 (2020). https://doi.org/10.1007/s10163-020-00988-6.

Braun, V. & Clarke, V. (2017). Thematic analysis. *The journal of positive psychology*, *12*(3), 297-298.

Brown, P. D. (2015). Garbage: How population, landmass, and development interact withculturein the production of waste. Resources, Conservation and Recycling, 98, 41–54.

Debrah, J. K., Vidal, D. G., & Dinis, M. A. P. (2021). Raising Awareness on Solid Waste Management through Formal Education for Sustainability: A Developing Countries Evidence Review. Recycling, 6(1), 6. https://doi.org/10.3390/recycling6010006

DeJonckheere, M., & Vaughn, L. M. (2019, March 1). Semistructured interviewing in primary care research: A balance of relationship and rigour. Family Medicine and Community Health. https://doi.org/10.1136/fmch-2018-000057

Gouge, D. H. (2023). Improving environmental health in schools. Current Problems in Pediatric and Adolescent Health Care, 103366. https://doi.org/10.1016/j.cppeds.2023.101407

Gusti, A. (2016). The relationship of knowledge, attitudes, and behavioral intentions of sustainable waste management on primary school students in the City of

Padang, Indonesia. International Journal of Applied Environmental Sciences, 11(5), 1323-1332. https://doi.org/0973-6077

Ike, C. C., Ezeibe, C. C., Anijiofor, S. C., & Daud, N. N. (2018). Solid waste management in Nigeria: problems, prospects, and policies. *The Journal of Solid Waste Technology and Management*, *44*(2), 163-172.

Joshi, R., & Ahmed, S. (2016). Status and challenges of municipal solid waste management in India: A review. *Cogent environmental science*, *2*(1), 1139434.

Kaza, S., Yao, L., Bhada-Tata, P., & Van Woerden, F. (2018). *What a waste 2.0: a global snapshot of solid waste management to 2050*. World Bank Publications.

Kumar, S., Smith, S. R., Fowler, G., Velis, C., Kumar, S. J., Arya, S., ... & Cheeseman, C. (2017). Challenges and opportunities associated with waste management in India. *Royal Society Open Science*, *4*(3), 160764.

Mayjaro, A. (2018). Students' waste disposal: A disciplinary problem in tertiary institutions. Project tulong.

Mian, M. M., Zeng, X., Nasry, A. A. N. B., & Al-Hamadani, S. M. (2017). Municipal solid waste management in China: a comparative analysis. *Journal of material cycles and waste management*, *19*, 1127-1135.

Monegro, R. H., Graham, S. R., Steele, J., Robertson, M. L., & Henderson, J. A. (2024). Hands-On Activity Illustrating the Sorting Process of Recycled Waste and Its Role
in Promoting Sustainable Solutions. *Journal of chemical education*, *101*(5).

Nandan, A., Yadav, B. P., Baksi, S., & Bose, D. (2017). Recent scenario of solid waste management in India. *World Scientific News*, (66), 56-74.

Okoye, C.O. (2015), STUDENTS' WASTE DISPOSAL: A DISCIPLINARY PROBLEM IN TERTIARY INSTITUTIONS.

Owojori, O. M., Mulaudzi, R., & Edokpayi, J. N. (2022). Student's knowledge, attitude, and perception (KAP) to solid waste management: A survey towards a more circular economy from a rural-based tertiary institution in South Africa. Sustainability, 14(3), 1310. https://doi.org/10.3390/su14031310

Reno, J. (2015). Waste and waste management. Annual Review of Anthropology, 44(1), 557-572.

Syah & Edinov (2019), The contributions of discipline and environmental knowledge on clean behavior of students in Public Elementary School 19 Kampung Baru Pariaman, West Sumatra.

Team, D. E. (2023, February 5). Semi-structured interview: Explanation, examples, & how-to. Semi-Structured Interview: Explanation, Examples, & How-To.

Utami, S. S., Nuh, M., & Sentanu, I. G. (2020). Students' sustainable waste management behaviors: Comparison between vocational and Public High School. Dinamika Pendidikan, 15(2), 148–163.https://doi.org/10.15294/dp.v15i2.25261

World Bank. (2018). Global waste to grow by 70 percent by 2050 unless urgent action is taken: World Bank report. https://www.worldbank.org/en/news/press-

release/2018/09/ 20/global-waste-to-grow-by-70-percent-by-2050-unless-urgent-action-is-taken-world-bankreport.

APA Citation:

Jaque, A. R., Balingit, M. A., Liam, K. I., Canlas, J., Liwanag, J. A., De Jesus, E., Dela Cruz, D. R., Membrado, T. J., Marcaida, J. L., & Perez, C. D. D. (2024). 3R'S EVERY HOUR: UNMASKING THE VIEWS OF SENIOR HIGH SCHOOL STUDENTS TOWARDS PROPER WASTE MANAGEMENT. Ignatian International Journal for Multidisciplinary Research, 2(8), 1592–1604. https://doi.org/10.5281/zenodo.13373364

johnlouisemarcaida@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

AUTOMATED ENERGY CUTOFF SYSTEM FOR AUDITORIUM SUSTAINABILITY USING IOT

Margarita Giner, Joel B. Garcera, Mariano Lañada, Rowena Donaire Galzote, Ian Ragodon

University of San Agustin, Iloilo City, Philippines

https://doi.org/10.5281/zenodo.13192707

ABSTRACT

University auditoria are known for significant energy waste due to lights and equipment left on post-events. Traditional management methods, which rely on manual shut-off, result in inconsistent energy savings and inefficiencies. To address this issue, our research introduces an Automated Energy Cutoff System for Auditorium Sustainability Using IoT. This system leverages Internet of Things (IoT) technology, with an ESP32 microcontroller serving as the central hub. The ESP32 controls a servo motor that physically cuts power according to pre-programmed schedules or manual commands, providing a reliable and consistent approach to energy management. Users can access the AECS via a web interface on their smartphones or laptops, enabling them to set schedules and control the system remotely. This dual functionality of automated scheduling and manual override ensures both efficiency and flexibility in power management. The AECS not only promotes efficient energy use but also significantly reduces operational costs, supporting the university's sustainability goals. By automating power management and offering remote control capabilities, our system sets a new standard for energy efficiency in educational institutions. This research underscores the importance of integrating IoT solutions to foster responsible energy consumption, thereby contributing to broader sustainability efforts. The AECS project exemplifies how innovative technology can be harnessed to achieve substantial energy savings and operational efficiency in university settings.

Keywords: *Energy Efficiency, Energy Management, Internet of Things (IoT), Auditoriums, Sustainability, Automation*

INTRODUCTION

University auditoriums serve as vibrant centers for learning, cultural exchange, and fostering community engagement. However, their advanced lighting systems and equipment contribute significantly to the university's energy footprint. Traditional practices rely on manual shut-off procedures, which are susceptible to human error and often lead to lights and equipment being left operational even during unoccupied periods. This persistent energy waste translates to substantial financial burdens for the university.

The Internet of Things, or IoT, is a system of interconnected (networked) devices that can communicate with each other, sharing information. It can include sensors, cameras, robots, and user interfaces such as mobile phones. This integrated system of devices can either be local or global. (Arduino.cc, 2024)

This study presents the design and implementation of an Automated Energy Cutoff System (AECS) specifically tailored for university auditoriums. Leveraging the power of Internet of Things (IoT) technology, the AECS addresses the challenge of unchecked energy consumption. The system employs a network of ESP32 microcontrollers, servo motors and intelligent devices to meticulously monitor auditorium usage patterns and automatically regulate power consumption based on occupancy. This automation not only drastically curtails energy waste and translates to cost savings, but also eliminates the need for manual shutdowns, streamlining operational efficiency. Furthermore, users can effortlessly schedule power-off times with a simple click on their mobile devices.

Sets of various smart sensors allow schools to save money on power consumption, for example, by automatically switching lights off if no one is around. IoT sensors also guarantee safety from fire, short circuits, and other accidents by instantly identifying them and sounding the alarm to swiftly correct the situation. (Cogniteq, 2024)

The AECS transcends mere financial benefits. It aligns seamlessly with the university's unwavering commitment to sustainability. By implementing a responsible energy management system within its auditoriums, the university aspires to serve as a beacon of inspiration for the broader educational sector, advocating for the adoption of similar practices. Embracing IoT technology for energy optimization is a pivotal step towards establishing a more sustainable and resource-efficient campus environment.

METHODOLOGY

This project aims to optimize energy consumption in university auditoriums by implementing an IoT-based Automated Energy Control System (AECS). By reducing

energy usage, we expect to lower costs and minimize environmental impact. This system will demonstrate the potential of IoT technology in achieving sustainability goals within campus facilities.

A dedicated mobile application empowers users with real-time access to sensor data and remote control over connected devices, promoting active engagement in energy-saving practices. The system effectively addresses phantom power consumption by powering down electrical sockets during non-working hours, resulting in substantial energy savings (Nageya et al, 2023).

To accomplish this, we developed an IoT system utilizing an ESP32 microcontroller to control a switch via a servo motor. The system includes a web-based user interface that can be accessed through a dedicated access point or an existing network. Users can manually operate the switch or set automated schedules using a Real-Time Clock. For added convenience, a physical button also controls the switch, but the web interface remains crucial for system configuration and management.

A. System Architecture and Design

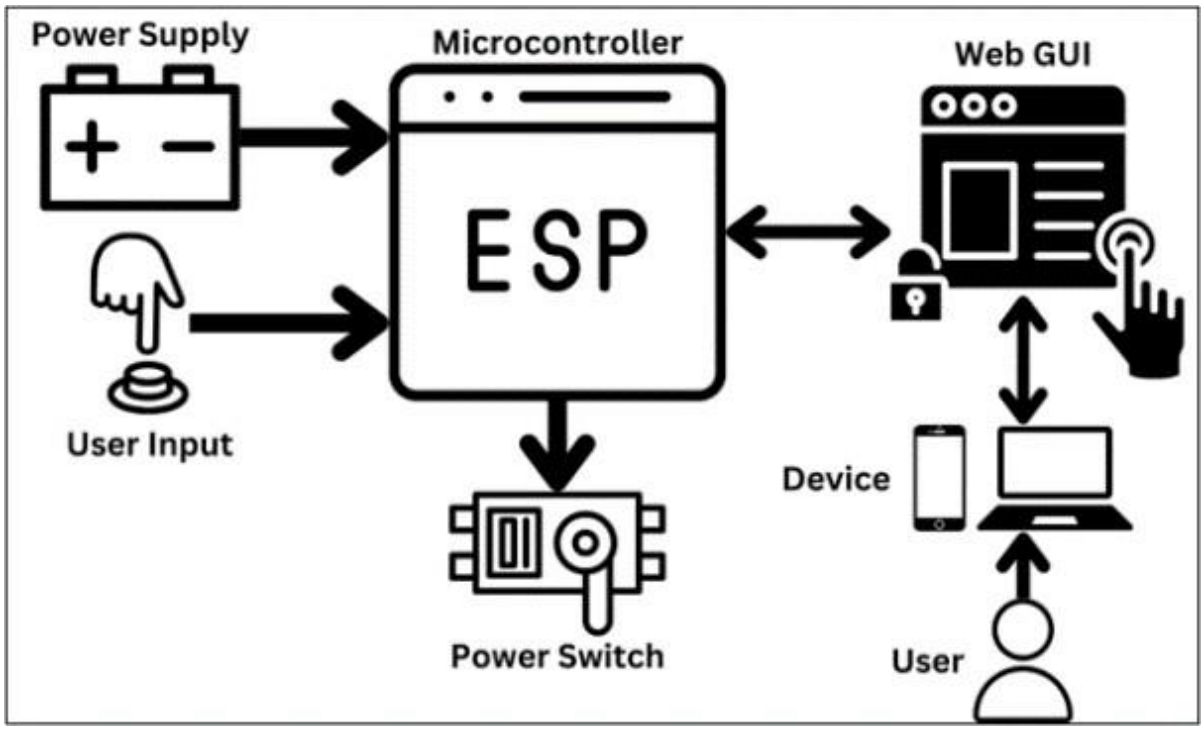


Fig. 1. System Architecture of Automated Energy Cutoff System for Auditorium Sustainability Using IoT

The ESP32 is a popular family of wireless microcontroller chips developed by the Chinese chip maker Espressif. It's a very affordable solution for use in commercial products

especially considering its high level of performance and extensive features. The Espressif ESP WiFi family of microcontrollers started with the original ESP8266 which embedded a single-core microcontroller with a WiFi radio. (Teel, 2024)

The automated power system architecture consists of several key components working together to provide scheduled and manual control of the power supply. The ESP32 microcontroller, powered by its dedicated power supply, serves as the central controller, managing the overall system. A push button allows for manual switching of the power supply, while a servo motor physically switches the power on and off based on commands from the ESP32. The ESP32 also functions as an access point, enabling users to connect their devices, such as phones or laptops, to a Web GUI where they can schedule power on/off times and control the system remotely. This setup allows users to easily manage their power supply, ensuring efficient energy usage with both automated scheduling and manual override options.

Hardware

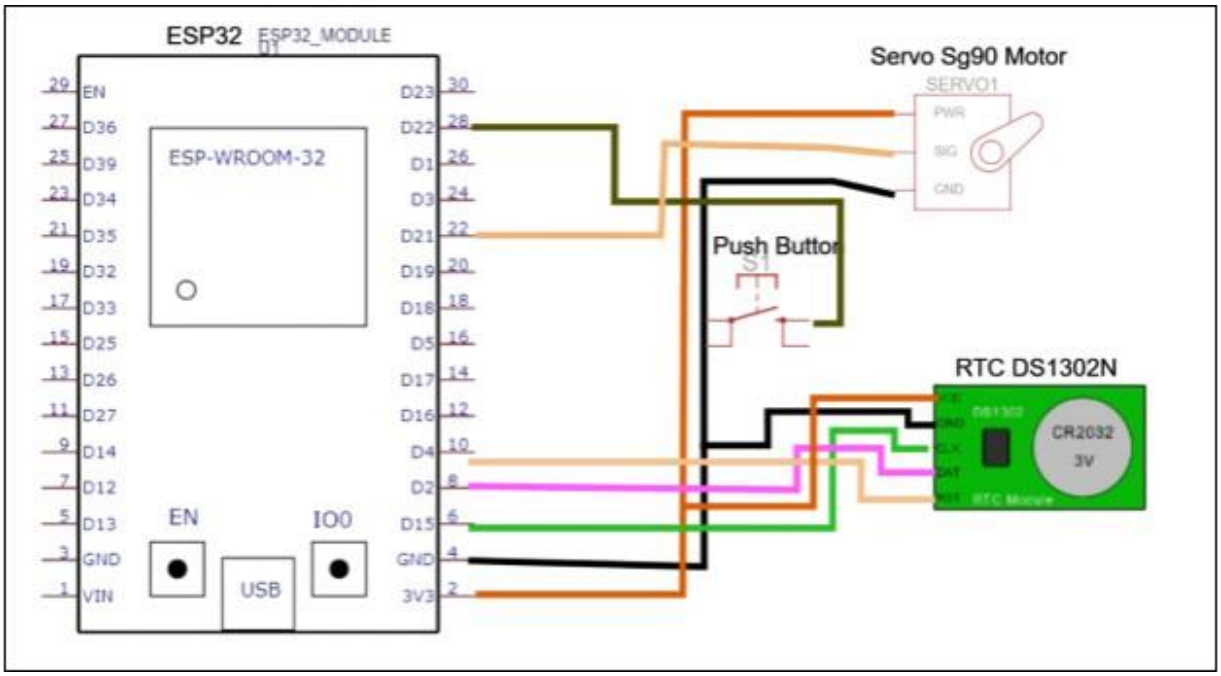


Fig.2. System Schematic Diagram Power System

Workflow

Upon initialization, the ESP32 activates the RTC module, servo motor, and push button components. An initial schedule for power on/off times is loaded into the ESP32's memory. Subsequently, the RTC continuously provides the current time to the

microcontroller. The ESP32 then compares this real-time data to the stored schedule. If a match is found, a signal is transmitted to the servo motor to control the power supply accordingly. Alternatively, users can manually override the automated schedule by pressing the push button. The ESP32 detects this input and either adjusts the programmed schedule or directly commands the servo motor to modify the power supply state.

RTCs are used in a variety of applications where they play a critical role in keeping accurate track of the current time while also providing alarms, timers, and interrupt functions and helping to reduce power consumption. (ECS INC International, 2023)

Servo motors are geared DC motors that have an integrated servomechanism with a feedback loop to allow precise positioning of the motor shaft. A high gear ratio allows a small servo to have an impressive torque rating. (Workshop, 2023)

Use Case

- Scheduled Power Management: The system ensures that power is supplied or cut off at specific times of the day, optimizing energy usage.
- Manual Override: Users can manually control the power supply if needed, providing flexibility and convenience

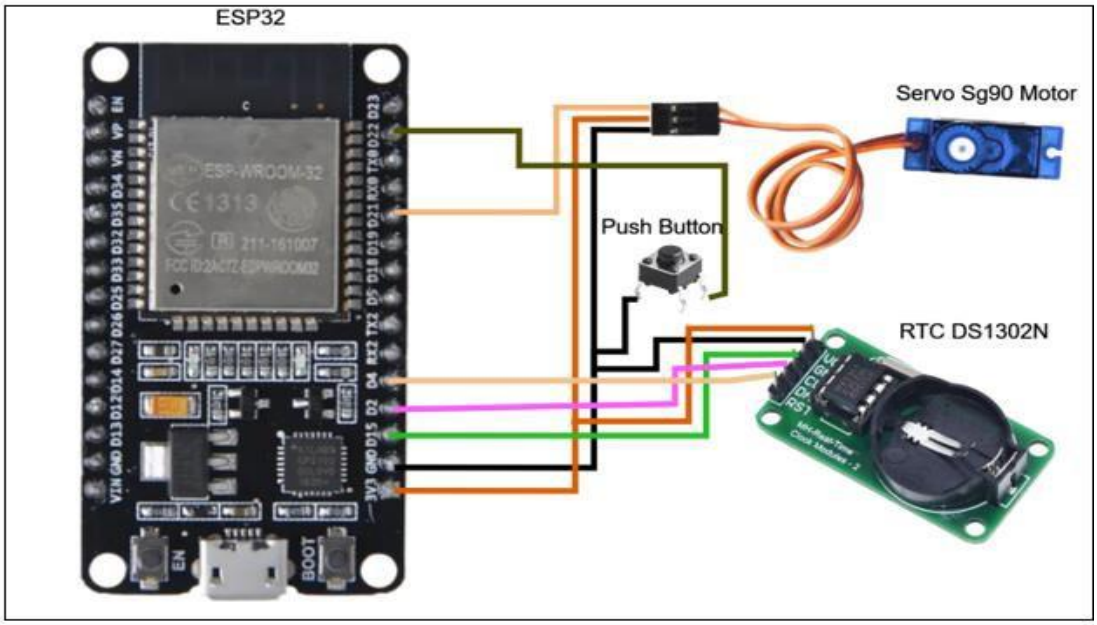


Fig.3. System Connection Power System

The ESP32 microcontroller, following its program, reads the accurate time from the RTC module, controls the servo motor's movement, and responds to commands you give through the push button.

Components:

This system is built around the ESP32 microcontroller, which acts as the brain, coordinating all the other components. The RTC module (DS1302N) keeps accurate time, while the servo motor responds to instructions from the ESP32 by moving to specific positions. Finally, the push button allows the user to provide input to the ESP32, enabling interaction with the system.

The DS1302 trickle-charge timekeeping chip contains a real-time clock/calendar and 31 bytes of static RAM. It communicates with a microprocessor via a simple serial interface. The real-time clock/calendar provides seconds, minutes, hours, day, date, month, and year information. (DS1302 Datasheet and Product Info | Analog Devices, 2015)

Connection:

The ESP32 acts as the brain and central connection point. The RTC module (DS1302N) communicates with the ESP32 using pins D15, D2, and D4. Both the RTC module and the servo motor receive power from the ESP32's dedicated 3.3V supply pin, while also being connected to a common ground (GND) for a complete circuit. The user interacts with the system through the push button, which is wired to a specific pin (D22) on the ESP32 and grounded (GND) to complete the circuit and register a button press.

The ESP32 chip comes with 48 pins with multiple functions. Not all pins are exposed in all ESP32 development boards, and some pins cannot be used. (Santos & Santos, 2024)

Software

```cpp
#include <WiFi.h>
#include <ArduinoJson.h>
#include <ESP32Servo.h>
#include <Ds1302.h>
#include "index.hpp"
//#include <vector>
//using namespace std;

// Server
WiFiServer server(80);
Servo motor;
Ds1302 rtc(4,15,2);
Ds1302::DateTime now;
int offset[3] = {1, -5, 37};
int wait = 1000;

// Data
StaticJsonDocument<200> schedule;
char *time(){
    char *out = new char[6];
    rtc.getDateTime(&now);
    snprintf(out, 6, "%02d:%02d", (now.hour+offset[0]+(now.minute+offset[1])/60+(now.second+offset[2])/3600)%24
    return out;
}

// Setup
bool state = false;
void setup() {
    WiFi.softAP("IOT Switch", "12345678"); // Create Network
    //WiFi.begin("Jasouza 2G", "Entangled23Kat"); // Join Network

    rtc.init();
    if (rtc.isHalted()) {
        Ds1302::DateTime dt = {
            .year = 24,
```

Fig. 4. C++ programming language Beginning code for Automated Energy Cutoff System for Auditorium Sustainability Using IoT

The system uses C++ programming language to code for an Automated Energy Cutoff System for Auditorium Sustainability Using IoT. It utilizes an ESP32 microcontroller to interact with various components to manage power based on a schedule and real-time occupancy detection.

C++ (or “C-plus-plus”) is a generic programming language for building software. It’s an object-oriented language. In other words, it emphasizes using data fields with unique attributes (a.k.a. objects) rather than logic or functions. (Staff, 2023)

Libraries:

ArduinoJson.h and WiFi.h are likely used for establishing communication with a Wi-Fi network and managing data in JSON format, which is a common way of structuring data for exchange between devices. Ds1302.h and ESP32Servo.h libraries are likely specific to the real-time clock (RTC) module (DS1302) and the servo motor used in the system.

ArduinoJson is a JSON library for Arduino, IoT, and any embedded C++ project. It supports JSON serialization, JSON deserialization, and MessagePack. (BenoitBlanchon, n.d.)

Timekeeping (#include <Ds1302.h>... }):

The code includes functions to interact with the RTC module (Ds1302), which keeps accurate time. It defines an offset (offset[3]) that might be used to adjust the RTC time for a specific time zone or daylight saving time.
A function time() is included to format the current time from the RTC.

Setup (void setup() { ... }):

The ESP32 creates a Wi-Fi access point named "IOT Switch" with the password "12345678". This allows the ESP32 to be configured initially through a Wi-Fi connection on a laptop or phone. (Comment //WiFi.begin("Jasouza 2G", "Entangled23Kat"); suggests an alternative configuration where the ESP32 connects to an existing Wi-Fi network named "Jasouza 2G" with the password "Entangled23Kat").
The RTC module is initialized (rtc.init()) and its halted state is checked (rtc.isHalted()). If halted, the program sets the current date and time (Ds1302:: DateTime dt)

User Interface

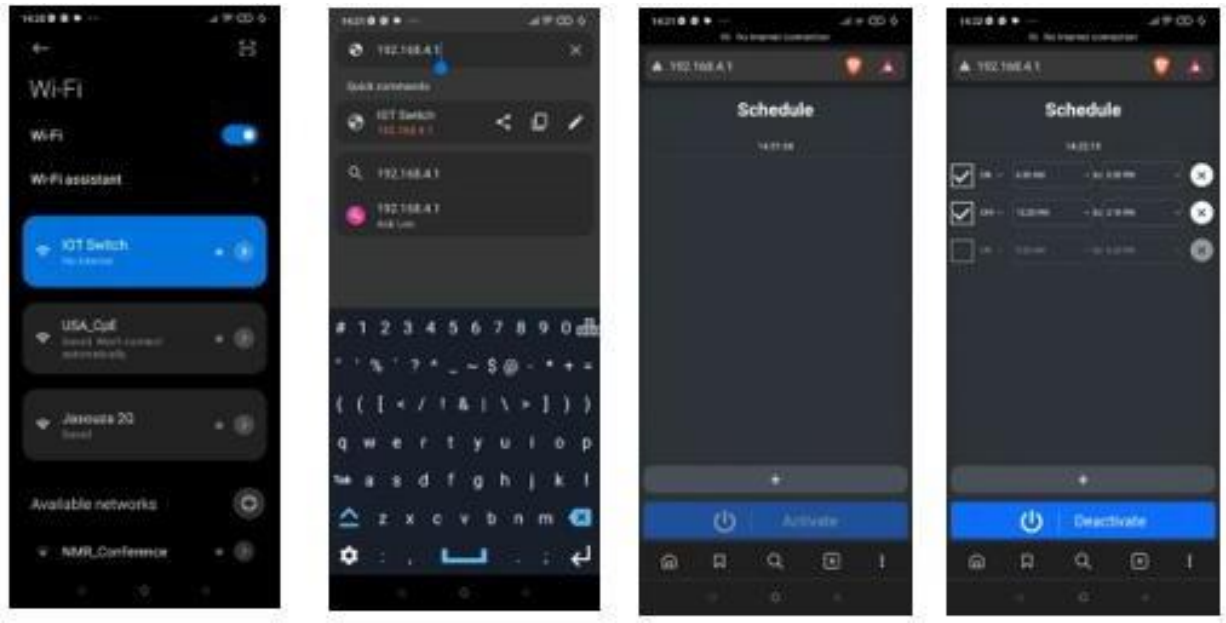


Fig. 5. User Interface of Automated Energy Cutoff System for Auditorium Sustainability Using IoT

The user interface (UI) is the point of human-computer interaction and communication in a device. This can include display screens, keyboards, a mouse and the appearance of a desktop. It is also how a user interacts with an application or a website, using visual and audio elements, such as type fonts, icons, buttons, animations and sounds. (Hashemi-Pour & Churchville, 2024)

The user interface of the Automated Energy Cutoff System (AECS) for Auditorium Sustainability, as illustrated in Figure 5, directs users through the system's setup and activation. Initially, users connect to the Wi-Fi network via the IoT switch and input the designated IP address. Upon successful connection, the home screen appears. To activate the system, users click the "Activate" button and choose the desired shutdown time. Once activated, the AECS functions independently, regardless of Wi-Fi or internet connection. Importantly, the system allows for adjustments to Wi-Fi and IP address settings within the program.

RESULTS

This paper highlights the successful design and implementation of an IoT-based Automated Energy Cutoff System (AECS) specifically tailored for auditoriums. The system was rigorously tested and evaluated to ensure its functionality and efficiency, confirming its readiness for industrial-scale applications. The AECS operates by leveraging interconnected devices and real-time data processing to monitor and manage the energy consumption of various appliances and circuits within an auditorium. When these devices are not in use, the system switches them off, thereby addressing the issue of phantom loads and standby power consumption. This proactive approach to energy management not only reduces waste but also enhances the overall sustainability of the facility.

Moreover, the results of the testing phase reveal that the AECS leads to significant cost savings by effectively minimizing unnecessary energy consumption. The system's capability to seamlessly integrate into existing infrastructure and its scalability make it a practical solution for larger industrial applications. The findings underscore the potential of IoT technology in revolutionizing energy management practices, promoting more sustainable and cost-effective operations. The successful deployment and operation of the AECS in auditoriums pave the way for its adoption in other large-scale settings, emphasizing the system's versatility and the broader impact it can have on energy conservation and financial savings. This research demonstrates a substantial advancement in the field of automated energy management, setting a precedent for future innovations in sustainable technology solutions.

DISCUSSION

The paper "Automated Energy Cutoff System for Auditorium Sustainability Using IoT" introduces an innovative IoT-based Automated Energy Cutoff System (AECS) designed to enhance energy efficiency in auditoriums. This system is tailored to manage energy consumption by detecting and automatically switching off unused appliances and circuits, thus addressing the issue of phantom loads and standby power. Through rigorous testing and evaluation, the system's functionality has been confirmed, showcasing its readiness for its implementations and applications. The AECS leverages interconnected devices and real-time data processing to optimize energy usage, significantly reducing waste and contributing to substantial cost savings.

The research highlights the AECS's potential for broader industrial implementation due to its demonstrated reliability and effectiveness. By focusing on the specific needs of large public venues like auditoriums, the system not only enhances sustainability but also provides a scalable model for other industrial settings. The results underscore the importance of integrating IoT technology into energy management practices, offering a practical solution for reducing energy consumption and operational costs. This advancement represents a significant step towards sustainable energy practices, with the AECS model serving as a blueprint for future developments in the field.

Conclusions

In conclusion, this paper presents a scalable IoT-based Automated Energy Cutoff System (AECS) designed specifically for auditoriums, with potential applications in industrial-scale settings. The system integrates ESP32 microcontroller hardware with scheduling and remote-control software to manage power consumption efficiently through automated time-based control. The user interface of the AECS guides users through the setup and activation process. Initially, users connect to the system via a Wi-Fi network using the IoT switch and input the designated IP address. Upon successful connection, the home screen appears, allowing users to activate the system by clicking the "Activate" button and selecting the desired shutdown time. Once activated, the AECS operates independently of Wi-Fi or internet connectivity, ensuring continuous energy management. Additionally, the system allows for adjustments to Wi-Fi and IP address settings within the program, providing flexibility and ease of use.

The successful deployment of a prototype at the University of San Agustin auditorium validates the AECS's potential for large-scale industrial implementation. Rigorous testing and evaluation have confirmed the system's functionality and readiness, demonstrating significant reductions in energy consumption by automatically switching off unused appliances and circuits. This reduction in phantom loads and standby power leads to substantial cost savings, highlighting the system's economic viability. The AECS represents a significant advancement in automated energy management, offering a

practical solution for enhancing sustainability in large public venues and industrial settings. This research sets a precedent for future innovations in sustainable technology, emphasizing the importance of integrating IoT solutions into energy management practices to promote cost-effective and environmentally responsible operations.

Recommendations

Based on the successful implementation and proven effectiveness of the Automated Energy Cutoff System (AECS) at the University of San Agustin auditorium, it is recommended that this system be deployed more widely in similar venues such as theaters, conference halls, and sports gymnasium. These large public spaces can significantly benefit from the automated energy management provided by the AECS, leading to substantial cost savings and enhanced sustainability. Additionally, customizing the AECS for diverse industrial applications should be explored to cater to the unique energy consumption patterns of different industries. Integrating the AECS with existing smart building systems can also create a more comprehensive energy management solution, optimizing energy efficiency across entire facilities.

To ensure the smooth adoption and optimal use of the AECS, it is crucial to provide thorough user training and ongoing technical support. Users should be well-versed in the setup, activation, and adjustment processes to fully utilize the system's capabilities. Establishing a continuous monitoring system to track performance and gather user feedback can help identify areas for improvement and ensure the system remains effective and relevant. Future research should explore the integration of advanced AI algorithms to enhance the AECS, providing predictive analytics for energy consumption patterns and automating even more nuanced control of appliances and circuits. Promoting awareness of the AECS and its benefits through industry conferences, publications, and collaborations with sustainability-focused organizations can encourage broader adoption of this innovative energy management solution.

Compliance with Ethical Standards

Compliance with ethical standards is a fundamental aspect of this research and the development of the Automated Energy Cutoff System (AECS). Throughout the project, the researchers adhered to the highest ethical principles to ensure the integrity and transparency of their work. This involved obtaining necessary permissions and approvals for testing the AECS in the University of San Agustin auditorium. The research team was committed to safeguarding the privacy and security of all data collected during the testing phase, ensuring that no personally identifiable information was compromised. Moreover, the development process strictly followed guidelines for the ethical use of IoT technology, ensuring that the system's deployment does not infringe on users' rights or contribute to any form of digital surveillance without consent.

Furthermore, the research team took proactive measures to ensure that the AECS promotes sustainability without causing unintended negative impacts on the environment

or the community. The system was designed to enhance energy efficiency, thereby contributing to the reduction of carbon emissions and overall energy consumption. By focusing on the ethical implications of technology deployment, the researchers aimed to create a solution that aligns with broader societal goals of environmental stewardship and responsible innovation. The commitment to ethical standards throughout this project underscores the researchers' dedication to not only advancing technological capabilities but also fostering a positive and responsible approach to the use of emerging technologies.

Acknowledgments

The research and development of the Automated Energy Cutoff System (AECS) for Auditorium Sustainability were made possible through the collaborative efforts and support of various individuals and departments. First and foremost, we extend our deepest gratitude to the University of San Agustin and to the Center for Information and Communications Support Services for providing the venue and necessary permissions to test the AECS prototype. The administrative and technical staff's assistance was invaluable in ensuring a smooth and successful deployment. We also wish to thank the faculty and students of the university who participated in the testing process, offering critical feedback that helped refine the system's functionality and usability.

We are also grateful to our funding bodies and partners who supported this project financially and logistically. Special thanks to the technology suppliers and IoT experts who provided the essential hardware and software components, as well as technical guidance throughout the development process. Additionally, we acknowledge the contributions of our research team members whose dedication, expertise, and collaborative spirit were instrumental in bringing this project to fruition. Finally, we appreciate the constructive feedback from peer reviewers and advisors, which significantly enhanced the quality and impact of this research. Their insights and suggestions were crucial in refining our approach and ensuring the robustness of our findings.

REFERENCES

Abdulaziz Yasin Nageye, Abdukadir Dahir Jimale, Mohamed Omar Abdullahi, Yahye Abukar Ahmed, Bashir Sheikh Abdullahi Jama, "Enhancing Energy Efficiency in Mogadishu: IoT-Based Buildings Energy Management System," SSRG International Journal of Electrical and Electronics Engineering, vol. 10, no. 10, pp. 54-60, 2023. Crossref, https://doi.org/10.14445/23488379/IJEEE-V10I10P106

BenoitBlanchon. (n.d.). ArduinoJson: Efficient JSON serialization for embedded C++. ArduinoJson. https://arduinojson.org/

DS1302 Datasheet and Product Info | Analog devices. (2015, March 23). https://www.analog.com/en/products/ds1302.html#part-details

ECS INC International. (2023, October 12). What is a Real Time Clock (RTC)? - ECS Inc. ECS Inc. https://ecsxtal.com/what-is-a-real-time-clock rtc/#:~:text=The%20real%20time%20clock%20(RTC,no%20other%20task%20is %20required.

Hashemi-Pour, C., & Churchville, F. (2024, April 30). user interface (UI). App Architecture. https://www.techtarget.com/searchapparchitecture/definition/user-interface-UI#:~:text=Examples%20of%20user%20interfaces&text=Examples%20of%20these%20include%20the,or%20webpages%20in%20this%20way.

Implementing IoT in Education: applications and benefits. (n.d.). https://www.cogniteq.com/blog/implementing-iot-education-benefits-challenges-use-cases

Santos, S., & Santos, S. (2024, June 20). ESP32 Pinout Reference: Which GPIO pins should you use? | Random Nerd Tutorials. Random Nerd Tutorials. https://randomnerdtutorials.com/esp32-pinout-reference-gpios/

Staff, C. (2023, November 29). What is C++? (And how to learn it). Coursera. https://www.coursera.org/articles/what-is-c-plus-plus

Teel, J. (2024, January 9). Introduction to the ESP32 family of wireless microcontrollers (Updated 2024). PREDICTABLE DESIGNS. https://predictabledesigns.com/introduction-to-the-esp32-wifi-bluetooth-wireless-microcontroller/

The role of the IoT in education. (n.d.). https://www.arduino.cc/education/the-role-of-the-iot-in-education

Workshop, D. (2023, April 11). Using Servo Motors with the ESP32. DroneBot Workshop. https://dronebotworkshop.com/esp32-servo/

APA Citation:

Giner, M., Garcera, J. B., Lañada, M., Galzote, R. D., & Ragodon, I. (2024). AUTOMATED ENERGY CUTOFF SYSTEM FOR AUDITORIUM SUSTAINABILITY USING IOT. Ignatian International Journal for Multidisciplinary Research, 2(8), 246–258. https://doi.org/10.5281/zenodo.13192707

Corresponding author: *jgarcera@usa.edu.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

AWARENESS AMONG THE ELECTIVE OFFICIALS FROM SELECTED BARANGAYS ON THE DEVOLVED FUNCTIONS, SERVICES, AND FACILITIES IN THE PROVINCE OF BATANGAS: BASIS FOR CAPACITY DEVELOPMENT PLAN

Celio C. Francia, RN, EnP, MPA

Department of the Interior and Local Government (DILG) – IVA (CALABARZON), Calamba City, Laguna, Philippines

https://doi.org/10.5281/zenodo.13162659

ABSTRACT

This study focused on determining the level of awareness of the barangay officials and the level of implementation of the barangays on the devolved functions, services, and facilities as stipulated in the Republic Act (R.A.) No. 7160 and by the full devolution as referenced in Executive Order (E.O.) No. 138, series of 2021. In answering the research question, the study employed a research approach with a mix of methods that combined both quantitative and qualitative techniques. It involves the use of descriptive correlational research and thematic analysis. The study results show that the barangay officials were aware of the devolved functions, services, and facilities. At the same time, the barangays attained a high level of implementation of the devolved functions, services, and facilities. Moreover, the study also discovered no significant difference in the level of awareness of barangay officials on the devolved functions, services, and facilities when grouped according to the respondents' profiles. Furthermore, the study also found a strong link between the level of awareness of barangay officials and the level of implementation of devolved functions, services, and facilities. Based on the responses received from the participants, the study confirmed that barangays are currently facing several issues and challenges in fully implementing the devolution, including a lack of or insufficient financial resources, a lack of human resources or staffing, and inadequate support from higher LGUs such as provinces, cities or municipalities, and national government agencies (NGAs).

Keywords: *Full Devolution, Mandanas-Garcia Ruling, Local Government Code of 1991; Barangay Officials, Devolved functions, services, and facilities*

INTRODUCTION

Every state or nation has its ultimate goal, which is to enhance the overall well-being of its citizens. Within the Philippine context, the local government units (LGUs) are obliged to fulfill this mandate. Using these resources, the LGUs can efficiently and effectively carry out the devolved facilities and services mandated by existing laws. Because of decentralization, they can respond to their community's distinct issues and challenges. As a result, decentralization promoted greater responsiveness and accountability in every LGU.

Devolution has empowered the LGUs by granting them power and resources. It enables them to continually enhance public services provision, participatory governance at the local levels, and needed policies that promote socio-economic growth and development. Additionally, devolution is vital to addressing differences between rural and urban communities by promoting equity and inclusivity. Lastly, it provides equal access to essential services, infrastructure development, and economic opportunities by serving as a link to address the gaps in sustainability.

The Philippines' decentralization effort began with the Local Government Code (LGC) of 1991, also known as the Republic Act (R.A.) No. 7160. The statute empowered local governments to manage their resources to benefit their inhabitants. Each LGU shall provide the basic facilities and services concerning national policies, standards, and guidelines that already exist following the Implementing Rules and Regulations (IRR) of LGC of 1991. As a result of decentralization, some functions, services, and facilities (FSFs) have been devolved to different levels of LGUs, like the barangays from the national government.

Internal Revenue Allotments (IRAs), a crucial element of financial decentralization, have been given to LGUs to ensure they can execute their mandated roles and responsibilities. According to Article X, Section 6 of the Philippine Constitution, LGUs are eligible for an equal share of national tax collections. However, as mandated by the Constitution, the Mandanas-Garcia Ruling raised the share of national taxes received by LGUs, significantly changing the decentralized picture. (G.R. Nos. 199802 and 208488, Mandanas et al. v. Executive Secretary, et al.)

Beginning Fiscal Year (F.Y.) 2022, the LGUs' IRA shares will increase based on the tax collected by the national government. It is brought about by the execution of the Mandanas-Garcia Ruling and per Section 284 of LGC of 1991, in which the LGUs' fair share from taxes collected by the national government is based on the third previous year of the present F.Y. Therefore, it is expected that starting in F.Y. 2022, the LGUs' overall shares of national taxes will rise considerably. This significant increase in the LGUs' portion of shares from national taxes will allow them to better serve their residents by providing basic services and facilities and assist them in carrying out other responsibilities assigned to them under Section 17 of R.A. No. 7160.

Executive Order (E.O.) No. 138 series of 2021, "Full Devolution of Certain Functions of the Executive Branch to Local Governments, Creation of Committee on

Devolution, and for Other Purposes," was signed into law on the first day of July 2021 by President Rodrigo R. Duterte. As mentioned above, the E.O. aims to aid in and direct the shift toward full devolution to successfully execute the Supreme Court's decision in the Madanas-Garcia Cases beginning in Fiscal Year 2022.

The barangay, regarded as the fundamental political or administrative unit, is crucial in advancing the well-being of all its inhabitants. Additionally, according to Section 384 of the LGC, the barangay coordinates and executes all government policies, plans, programs, activities, and projects within the community. Following the Mandanas-Garcia Ruling (G.R. Nos. 199802/ 208488), which brought about full devolution, the national government ensured that decentralization improves all citizens' welfare and keeps LGUs operating more efficiently. Furthermore, the national government must guarantee that the LGUs, especially the barangays, receive an equal share of the national government tax collections.

During the guidelines' implementation on full devolution in 2021, the researcher noted that the barangay officials raised several issues, including a lack of funding, staff, and technical capacity to carry out the devolved FSFs. As a result, the problems and challenges the LGUs face in implementing full devolution should be fully understood, particularly from the viewpoint of the barangay's grassroots level. In this way, the researcher can formulate a necessary intervention plan will be crafted to address the barangays' identified issues and challenges.

The study’s results will help the national government agencies and higher LGUs to develop a priority capacity development intervention that will enhance and strengthen the capacities of the barangay officials and the barangays in implementing their devolved FSFs. In the long run, these capacity development interventions will improve the performance and service delivery of barangays geared towards enhancing every individual's life in the community.

Research Questions

This study assesses the significant relationship between the barangay officials' awareness level and the barangays' implementation level on the devolved functions, services, and facilities outlined in Section 17 of LGC of 1991. Moreover, the study also determined the issues and challenges concerning implementing full devolution to serve as the basis for identifying capacity development interventions.

Specifically, this study intended to answer the following:

1. What is the profile of the respondents in terms of:
    1.1. age;
    1.2. sex;
    1.3. educational attainment;
    1.4. Years of service as barangay officials?
2. What is the profile of the respondent’s barangay in terms of:

2.1. classification;
2.2. Internal Revenue Allotment (IRA) shares;
2.3. type of LGU where the barangay is located;
2.4. income class?

3. What is the level of awareness of barangay officials on the devolved functions, services, and facilities in terms of:
   3.1. agricultural support services;
   3.2. health and social services;
   3.3. services and facilities related to general hygiene and sanitation, beautification, and solid waste collection;
   3.4. maintenance of Katarungang Pambarangay;
   3.5. maintenance of barangay roads and bridges;
   3.6. maintenance of the water supply system;
   3.7. infrastructure facilities;
   3.8. Information and Reading Center;
   3.9. satellite or public market?
4. What is the current level of implementation of the devolved functions, services, and facilities of the barangays in terms of:
   4.1. agricultural support services;
   4.2. health and social services;
   4.3. services and facilities related to general hygiene and sanitation, beautification, and solid waste collection;
   4.4. maintenance of Katarungang Pambarangay;
   4.5. maintenance of barangay roads and bridges;
   4.6. maintenance of the water supply system;
   4.7. infrastructure facilities;
   4.8. Information and Reading Center;
   4.9. satellite or public market?
5. Is there a significant difference in the barangay officials' level of awareness of the devolved functions, services, and facilities when grouped according to the respondents' profiles?
6. Is there a significant relationship between the level of awareness of the barangay officials and the level of implementation of barangays on the devolved functions, services, and facilities?
7. What issues and challenges do the barangays face in implementing the full devolution?
8. What capacity development interventions are needed by the barangays to implement the full devolution?

METHODOLOGY

Research Design

In responding to the research problems, this study employed a design combining methods incorporating qualitative and quantitative aspects. The researcher used quantitative method in this study to gather the respondents' profile, like years of service

as barangay officials, educational attainment, age and sex; barangays' profile of each respondent, such as classification, income class, type of LGU where the barangay is located, and average IRA shares; the barangay officials' awareness level on the devolved FSFs outlined in Section 17 of RA 7160 as well as the barangays' level of implementation of such devolved functions.

Additionally, this study employed a descriptive correlational study approach. The descriptive study methodology was successful and suitable in assessing the respondents' demographics, such as years of service as barangay officials, educational attainment, age, and sex, including the profile of their respective barangays in terms of classification, type of LGU where the barangay is located, income class, and average IRA shares. It was additionally utilized to investigate the level of understanding among barangay officials and the implementation of devolved services and facilities.

Further, the researcher employed a theme-based approach to arrange and evaluate the qualitative information. A codebook thematic analysis was used in this study to determine the issues and challenges that barangays confront while trying to implement full devolution.

Population and Sampling Technique

The study's participants were Punong Barangays from several cities and municipalities in Batangas Province. Furthermore, the study's population comprises 1,078 barangays.

The research sample was chosen using a method of probability sampling, specifically stratified random sampling processes. The stratified selection at random will be employed to split the population into similar strata or subgroups according to the cities or municipalities where the barangays are situated.

Respondents of the Study

The study's respondents were 292 Punong Barangays from 1,078 barangays in different cities and municipalities of Batangas Province. Based on the sampling techniques, the respondents will be divided equally per Congressional District.

Research Instrument

The primary data collection instruments in this study were a questionnaire for surveys and a guide to the interview questionnaire, both designed by the researcher. The development of these instruments was based on the research title and informed by existing related studies and literature. The researcher carefully constructed the questionnaires to guarantee that the information collected was relevant and valuable for addressing the study's aims, including pertinent questions and items related to the research problem.

In this study, the researcher crafted a questionnaire about the respondents' profile, the respondent's barangay profile, the barangay officials' awareness level, and the

barangays' implementation level on the devolved FSFs cited in Section 17 of R.A. No. 7160, which is divided into four (4) parts. The statements in the said instrument were formed based on various literates reviewed.

Part I provides the respondents' profiles, including age, sex, educational attainment, and years of service as barangay officials.

Part II contains the respondent's barangay profile, including the classification of barangays, average IRA shares from 2020-2023, the type of LGU where the barangay is located, and the income class classification.

Part III comprises the barangay officials' level of awareness, particularly of punong barangays, on the devolved FSFs cited in Section 17 of R.A. No. 7160, which were rated by the respondents using the four (4)-4-point Likert scale. The Likert scale assigns quantitative values to qualitative data so that the researcher can statistically analyze it. The rating system is as follows:

Numerical Rating	Scale	Verbal Interpretation
4	3.5 – 4.0	Very Aware
3	2.5 – 3.49	Aware
2	1.5 – 2.49	Somewhat Aware
1	1.0 – 1.49	Not Aware

Part IV involves the current level of implementation of the barangays on the devolved FSFs cited in Section 17 of LGC, which were rated by the respondents using the five (5)-point Likert rating scale. It is a means of assigning quantitative values to qualitative data so that the researcher can statistically analyze it. The rating system is as follows:

Numerical Rating	Scale	Verbal Interpretation
5	4.5 - 5.0	Advanced Level of Implementation
4	3.5 – 4.4	High level of Implementation
3	2.5 – 3.4	Medium level of Implementation
2	1.5 – 2.4	Low level of implementation
1	1.00 – 1.4	No implementation at all

Additionally, the researcher crafted an interview guide questionnaire to determine the issues and challenges the barangays face in implementing the devolution.

Data Gathering Procedure

As part of the data gathering, the researcher considered the following procedures:

1. The primary data collection tool, a survey instrument, was discussed with the research adviser for suggestions and input. Three validators with expertise in the field of study validated the instrument's content. In addition, the researcher utilized Cronbach's Alpha dependability to assess its dependability in pilot research with 25 participants.
2. The researcher made necessary revisions to the survey questionnaire based on the input, comments, and suggestions of the adviser, statistician, and validators. After finalizing the survey questionnaire, an online survey form was also created.
3. The researcher wrote a letter to the DILG Provincial Director and Local Chief Executives, requesting authorization to conduct the study, disseminate the survey online, and conduct face-to-face or virtual interviews.
4. For online distribution, the researcher coordinated with the respective C/MLGOO of every city and municipality to send the link to the online survey through an online platform to barangay officials within their area of responsibility. Data was also retrieved using that online platform. For virtual or face-to-face interviews, the researcher also coordinated with the C/MLGOO of the concerned Punong Barangays.
5. Data were collected and carefully organized for tabulation and analysis using Excel. The collected data underwent statistical treatment and analysis using the Predictive Analytic Software (PASW) version 26. On the other hand, data collected from the interview was analyzed by the statistician using thematic analysis.
6. The researcher upheld ethical standards throughout the data collection and prioritized the respondents' confidentiality agreement. The information collected was only utilized for this research study and other relevant academic endeavors, and the anonymity of the data is protected.
7. The researcher duly acknowledged the literature sources used for this study in the discussions and reference section with citations and references. This ensured that ideas were properly attributed, avoided plagiarism, and gave readers access to the referred works for additional research.
8. The data and findings were the basis for the proposed capacity-building interventions, which the researcher will submit to the appropriate agency for possible consideration and implementation.

Statistical Treatment of Data

After being collected from respondents, the researcher processed and evaluated the data using various statistical methods to present, analyze, and interpret the results. To address the research problem and assess the collected data, the researcher employed the subsequent statistical instruments:

1. Frequency count and percentage were used to answer Problem No. 1, the respondents' profile, and Problem No. 2, the respondents' barangay profile.
2. Standard Deviation Weighted Mean was applied to examine Problem No. 3, which concerned barangay officials' awareness of devolved services and facilities, and Problem No. 4, which examined the level of implementation of these devolved services and facilities among the barangays.

3. The researcher utilized the Kruskal Wallis H and Mann-Whitney U tests to identify a significant variance in barangays' awareness level of the devolved FSFs when classified by profile.
4. This study employed Spearman's Rank Correlation Coefficient (Spearman's rho) to determine the significant link between barangay officials' awareness and barangays' implementation of devolved FSFs.

RESULTS AND DISCUSSION

1. Profile of the Respondents

Table 1.1: Profile of the Respondents as to Age

Age	Frequency	Percentage %
18-24 years old	4	1.4
25-34 years old	21	7.2
35-44 years old	51	17.5
45-54 years old	99	33.9
55-64 years old	82	28.1
65 years old and above	35	12.0
Total	**292**	**100**

Table 1.1 affirms the respondents' age profile. The most significant proportion (33.9%) are between 45 and 45 years old, and 28.1% are between 55 and 64 years old, accounting for more than 60% of the sample. The youngest age group (18 – 24) is minimally represented at 1.4%.

This indicates that a significant portion of the surveyed Punong Barangays are between 45 and 54 and 55 and 64. The data also reflects a generation gap in local governance, with older individuals more likely to hold traditional leadership positions. According to Floranza (2021), this age group is often seen as combining youthful enthusiasm with extensive experience, which is crucial for effective barangay leadership. Moreover, middle-aged leaders frequently bring vitality and seasoned judgment to their responsibilities.

Table 1.2: Profile of the Respondents as to Sex

Sex	Frequency	Percentage %
Male	173	59.2
Female	119	40.8
Total	**292**	**100**

Table 1.2 depicts the respondents' sex profiles. Males represent more respondents (59.2%) than females (40.8%).

The findings show that men hold more leadership roles in barangays than women. However, women's participation in local governance has been increasing. As cited in the study spearheaded by the Asian Development Bank (2023), although men have traditionally dominated local governance, there is a growing trend towards gender inclusivity, with more women assuming local leadership roles. This change can be attributed to gender empowerment initiatives and the increasing recognition of the effectiveness of female leaders in community development.

Table 1.3: Profile of the Respondents as to Educational Attainment

Educational Attainment	Frequency	Percentage %
Elementary Undergraduate	1	0.3
Elementary Graduate	5	1.7
High School Undergraduate	7	2.4
High School Graduate	56	19.2
College Undergraduate	62	21.2
College Graduate	157	53.8
Post Baccalaureate Undergraduate	2	0.7
Post Baccalaureate Graduate	2	0.7
Graduate School	1	0.3
Total	**292**	**100**

Table 1.3 displays the educational attainment profile of the respondents. A large percentage (53.8%) had completed college, indicating a relatively high academic attainment. A significant portion has at least some college education (21.2% college undergraduate). Only some respondents have education levels below high school graduation.

The findings suggest that a sizable proportion of respondents are college graduates, indicating an upward trend in educational attainment among community leaders. Dumlao's (2021) study found a substantial association between educational attainment and Punong Barangay performance. Additionally, Nur's (2019) research reveals that the performance levels of female Punong Barangays are greatly influenced by their educational attainment, with those possessing higher educational qualifications demonstrating better performance.

Table 1.4: Profile of the Respondents as to Years of Service as Barangay Officials

Years in Service	Frequency	Percentage %
1-3 years	87	29.8
4-6 years	72	24.7
7-9 years	28	9.6
10 years and above	105	36.0
Total	**292**	**100**

Table 1.4 illustrates the respondents' profile regarding years of service as barangay officials. Most respondents have significant experience, with 36.0% having ten years or more in service. Those with less than four years of service constitute a substantial segment (29.8%). On the other hand, the least number of respondents had 7 – 9 years of experience, which was 9.6%.

This suggests that most respondents are serving their third term in office, reflecting a trend of long-term leadership among barangay officials. Such long terms in government have significant implications for the local government and the growth of communities. Leadership with over ten years of service tend to have a solid local governance background. Walker and Andrews (2020) claim that leaders with more years in office generally offer better governance outcomes because of their acquired knowledge and stronger community relationships. Similarly, Malemane and Nel-Sanders (2021) note that more extended periods in government positions frequently result in improved organizational expertise and knowledge, leading to enhanced governance. Seasoned officials can deal with bureaucratic procedures while carrying out regulations efficiently.

2. Profile of the Respondents' Barangay

Table 2.1 displays the respondent's classification-based barangay profile. The data shows that 61% of the barangays are rural, while 39% are urban.

The findings show that almost all barangays can be categorized as rural. The above breakdown suggests that most barangays are situated away from towns or urban centers, typically in areas with low population density. The population's size is a significant variable in determining the IRA or NATA share for barangays, as stated in Section 285 of R.A. No. 7160.

Table 2.1: Profile of the Respondent's Barangay as to Classification

Classification	Frequency	Percentage %
Urban	114	39.0
Rural	178	61.0
Total	**292**	**100**

Problems in devolved FSFs are experienced at the grassroots level, especially in rural barangays (Dabalos & Diamante, 2020). The Asian Development Bank's 2019 study indicates significant variations in access to services and economic opportunities between rural and urban locations. It emphasizes the significance of focused actions for rural development and balanced regional growth.

Table 2.2: Profile of the Respondent's Barangay as to Average Internal Revenue Allotment (IRA) Shares from 2020-2023 (in Pesos)

Average Internal Revenue Allotment (IRA) Shares	Frequency	Percentage %
1 – 999,999	16	5.5
1,000,000 – 4,999,999	200	68.5
5,000,000 – 9,999,999	47	16.1
10,000,000 – 14,999,999	18	6.2
15,000,000 and above	11	3.8
1 – 999,999	16	5.5
Total	**292**	**100**

Table 2.2 presents the respondent's barangay profile as to average Internal Revenue (IRA) Shares from 2020 – 2023. Most barangays' average IRA shares range from 1,000,000 – 4,999,999, with 68.5%, while the least barangays received 1 – 999,999 average IRA shares with 5.5%.

The findings indicate that most respondents' barangays receive IRA shares between 1,000,000 and 4,999,999 annually. The barangays utilize these funds to carry out the devolved FSFs cited in Section 17 R.A. No. 7160. However, the significant discrepancy in IRA shares reveals that many barangays need more funding, which may limit their capacity to deliver essential services and infrastructure improvements. According to Gulane and Viray (2023), unequal IRA distribution might lead to differences in access to facilities and services among residents of different barangays, thereby worsening inequality.

Table 2.3: Profile of the Respondent's Barangay as to Type of LGU where the Barangay is Located

Type of LGU where the Barangay is Located	Frequency	Percentage %
City	75	25.7
Municipality	217	74.3
Total	**292**	**100**

Table 2.3 exhibits the profile of the respondent's barangay and the type of LGU where the barangay is located. Most of the respondents' barangays are located in the municipality, with 74.3% in the city and 25.7% in the municipality.

The findings indicate that most respondents' barangays are located within municipalities. This can be attributed to the country's more significant number of municipalities than cities. Additionally, the type of LGU where the barangay is located is a determining factor in the distribution of IRA shares, as outlined in Section 285 of R.A. No. 7160.

In 2022, the study conducted by the Bureau of Local Government Finance (BLGF) underscored significant differences in governance and resource allocation between municipalities and cities. Municipalities face challenges such as lower funding and fewer infrastructures than cities, which impact their ability to deliver services and implement development projects effectively.

Table 2.4 shows the income class of the respondent's barangay. According to the data, most of the respondents' barangays are in the first-income class (61%), with the lowest being in the fifth-income class (6.2%).

Table 2.4: Profile of the Respondent's Barangay as to Income Class

Type of LGU where the Barangay is Located	Frequency	Percentage %
1st Class	178	61.0
2nd Class	28	9.6
3rd Class	40	13.7
4th Class	28	9.6
5th Class	18	6.2
6th Class	0	0
TOTAL	**292**	**100**

The data indicate that most respondents' barangays fall into the first income class. This breakdown highlights many significant characteristics of local governments' economic standing and financial capabilities. Higher-income class classifications generally imply a greater income-generating perspective, which can lead to improved access to resources, infrastructure, and government services within the barangays. This economic standing is frequently linked with better growth prospects and a higher quality of life for citizens. Based on Diokno-Sicat (2019), higher-income barangays gain from increased economic stability, allowing them to support local development projects more effectively. Lower-income barangays need more finances, impacting administration and the delivery of services.

3. Level of Awareness of Barangay Officials on the Devolved Functions, Services, and Facilities

Table 3: Level of Awareness of Barangay Officials of the Devolved Functions, Services, and Facilities

Indicators	Weighted Mean	SD	Verbal Interpretation
1. Agricultural support services	2.77	1.04	Aware
2. Health and social services	3.62	0.68	Very Aware
3. Services and facilities related to general hygiene and sanitation, beautification, and solid waste collection	3.51	0.73	Very Aware
4. Maintenance of Katarungang Pambarangay	3.55	0.69	Very Aware
5. Maintenance of barangay roads and bridges	3.36	0.83	Aware
6. Maintenance of the water supply system	3.21	0.89	Aware
7. Infrastructure facilities	3.43	0.79	Aware
8. Information and Reading Center	2.88	1.03	Aware
9. Satellite or public market	2.62	1.15	Aware
Composite Mean	**3.21**		**Aware**

Legend: 3.50 – 4.00 = Very Aware; 2.50 – 3.49 = Aware; 1.50 – 2.49 = Somewhat Aware; 1.00 - 1.49 = Not Aware

Table 3 presents the awareness level among barangay officials regarding devolved functions, services, and facilities. The overall mean of 3.21 implies that most respondents are generally aware. It means that barangay officials are knowledgeable and can somewhat explain the devolved functions, services, and facilities. Among the items cited, health and social services had the highest mean score of 3.62 with an SD of 0.68 and was interpreted as very aware. This is the highest-ranked indicator, suggesting that barangay officials are knowledgeable and can explain the devolved services well. This high level of awareness is due to the crucial role of social and healthcare services in community welfare and public health.

It was preceded by the maintenance of Katarungang Pambarangay with a weighted mean of 3.55 and SD of 0.69 and services and facilities related to general hygiene and sanitation, beautification, and solid waste collection with a weighted mean of 03.51 and SD of 0.71. Both have verbal interpretations of being very aware.

Meanwhile, other items were assessed as aware only, such as infrastructure facilities (3.43), maintenance of barangay roads and bridges (3.36), maintenance of the water supply system (3.21), agricultural support services (2.99), satellite or public market (2.62) and agricultural support services (2.54). This is the lowest-ranked indicator, suggesting that specific aspects of agricultural support services must be more well-known and prioritized among barangay officials.

As affirmed by the study conducted by Francia (2022), most of the punong barangays are highly aware of the devolved FSF except for agricultural support services, information and reading centers, and satellite or public markets, which are only aware. On the other hand, the Gallanosa and De Castro (2023) study shows that respondents are partially aware of devolution and its functions.

4. Level of Implementation of the Devolved Functions, Services, and Facilities of Barangays

Table 4 displays the current implementation level of the barangays' devolved functions, services, and facilities. In general, the overall mean of 3.69 indicates that the barangays have a high level of implementation. This suggests that the barangays are implementing the devolved functions, services, and facilities using their budget with some assistance from NGAs and higher LGUs. Among the items cited, the indicator "health and social services" has the highest mean of 4.09 with an SD of 0.92 and is interpreted as a "high level of implementation." In contrast, "agricultural support services" and "satellite or public market" have the lowest mean of 3.16 with SD of 1.14 and 1.27, respectively, and are interpreted as "medium level of implementation."

On the other hand, the barangays have a high level of implementation on services and facilities related to general hygiene and sanitation, beautification, and solid waste collection (4.03); maintenance of Katarungang Pambarangay (4.03); maintenance of barangay roads and bridges (3.87); maintenance of the water supply system (3.75); and, infrastructure Facilities (3.87). For the information and reading center (3.39), the barangays have a medium level of implementation. They implemented the service using some of their budget but with assistance from NGAs and higher LGUs.

The study of Francia (2022) affirms that most of the devolved functions, services, and facilities were fully implemented by the barangays except for agricultural support services and information and reading centers, which are partially implemented, while satellite or public markets are yet to be implemented. On the other hand, the study by Flores (2019) shows that the barangays in Makati implemented social and health services, barangay justice systems, infrastructure facilities, and solid waste management. However, the barangays should have given more attention to agricultural support services and the satellite market because they were not feasible. Moreover, Orcena's (2019) study also shows that barangays are compliant in providing health and social services and solid waste management. However, the barangay needs an information reading center and agricultural support services to be implemented because the barangay is situated in the metropolis.

Table 4: Current Level of Implementation of the Devolved Functions, Services, and Facilities of Barangays

Indicators	Weighted Mean	SD	Verbal Interpretation
1. Agricultural support services	3.16	1.14	Medium level of implementation

2. Health and social services	4.09	0.92	High Level of Implementation
3. Services and facilities related to general hygiene and sanitation, beautification, and solid waste collection	4.03	0.87	High Level of Implementation
4. Maintenance of Katarungang Pambarangay	4.03	0.93	High Level of Implementation
5. Maintenance of barangay roads and bridges	3.87	0.97	High Level of Implementation
6. Maintenance of the water supply system	3.75	1.07	High Level of Implementation
7. Infrastructure facilities	3.87	1.03	High Level of Implementation
8. Information and Reading Center	3.39	1.22	Medium level of implementation
9. Satellite or public market	3.16	1.27	Medium level of implementation
Composite Mean	**3.69**		**High Level of Implementation**

Legend: 4.50 -5.00 = Advance level of Implementation; 3.50 – 4.49 = High level of Implementation; 2.50 – 3.49 = Medium level of Implementation; 1.50 – 2.49 = Low level of implementation; 1.00 - 1.49 = No implementation at all

5. Significant Difference in the Level of Awareness of the Barangay Officials on the Devolved Functions, Services, and Facilities when Grouped According to the Respondent's Profile

Table 5 shows the barangay officials' awareness of devolved functions, services, and facilities according to their profile. The findings reveal no significant differences between groups, as the p-values were higher than the alpha level. This indicates that the responses are statistically similar, reflecting a uniform awareness across profiles.

Table 5: Difference of Responses on Level of Awareness of Barangays Officials on Devolved Functions, Services, and Facilities When Grouped According to Respondents' Profile

Profile Variables	λ^2_c / U	p-value	Interpretation
Age	8.156	0.148	Not Significant
Sex	9370	0.191	Not Significant
Educational Attainment	7.696	0.360	Not Significant
Years in Service as Barangay Officials	3.732	0.292	Not Significant

Legend: Significant at p-value < 0.05

Based on the previously mentioned study results, it is clear that barangay officials' awareness of devolved functions, services, and facilities is not influenced by their sex, age, educational attainment, or years of service.

A University of the Philippines backed the argument - Diliman study, which discovered that officials' knowledge about devolved services, such as health, agriculture, and social services, is consistent across demographics and professional backgrounds, suggesting no significant disparity in awareness levels (UPSaHalalan, 2019). Contrary to this, Floranza's (2021) research discovered that barangay officials' socio-demographic characteristics, such as years of service, educational attainment, age, and sex, affect their governance and awareness of devolved functions, services, and facilities. Those with higher education degrees and greater years of service exhibited more awareness and expertise in governance. Younger officials, or those who had yet to go to school, showed less awareness.

6. Relationship between the Level of Awareness of the Barangay Officials and the Level of Implementation of the Barangays on the Devolved Functions, Services, and Facilities

Table 6 indicates the relationship between barangay officials' awareness of devolved functions, services, and facilities and their level of implementation. The calculated rho-value of 0.532 suggests a moderate direct correlation, and the consequent p-value of 0.000 is below the alpha significance threshold of 0.01. This indicates a significant connection, indicating that higher awareness is related to a higher level of implementation of devolved functions, services, and infrastructure.

Table 6: Relationship Between Level of Awareness of Barangays Officials on Devolved Functions, Services and Facilities and Level of Implementation of devolved functions, services and facilities

	rho-value	p-value	Interpretation
Level of Awareness vs. Level of Implementation	0.532**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

A 2022 study by the PIDS revealed that, while financial capacity and planning are essential, understanding among local government units (LGUs) about their devolved responsibilities significantly affects the delivery of services efficiency. The study points out the need for effective management of human resources along with capacity building to ensure that barangay officials are adequately prepared to execute devolved tasks effectively. Furthermore, the HKPH Public Opinion and Research Center's study, which was carried out in collaboration with the Asia Research Center, highlighted the crucial role of barangay officials in local governance. As stated in the study, increased awareness

and knowledge among barangay officials results in better service and function implementation (Manila Standard, 2023).

7. **Issues and Challenges that the Barangays are Facing in the Implementation of the Full Devolution**

The researcher interviewed nine (9) punong barangays in various cities and municipalities in Batangas. The participants are either in their second or third term as Punong barangays and have experience implementing full devolution. Participants' viewpoints are based on their knowledge of fully implementing devolution. The issues and challenges that the punong barangays face are divided into three (3) themes: lack or insufficient financial resources, lack of human resources/staffing, and lack of support from higher LGUs and NGAs.

Theme 1: Lack or insufficient financial resources

The IRA, now known as NTA, is a share that barangays automatically receive from national tax collections, as outlined in Section 17 of LGC of 1991. This funding supports the implementation of devolved FSFs. However, the IRA amount received by barangays often needs to align with the scale of programs and projects they must implement, leading to a need for more resources for effective full devolution.

Theme 2: Lack of human resources/staffing

Implementing devolved functions, services, and facilities requires adequate human resources and technical skills. However, insufficient financial resources often prevent barangays from hiring the additional personnel needed. With a sufficient budget, barangays can recruit the necessary staff to carry out programs and projects at the local level effectively. As a result, barangays encounter significant challenges and issues due to a need for more human resources to implement devolution fully.

Theme 3: Lack or inadequate support from higher LGUs and NGAs

Section 17 of the LGC of 1991 cites the specific devolved FSFs assigned to various levels of LGUs. It outlines each LGU's responsibilities and limitations in executing these devolved services. Higher LGUs and NGAs should coordinate their programs and projects with those of the barangays to ensure integrated development efforts. However, barangays frequently need more support from higher-level LGUs and NGAs while adopting full devolution, notably regarding financial or technical assistance.

Conclusions

Based on the study's findings, the following conclusions were reached:

1. Most of the respondents are 45-55 years old, male, college graduates, and have more than ten years of service as barangay officials.

2. Respondent's barangays are mainly classified as rural and located in municipalities with first income class and average IRA shares of PhP1,000,000 – 4,999,999.
3. Barangay officials are very aware of the maintenance of Katarungang Pambarangay and services and facilities related to general hygiene and sanitation, beautification, solid waste collection, health, and social services, and other devolved functions, services and facilities.
4. Currently, barangays have a high level of implementation for most devolved functions, services, and facilities, except for the satellite or public markets, information and reading centers, and agricultural support services, which have a medium level of implementation.
5. The barangay officials' awareness of the devolved functions, services, and facilities is similar when grouped according to the respondent's profile.
6. There is a significant relationship between the level of awareness of the barangay officials and the level of implementation of barangays on the devolved functions, services, and facilities.
7. The barangays are currently facing issues and challenges in implementing full devolution, which include a lack of or insufficient financial resources, a lack of human resources/staffing, and a lack of or inadequate support from higher LGUs and NGAs.
8. The barangays need the following capacity development interventions that will enhance their competencies as barangay officials and capabilities of their respective barangays in carrying out the devolved services in facilities which include the following: strengthening the barangays' innovative revenue-raising capacities to generate local sources of revenue through fees and clearances; ensuring efficient and effective use of financial resources; prioritizing projects and programs for implementation; seeking financial and technical assistance from higher LGUs and national NGAs; and establishing partnerships with civil society organizations (CSOs) within the barangays for program and project implementation.

Recommendations

Based on the conclusions acquired from the information provided, the following recommendations can be made:

1. Conduct re-orientation or training programs for barangay officials to enhance their skills and knowledge of the devolved functions, services, and facilities. Focus on areas with lower awareness levels, such as satellite or public markets, agricultural support services, and information and reading centers.
2. Create strategies to improve resource allocation and management, both financial and human, to ensure efficient utilization of available resources. This can include planning, budgeting, financial management, and human resource development training.
3. Strengthen partnership, coordination, and collaboration with higher LGUs and NGAS in implementing programs and projects to ensure all efforts are aligned and

complemented. This involves regular coordination meetings, joint projects, and technical assistance provisions to address the issues and challenges of financial and human resources shortages. This will also help the barangays to implement devolved functions, services, and facilities with low implementation levels.

4. Encourage barangays to explore innovative revenue-raising activities as part of their taxing power, as cited in the provision on LGC of 1991, which can help increase their income. Activities related to revenue-raising include using barangay assets to generate income, updating their revenue code, improving fee collection systems, and establishing local economic enterprises.
5. Ensure the barangays focus on improving facilities and services currently underperforming, such as agricultural support services and public markets, by investing in constructing and maintaining essential infrastructure. Additionally, barangays can forge a private-public partnership to implement such infrastructure projects.
6. Create a local project monitoring committee to implement monitoring and evaluation activities regarding the devolved FSF implementation in the barangays. The committee will assist in identifying gaps, evaluating progress, and making adjustments needed to improve the implementation of full devolution.
7. As part of participatory governance, the CSOs can participate in the barangays' decision-making and planning process. This can be accomplished through regular community meetings, feedback channels, and joint planning sessions.
8. Organize information and education campaigns on the devolved functions, services, and facilities to ensure that barangay officials and their constituents understand its importance. This is meant to encourage the community's support and participation in various projects in the barangays.
9. Develop a capacity development plan to improve the competencies and capabilities of barangay officials in fully implementing devolution.

Compliance with Ethical Standards

To ensure no harm occurred in this study, the researcher confirmed that all respondents voluntarily agreed to participate. Permission was obtained through informed consent, using the university's official letterhead outlining the study's purpose and data collection methods.

The researcher guaranteed that respondents' names and information were used solely for research purposes and maintained complete confidentiality. Additionally, the researcher prioritized the respondents' safety, and they could withdraw at any time.

Acknowledgements

The researcher would like to convey his sincere gratitude and profound acknowledgment to all individuals for their remarkable support and encouragement throughout this research journey. Their contributions have been invaluable; this endeavor would not have been possible without their assistance.

REFERENCES

Administrative Order No. 270: Prescribing the Implementing Rules and Regulation of the Local Government Code 1991. Retrieved the fifth day of December 2023, from https://s3.amazonaws.com/rgi-documents/3558cc22f8a1f61c69a1246299db95d33f981c30.pdf

Asian Development Bank (2023). ADB's Work in the Gender and Development Sector. Retrieved the twenty-fifth day of May 2024, from Asian Development Bank website: https://www.adb.org/what-we-do/topics/gender/overview#reducing-inequality

Asian Development Outlook (2019). - Strengthening Disaster Resilience - World. (2019, the third day of April). Retrieved the twenty-sixth day of May 2024, from ReliefWeb website: https://reliefweb.int/report/world/asian-development-outlook-2019-strengthening-disaster-resilience?gad_source=1&gclid=Cj0KCQjwmMayBhDuARIsAM9HM8cPPFK8la0nIKjligfuwkwXlH1R0ySC2jdhn2-kchsC54iVh6mtn7AaAr9fEALw_wcB

Dabalos, E. and Diamante, C. (2020). Water Quality Assessment in Barangay Santo Niño, Sibuco, Zamboanga Del Norte, Mindanao, Philippines. Ciencia. Western Mindanao State University. Philippines.

Diokno-Sicat, J. (2019). Philippine Case Study on Municipal Financing. Retrieved from https://repository.unescap.org/bitstream/handle/20.500.12870/1186/ESCAP-2019-WP-Philippine-Metro-Manila-case-study-on-municipal-financing.pdf?sequence=2#:~:text=

Dumlao, S. (2021). Educational Attainment Profile and Performance of Punong Barangays in Municipality of Mogpog, Marinduque: Implication to Good Governance. Retrieved the fifteenth day of January 2024, from Academia.edu website: https://www.academia.edu/31527175/educational_attainment_profile_and_performance_of_Punong_barangays_in_Municipality_of_Mogpog_Marinduque_Implication_to_Good_Governance

Floranza, J. (2021). Barangay Governance in Northeast of Catanduanes, Philippines: Basis for Catanduanes State University Panganiban Campus Extension Program. DOAJ (DOAJ: Directory of Open Access Journals). https://doi.org/10.13135/2704-9906/5058

Flores, R. (2019). Assessment of Selected Barangays in Makati Towards Improved Barangay Governance. Philippines.

Francia, C. (2022). Devolution of Certain Functions of the Executive Branch to Barangays in Batangas Province. Laguna State Polytechnic University. Laguna. The Philippines.

Gallanosa, J., and De Castro, E. (2023). Full Devolution Transition: Challenges in The Implementation of Executive Order 138 in Selected Municipalities in the Province of Sorsogon. Retrieved from https://uijrt.com/articles/v4/i3/UIJRTV4I30018.pdf

Gulane, I., and Viray, M. (2023). INTERNAL REVENUE ALLOTMENT: THE CASE OF BARANGAY CALAMBA, CEBU CITY. MAP Observer: Jurnal Penelitian Administrasi Publik, 3(02), 1-10. https://doi.org/10.30996/mapo.v3i02.9584

Malemane, K. and Nel-Sanders, D. (2021). Strengthening participatory local Governance for improved service delivery: The case of Khayelitsha. Africa's Public Service Delivery & Performance Review, 9(1), 10. Retrieved from https://apsdpr.org/index.php/apsdpr/article/view/500/884

Manila Standard (2023, the twenty-first day of November). Barangay Officials: The

Backbone of Local Governance in the Philippines study released - Manila Standard. Retrieved the twenty-fifth day of May 2024, from Manila Standard website: https://manilastandard.net/?p=314392185

Nur, V. (2019). Socio-Demographic Profile and Performance of Women in Punong Barangays In Selected Municipalities of Maguindanao. Abstract Proceedings of International Conference on Responsive Education and Socio-Economic Transformation.Vol 01: Iss01: Pg12. https://doi.org/10.21016/ICRESET.2018.A26WF003O

Orcena, G. (2019). A 'Paradox' of Governance Performance: The Case of Barangay 872, Manila, Philippines. Journal of Social and Political Sciences. Vol. 2, Np. 1, 2019:132-141. Asian Institute of Research.

Philippine Constitution of 1987. (2021, the twenty-sixth day of August). Constitute Project. Retrieved January 5, 2024 from https://www.constituteproject.org/ constitution/Philippines_1987.pdf?lang=en

Republic Act (R.A.) No. 7160: An Act Providing for Local Government Code of 1991. (1991). The LAWPHiL Project. Retrieved the fifth day of November 2023 from https://www.lawphil.net/statutes/repacts/ ra1991/ra_7160_1991.html

Supreme Court of the Philippines. (2019). G.R. No. 199802/G.R. No. 208488: Congressman Hermilando I. Mandanas et al. Vs. Executive Secretary Paquito N. Ochoa, Jr., et al./Honorable Enrique T. Garcia, Jr. Vs. Honorable Paquito N. Ochoa, Jr., et al. Retrieved the fifth day of January 2024 from https://sc.judiciary.gov.ph/3726/

UPSaHalalan. (2019, the eleventh day of May). Powers and Devolved Services of Local Government Units (LGUs). Retrieved the sixteenth day of June 2024, from UP sa Halalan website: https://halalan.up.edu.ph/powers-and-devolved-services-of-local-government-units-lgus/

Walker, R. & Andrews, R. (2020). Local Government Management and Performance: A Review of Evidence. Journal of Public Administration Research and Theory, 25(1), 101–133. https://doi.org/10.1093/jopart/mut038

APA Citation:

Francia, C. C. (2024). AWARENESS AMONG THE ELECTIVE OFFICIALS FROM SELECTED BARANGAYS ON THE DEVOLVED FUNCTIONS, SERVICES, AND FACILITIES IN THE PROVINCE OF BATANGAS: BASIS FOR CAPACITY DEVELOPMENT PLAN. Ignatian International Journal for Multidisciplinary Research, 2(8), 212–232. https://doi.org/10.5281/zenodo.13162659

celiofrancia@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

BEEP BEEP BEEP: STEERING THE PERCEPTION OF JEEPNEY DRIVERS TOWARDS JEEPNEY MODERNIZATION

Mara Raine P. Cunanan [1], Joshua L. Rosel [1], Arelly Angel O. Balilo [1], Louie C. Lugue Jr.[1], Angelo P. Sandot [1], Renz M. Pamintuan [1], Sean Danielle D. David [1], John Louise M. Marcaida[2], Dexk Michael N. Tayag[2]

[1] Senior High School Department, Our Lady of Fatima University, Philippines
[2] Department of Physical Education, Our Lady of Fatima University, Philippines

https://doi.org/10.5281/zenodo.13346354

ABSTRACT

To strengthen and develop the PUVM, the study attempts to ascertain the views and opinions of jeepney drivers regarding public utility vehicle modernization. This qualitative-phenomenological study included a complete list of the responses of Jeepney drivers in the Bulaon-San Fernando Jeep Terminal who voluntarily participated in this qualitative research (30) by responding to a semi-structured questionnaire. This open-ended and closed-ended questionnaire analyses the perceptions of the jeepney drivers and the challenges of the PUVM to the jeepney drivers. The study employed manual coding to carry out Braun and Clarke's thematic analysis approach. Three themes emerged from the research that shed light on the attitudes and views of jeepney drivers regarding PUVM and its impact on them: (1) preserving cultural heritage and economic resilience: The Jeepney Industry's Struggle Against Modernization; (2) fare adjustments and passenger competition in Jeepney Modernization; and (3) daily impacts: the Effect of PUVM on Jeepney Drivers Daily Lives. The findings of this study may wake people up, especially the higher-ups, to what is happening to the jeepney drivers towards the PUVM. In addition, it may enhance the PUVM to improve and be a better program for everyone, and it may also raise social awareness among the people.

Keywords: *jeepney modernization program, public transportation system, public utility vehicle modernization, jeepney drivers, social awareness*

INTRODUCTION

Conventional jeepneys are a big part of our everyday transportation. After World War II, US Forces abandoned their military jeeps, the Filipinos combined spare components from repurposed machines to build a maximum commuter car that could hold six people. Meanwhile, in 2017 the Department of Transportation began implementing the jeepney refurbishment plans. The widespread use of conventional transportation is to be replaced by safer, more contemporary vehicles that will have a smaller negative impact on the environment. The program's objective is to solve the issues including outdated technology, safety concerns, and environmental effects by incorporating elements such as emission compliance and upgraded safety measures.

The Philippine government is pursuing sustainable growth solutions in response to growing environmental concerns. As stated by Atos et al. (2021), "the suggestion to update the nation's iconic symbol, the jeepney." Incorporating input from commuters, operators, and drivers had a major impact on modernizing the fleet of jeepneys. The Jeepney Modernization Program has encountered various obstacles. As mentioned by Clavecillas (2017), these replacements, the plan was for jeepneys to replace the 15 years or older, which has an impact on operators and drivers who have spent the most time working in the field. Correspondingly, Manuel (2020) stated that the quantity of the nation's jeepney fleet and its expensive operators and the replacement will be covered by the drivers. However, the implementation of the program was delayed. According to Biona et al. (2023) By 2020, the Public Utility Vehicle Modernization Program (PUVMP) was supposed to be finished. However, due to the COVID-19 outbreak and the protests by Philippine transport groups in March 2023, the government decided to postpone the franchise consolidation date to December 31, 2023. The biggest worry for these roadmasters is their source of income because they fear that the replacement of jeepneys' high cost will force them with nothing but debt and a diminished standard of living, adding to their already challenging lives.

Knowledge is the main benefit of raising awareness. As stated by Zagzebski (2017), knowledge is a highly respected state that entails cognitive engagement with reality. The researchers can help people acknowledge and hear the voices and perceptions of beloved jeepney drivers who've been there since the start and have become a part of our culture toward jeepney modernization. A special focus on socialization will be placed on this study because the goal is to observe, explore, and assess the viewpoints of jeepney drivers regarding the modernization project. Social awareness helps people understand, as they grow older, how they fit into and contribute to society and the environment, as well as how we get the things we need from them. As stated by Kaiser (2022), to create vibrant, healthy relationships and make moral decisions, people must develop social awareness, also known as socialization. Since social awareness is a crucial ability for enhancing interpersonal interactions and communication, it can help us deal with problems and challenges like how drivers view the modernization of the jeepney. The researchers conducted this study to educate people on a wider scale about the reality of what their nation is experiencing regarding modernizing jeepneys. This study's findings,

aims to promote greater awareness and understanding of the challenges and needs faced by jeepney drivers, which would eventually result in more productive discussions and decisions regarding transportation regulations.

Modernized Jeepneys and the Transformation of Commuting Experiences

In an era marked by rapid technological advances, modernized jeepneys are not just transforming the way we commute but also contributing to broader and more efficient public transportation. According to the Department of Science and Technology (DOST), the new jeepney's features, which include digital route signs, CCTV cameras, dash cams, PUV stop buttons, rear emergency doors, cashless payment systems, and public speaker systems, are all designed with the safety and comfort of its passengers in mind. With better safety features and more comfort for passengers, these modernized jeepneys are reshaping the commuting experience. Moreover, the focus on making transportation accessible ensures that everyone, including those with disabilities, can easily use public transit systems. Through working together, using technology, and making designs that work for everyone, the objective is to create a connected, accessible, and safer experience for all. The Land Transportation Franchising and Regulatory Board (LTFRB) mentioned that the program seeks to enhance the quality of life for all citizens in the Philippines by offering a safer, more efficient, reliable, convenient, cost-effective, eco-friendly, and sustainable transportation system nationwide.

Exploring the Influence of Jeepney Vehicles impact on Filipino Culture

The jeepney vehicle in the Philippines has been a trademark for Filipinos. They use this vehicle for daily transportation. For those who budget their money on transportation, riding a jeepney saves them a lot of money, especially students, senior citizens, and PWDs, because of the discounts. As mentioned by Savilla et al. (2023), jeepneys are iconic images of the Philippines that represent the people's inventiveness. The development of these vibrant public transportation options began in the 1950s. After World War II, the American troops departed the Philippines, leaving behind many vehicles. The Philippines has been known for its colorful, eye-catching, and creative jeepneys, which became one of their cultures. From the jeepney itself to the hardworking drivers, driving a jeepney helps them find a good job and serve people. Every jeepney vehicle can help other people show their creativity by designing, enhancing, and detailing their vehicles.

As of today, these jeepneys are being phased out and modified to an e-jeep. According to Estipular (2020), “The Public Utility Vehicle Modernization Program (PUVMP)" was put into effect and unveiled in 2017 to completely change the Philippines' public transportation system. The primary means of transportation for Filipinos is jeepneys. To preserve Philippine culture or tradition, modernized jeepneys should be designed like the modern ones. As said by Zulueta et al. (2024), "It is advised to maintain cultural distinctiveness by designing modern jeepneys to resemble traditional jeepneys to attract commuters from the Philippines.” The higher-ups should also consider preserving the culture of the Philippines before phasing out the traditional jeepneys because, as said by Landayan et al. (2024), "the jeepney is a painting that captures the essence of Filipino culture, not just

a means of transportation. Locals quickly transformed the public utility cars into movable artworks. Artists began painting vivid murals, elaborate patterns, and even ironic sayings on jeepneys, transforming them into moving works of art."

Alterations of Public Transport from Traditional to Modern

In the Philippines, the iconic jeepney reigns supreme as the quintessential mode of public transportation, catering to the daily commuting needs of a significant portion of the population Baluyot et al. (2017). However, recognizing the pressing need for a shift towards sustainability and efficiency in the transport sector, the government has embarked on a transformative journey with the launch of the Public Utility Vehicle (PUV) Modernization Program. As stated by Castro (2019), This initiative places a spotlight on the introduction of updated diesel and electric jeepneys, commonly referred to as e-jeepneys, signalling a pivotal step towards fostering a greener and more sustainable public transportation landscape.

However, despite the undeniable potential for positive change, the implementation of the PUVM modernization program encounters substantial resistance from various stakeholders within the transportation sector. Foremost among these dissenting voices are transportation associations, whose opposition is primarily fuelled by apprehensions surrounding investment risks and financial burdens associated with the transition. According to Baracao et al. (2023), these concerns highlight the inherent challenges and complexities involved in effecting a comprehensive overhaul of the existing transportation infrastructure.

Research Questions

The general objective of this study is to uncover the perception of jeepney drivers toward the Jeepney Modernization Program. Specifically, it seeks to answer the following:

1. What is the perspective of jeepney drivers in the Jeepney Modernization Program?
2. How does the jeepney modernization program affect the transportation system?
3. How are the jeepney drivers going to handle this upgrading program for jeepney

METHODOLOGY

This study utilized qualitative research to present the framework and to discern and perceive the perceptions of jeepney drivers to PUVM. Also, to provide an in-depth analysis and understanding of the perception of jeepney drivers in Bulaon-San Fernando Terminal about the PUVM. Hennink et al. (2020) stated that qualitative research is a methodology that enables the detailed examination of people's experiences using a particular set of research techniques, including life histories or biographies, in-depth interviews, focus groups, observation, content analysis, and visual aids. Additionally, phenomenological methods apply wherein this approach investigates the everyday

experiences of human beings while suspending the researchers' preconceived assumptions about the phenomenon. In the lens of Quinney et al. (2016), understanding and exploring the substance of a human experience, as well as starting a conversation with the subject, are the main goals of phenomenological research. In terms of participants in this study. The study focused on regular jeepney drivers at the San Fernando Jeep terminal in Bulaon, with thirty drivers participating voluntarily. The researcher used purposive sampling, a method where participants are selected based on specific criteria, as defined by Obilor (2023), to ensure relevance and practicality. This approach was chosen to capture detailed and nuanced insights from drivers directly at the terminal. Researchers intentionally selected individuals using purposive sampling. Using this method and its practicality in select individuals, researchers identified their targeted jeepney driver participants directly at their designated terminal.

In collecting data from participants. The researchers utilized a semi-structured interview following the study objective. The semi-structured interview was conducted via face-to-face interaction. In the collection of data, the researchers respectfully addressed the participants, asking for permission to conduct interviews and outlining the goal of the study. To promote comfort, they utilized the participants' preferred language and thoughtfully selected phrases. To ensure correct documentation, permission was also sought to record responses. All information gathered for this study will be kept private and confidentiality by the Data Privacy Act of 2012. The data generated from the participant replies was methodologically collected, transcribed, structured, analysed, and appraised using the Thematic Analysis Method of Braun and Clarke (2006), yielding insightful results. According to Braun and Clarke (2006), this method is frequently used in qualitative research because it provides insightful and comprehensive results.

RESULTS AND DISCUSSION

The methods described by Braun and Clarke (2006) are used in this study to present a thorough thematic interpretation of the results obtained from theme analysis. To completely comprehend the idea of the study, an intensive and meticulous explanation was also provided to give the derived themes and subthemes their underlying qualities and meanings.

Theme 1: Preserving Cultural Heritage and Economic Resilience: The Jeepney Industry's Struggle Against Modernization

The Jeepney Industry's Struggle Against Modernization encapsulates a poignant narrative at the intersection of tradition and progress. Jeepneys, iconic symbols deeply embedded in the country's cultural fabric, emerged from surplus military jeeps post-World War II, evolving into colorful manifestations of Filipino resourcefulness and resilience. However, as modernization efforts seek to enhance safety, reduce emissions, and improve efficiency, the very essence of the jeepney industry and the livelihoods it sustains

face unprecedented challenges. As stated by Mateo-Babiano (2020), this theme delves into the complex dialogue surrounding the preservation of cultural heritage amidst rapid technological advancement, raising pivotal questions about inclusivity, governmental support, and the imperative of finding innovative solutions that honor tradition while embracing progress. In addition, Andalecio (2020) notes that in many Philippine cities, jeepneys—paratransit vehicles—account for most urban transportation. 90% of the approximately 179,000 jeepneys in use are fifteen years of age or older. But there are a lot more problems along the way. To address this, the government unveiled a historic bill creating the Public Utility Vehicle Modernization Program (PUVMP), a ground-breaking, expansive initiative focused mostly on land-based public transit, the majority of which is jeepneys.

Subtheme 1.1 Financial Strain and Resistance to Modernization in the Jeepney Industry.

This sub-theme emerges as the result of the perspective of jeepney drivers towards the execution of the jeepney modernization program. According to Andelancio et al (2020), Jeepney drivers face financial challenges during the jeepney modernization program, The implementation of the program involves phasing out old regular jeepneys and replacing them with modernized jeepneys, which requires drivers to invest in new vehicles. However, the cost of acquiring modernized jeepneys poses a significant financial burden for drivers, as they may not have the necessary funds to purchase these vehicles. In addition, Dimalanta et al (2019) stated Jeepney drivers typically earn around 500 pesos per day in gross revenue. Meanwhile, jeepney operators see a driver typically earning between P2,500 and P3,000. The high cost of modern jeepneys far surpasses the financial capacity of both drivers and operators, creating a significant financial burden. The Public Utility Vehicle Modernization Program (PUVMP) of the government offers finance packages through the Development Bank of the Philippines (DBP) and Land Bank of the Philippines (Landbank) to ease the transition to new jeepneys. However, given the high cost of modern jeepneys and the financial limitations of many drivers and operators, the program's current funding might be insufficient. Increasing the available funds or exploring alternative financing options could help bridge this gap. These financial difficulties may make it more difficult for the jeepney modernization initiative to be implemented successfully and may necessitate government intervention to support and aid drivers.

Subtheme 1.2 Preserving Cultural Heritage and Unique Identity

This sub-theme comes out as an outcome of jeepney drivers' deep attachment to the traditional jeepney as a symbol of Filipino identity. Cerio (2017) mentioned that as the "moving icon of Philippine culture," the jeepney has not only become a common sight on the country's streets but has also become ingrained in Filipino identity, culture, and values. The jeepney represents the ingenuity, originality, talent, and business acumen of the Filipino people. Furthermore, the jeepney is more than just a means of transit; it contains history, artistry, and community. As stated by Solina (2023), the Philippine transportation system is known for its jeepneys. The jeepney, which has been a means

of transportation for the Filipino people since the mid-1900s, is well-known for its vibrant, imaginative, and locally inspired patterns.

Additionally, according to Gatarin (2024), preserving traditional jeepneys is essential for safeguarding the unique character and cultural heritage of the Philippines. Having provided transportation for the public since the end of World War II, these public utility vehicles (PUVs) are now recognized as significant cultural symbols on Filipino streets. Ranis et al. (2021) mentioned that, as the "Kings of the Road," jeepneys are the main form of transportation used by most Filipinos daily. Across cities throughout the Philippines, public transit, facilitated by jeepneys, provides crucial access to employment opportunities, essential resources, healthcare services, and recreational activities. Due to the lowest fare, it helps commuters as well as those who own a vehicle. Jeepneys are significant in Filipino cultures as both a means of transportation and an iconic object. These recognizable vehicles represent the culture and heritage of Filipino communities and are more than just a means of transportation.

Subtheme 1.3 The Voices of Jeepney Drivers Against Modernization

This sub-theme emerged because of the jeepney driver's perceptions against jeepney modernization. As stated by Mendoza (2021), the government's modernization project for jeepneys has two main "blindsides," according to information gathered from drivers and operators as well as data: the high cost of each new jeepney and the potential ripple effect of raising jeepney fares to offset the cost of buying new jeepney units. Jeepney drivers fear that the modernization initiative would risk their means of support. Many are concerned that newer, more expensive modernized jeepneys would displace them or make them less relevant because they have dedicated their life to this line of work. According to Atos et al. (2021), the country's historical symbol, the jeepney, was one of the programs that was modernized. Cabin operators, drivers, and commuters were all impacted by the jeepney's upgrades. In addition, according to Savilla et al. (2024). In general, drivers disagreed with the program's implementation and opposed its execution. Some drivers feel left out by government policies that prioritize modernization without properly taking seriously the opinions of drivers or listening to their concerns.

Theme 2: The Impact of Jeepney Modernization on Fare, Affordability, Job Security, and Route Adjustments

The modernization of jeepneys in the Philippines has had a significant influence on both drivers and commuters. As the government pushes for the transition to more modern and environmentally friendly vehicles, drivers are faced with affordability issues and potential debt accumulation. According to Manuel (2019), the jeepney phase-out will impose a significant financial strain on drivers and operators. The government is set to require them to invest in new electric jeepneys, demanding substantial down payments running into hundreds of thousands. The cost of upgrading to modern jeepneys poses a financial challenge for many drivers, leading to concerns about their livelihoods and financial stability. This shift towards modernization also raises job insecurity among drivers, as the transition may result in reduced demand for traditional jeepneys, potentially leading to job losses and uncertainty in the industry. Furthermore, the modernization of jeepneys could

bring about changes in routes that may impact passenger pickups and drop-offs, as well as potential fare increases. With the introduction of modernized jeepneys and potential adjustments to existing routes, commuters may experience disruptions in their daily commute patterns. Changes in routes could affect the accessibility of certain areas and the convenience of transportation for passengers.

Subtheme 2.1: Implications and Effects of the Fare Increase on Jeepney Drivers and Commuters.

This sub-theme comes up as a major problem in fare adjustment with public transit and commuting. The daily lives of commuters are affected by the hike in passenger and jeepney fares, especially those who depend on these forms of transportation for their daily commute. According to Piquero (2024), “Regular commuters will have a much harder time finding their monthly expenses since, should the Public Utility Vehicle Modernization (PUVM) initiative be completely executed, jeepney drivers will likely demand higher minimum fares—which could rise by as much as P25.” As stated by Agpaoa (2024), “Leaders in the transport sector have cautioned that the minimum ticket, which is currently P15, will increase to P40 if the Public Utility Vehicle Modernization Program (PUVMP) is completely implemented.” In addition, according to Yu (2024), commuters may suffer because of the government's modernization effort, as minimum tariffs could rise from the current P15 to as much as P40. Due to the high cost of modern jeepneys, experts and manufacturers are concerned that fares may need to be increased. This is especially true since some operators are already having trouble affording the monthly amortization of their new cars.

Subtheme 2.2: Affordability Issues for Drivers and Potential Debt Accumulation.

The financial challenges that jeepney drivers face, especially considering the ongoing modernization initiatives, have the potential to lead to the accumulation of significant levels of debt, creating a pressing financial burden for those individuals working in the jeepney industry. According to Fernandez (2019), current e-jeepney costs at least PHP 1.2 million (about USD 23,400), therefore switching to one requires a significant upfront expense. Operators must comply with a regulatory mandate of owning at least 10 units, further increasing the financial strain. This significant initial expense has raised significant worries among operators and drivers.

Operators and drivers in the jeepney industry are raising concerns about the substantial upfront costs associated with purchasing modern jeepneys. The shift towards these advanced and eco-friendly vehicles has notably heightened the financial burden on individuals within the sector, making it more challenging for them to adapt to the changing dynamics of public transportation. Bautista & Moya (2023) stated that on average, a jeepney operator generates a daily gross income ranging from P2,500 to P3,000. But due to costs like fuel, maintenance, and compensation to the jeepney driver (typically about P500), this income is drastically decreased. The cost of a modern jeepney far surpasses that of a traditional one, posing a substantial financial challenge for jeepney drivers and operators. The increased costs of transitioning to modern jeepneys in comparison to traditional ones create a notable financial obstacle for jeepney drivers and operators. This

significant difference in expenses highlights the financial constraints faced by those in the industry, adding complexity to their ability to adjust to the changing dynamics of public transportation.

Subtheme 2.3: Competition Among Traditional and Modern Jeepneys for Passengers Based on Comfort Preferences.

The transition to modern jeepneys poses a formidable challenge regarding job insecurity for traditional jeepney drivers. The transition to modern jeepneys has the potential to decrease the demand for traditional jeepneys, leading to potential job losses and industry instability. Drivers are confronted with the imminent risk of losing their primary source of income. As stated by Malasique et al. (2022), the Public Utility Vehicle Modernization Program (PUVMP) influences PUV drivers' employment because it creates new job opportunities while also removing their existing sources of income. The shift from traditional jeepneys to modernized ones and the requirement to obtain valid franchises present financial hurdles that not all PUV drivers can overcome. The problem is made worse by difficulties in merging with firms or cooperatives, which has a big impact on PUV drivers' employment in the Philippines. In addition, Manuel (2019) expressed concerns about the potential phase-out of jeepneys and its implications for drivers and operators. These individuals rely on driving jeepneys for their livelihood, supporting their families and children's education. The disappearance of jeepneys would create uncertainty and financial difficulties in meeting daily needs, significantly impacting their lives and livelihoods.

Subtheme 2.4: Potential Changes in Routes Affecting Passenger Pickups.

This sub-theme surfaced as a possible investigation of how route changes affect passenger pickups. According to Mercurio (2021), the Passenger Forum (TPF), a consumer advocacy group, claims that there is still work to be done on the issue of how different transportation options and routes are connected. As mentioned by About Philippines (2023), “The restricted seating capacity, absence of marked stops, and unregulated rates of traditional jeepneys are frequent points of contention. It is suggested that transportation efficiency and convenience can be greatly increased by introducing larger-capacity, standardized vehicles and creating regular routes. By reducing travel times and relieving traffic congestion, these modifications may improve commuters’ general quality of life and productivity.” In addition, Yu (2024) stated before the revised deadline of April 30, that almost 1,900 UV Express and jeepney routes ran the risk of disappearing nationally by February 1. A memo circular issued by the Land Transportation Franchising and Regulation Board (LTFRB) states that jeepneys operating on specific routes—including those with low consolidation rates—had until January 31 to resume operations if they were unable to consolidate by the deadline of December 31, 2023. However, there were other routes where no cooperative or company was created by any of the UV Express units or jeepneys operating on them. Under the LTFRB data, 108 UV Express routes and 395 jeepney routes in Metro Manila do not have consolidated organizations. There are 1,948 PUV routes without consolidated organizations throughout the entire country.

Theme 3: Daily Impacts: Effect of PUVM on Jeepney Drivers Daily Lives

There are several negative effects that the Public Utility Vehicle Modernization (PUVM) adoption has on drivers' daily lives. The jeepney drivers face financial difficulties with the necessity to surrender their jobs, and primarily their leaders and the higher-ups because they no longer realize that their freedom to choose is acquired little by little. One of the negative impacts is their financial difficulties. Gumasing et al. (2024) stated that “Jeepney operators and drivers don't make a lot of money because their pay is based on several variables, including passenger traffic, seating capacity, and route profitability.” Second, they rely their decisions on the higher-ups because they don’t have a choice if the government is the one who implements them. Their freedom to choose is acquired little by little by the higher-ups. Third, the number of jeepney drivers will decrease because some of them will just quit their jobs and others will find another job to be able to support their families. Furthermore, the shortage of jeepney drivers would affect more than just the drivers themselves. According to Recio (2020), “Since low-income jeepney drivers are unable to purchase new cars, the government ought to investigate the initiative. The jeepney drivers would suffer and lose their jobs because of this.” In conclusion, the challenge that jeepney drivers face captures the intricate relationship between autonomy and job security in the face of economic upheaval. As stated by Tiglao et al. (2023), disadvantaged locations are densely populated metropolitan environments that are less responsive to changes in transportation networks and physical distance needs, in addition to having a higher number of jobs with lower skill levels. When low-wage workers use public transportation less frequently, they run the risk of being ostracized.

Subtheme 3.1 Freedom of Choice: The Jeepney Driver's Compliance is to Follow the Lead of Higher-Ups.

This sub-theme occurred as the outcome after the interview with the jeepney drivers. Some of them utter that they’re just going to follow what the government wants since they can’t do anything about it, especially if the government is the one who will implement that program. As stated by Sunio et al (2019) the Department of Transportation is the primary government organization in the Philippines entrusted with developing policies and implementing plans, programs, and projects about transportation. Some of the drivers stated that the jeepney modernization was hard for them but if that government wants it then they don’t have a choice but to follow.

In addition, Malasique et al (2022) mention that “Since updating public fleets was the program's primary goal, the government put in place regulations that drivers and public utility operators must abide by". As time passed by, jeepney drivers continuously fought for their rights that’s why According to Lu (2024) the licenses allowing independent operators to operate traditional jeepneys came to an end on December 31, 2023. However, this was extended by one month, or until January 31, 2024. This was an extension, the first of which concluded on June 30, 2023. Due to the one-month extension, we expect that traditional jeepneys will no longer run on our routes. Unless that is, the government chooses to prolong the period by which drivers and operators of jeepneys can amalgamate once more.

Subtheme 3.2: Giving Up the Wheel or Seeking a New Path of Journey.

This sub-theme emerges because of the negative impacts of the PUVM on the jeepney drivers. Many jeepney drivers are losing their fate in their jobs because they are scared to lose their franchise and won't be able to drive a jeep again also due to the high price of modernized jeeps. As a result of that they are planning to find a more secure job that can afford their daily expenses. As mentioned by Gatarin (2024), because of the sudden loss of their vital jeepney and source of income, the Public Utility Vehicle Modernization Program (PUVMP) is a sensitive and divisive matter in this case.

In addition, according to Guno et al. (2021), Jeepney drivers are forced to live in a city that is created by the capitalist corporate class and the public transportation system because of the "tyranny of the market," which eliminates the human aspect of essential improvements in the jeepney sector through a technofix approach. Because of the jeepney drivers leaving and their jobs being stolen from them because of removing their franchise, it could be the result of a domino effect where not only jeepney drivers will experience it but also commuters and the economy of the country. As stated by Malasique & Rosete (2022), "When transportation networks are not reliable or have insufficient capacity, it can lead to lost or reduced quality of life and lost opportunity."

Subtheme 3.3: Financial Struggles of Owning a Modernized Jeepney.

This sub-theme emerged because of interviewing the jeepney drivers. Many of them are scared that they cannot pay for the modernized jeep until their old age because of their lack of money to buy and maintain the modernized jeep. According to Guno et al. (2021), the abrupt price increases for the already expensive jeepneys are closely related to worries regarding the contemporary model. A 2018 only cost between PHP 1.4 and 1.6 million upon launch. In 2020, this expense is expected to increase to 2.5–2.6 million PHP. But some of the jeepney drivers will allow the jeepney modernization program if the government will help them and loan for them, but when the monthly payment is so high that they cannot afford it, they will be against the PUVM.

In addition, as mentioned by Andalecio et al. (2020), "the chairwoman asserted that drivers of jeepneys who could not afford to buy the updated jeepney received financial assistance from the government in the form of loans." Moreover, Guno et al. (2021) mentioned that high interest rates will compound the high annual payments resulting from high unit prices. At six percent interest, annual amortization costs rise by 25 percent. That's why, according to Andalecio et al. (2020), half of the jeepney drivers said this initiative was presented at the appropriate time and cost, and the other half said the Philippines is not prepared for jeepney modernization.

Conclusions

From the findings of the study, the following conclusions were derived:

1. Concerns regarding the government's modernization measures are voiced by Filipino jeepney drivers, who worry about potential effects on their livelihoods, job loss, affordability, and the cultural value of traditional jeepneys.
2. Jeepney drivers in the Philippines express worries about the strict financial restrictions imposed on modernization, including the high cost of replacing traditional jeepneys and the potential impact on passengers, as well as concerns about route modifications and passenger changes.
3. Jeepney drivers' express resignation and fear of losing their source of income if the modernization program is fully implemented. They fear job loss and future work opportunities, while the affordability of modern jeepneys is a major concern.

Recommendations

1. Drivers may consider investigating other financial options or obtaining assistance from applicable government programs targeted at easing the transition to modernized vehicles, they should engage in advocacy activities to ensure that the government gives enough aid to individuals experiencing financial barriers to adopting newer automobiles, drivers should also be abreast of any update in-vehicle modernization policies and participate in conversations and decision-making processes that affect their livelihoods.
2. Commuters should consider launching public campaigns, utilizing social media platforms effectively and actively engaging with local communities to raise awareness, support jeepney drivers and ensure that their voices are heard, conduct surveys, organize public forums, and establish feedback mechanisms. Commuters should advocate fair treatment of jeepney drivers and commuters alike.
3. Policymakers should acknowledge the perceptions of jeepney drivers when formulating policies towards the jeepney modernization program, policymakers, drivers, commuters and relevant stakeholders should collaborate to develop policies and regulations to consider the welfare of both jeepney drivers and commuters balancing the safety, affordability, and sustainability of both parties and ensure that the regulations are fair and equitable for all the stakeholders involved.
4. Transportation agencies should make use of strategies including frequent meetings, consultations, and easily available avenues for feedback to foster open communication, address driver issues, obtain insightful advice, actively monitor the execution of the modernization program, and conduct thorough evaluations of its effect on both jeepney drivers and the commuting public, to recognize the difficulties of the jeepney drivers with the jeepney modernization program.
5. Future Researchers should use this as a guide and as a reference for their academic pursuits, to pinpoint any gaps in existing research and delve deeper into areas that demand further investigation concerning the viewpoints of jeepney drivers on the modernization initiative and have a deep understanding about the perceptions of the participants and hear their voices about the modernization program.

Compliance with Ethical Standards

This research strictly adheres to the ethical standards set by the institution and the body of knowledge. All information and data coming from the respondents are solely for

academic purposes only. In line also with the Data Privacy Act of 2012, the researchers strictly preserved the anonymity and confidentiality of the respondents.

Acknowledgments

The researchers sincerely thank the Almighty God, who bestowed on them knowledge, strength, and wisdom, along with his divine guidance and love. As well as for being the ultimate source of knowledge, strength, wisdom, guidance, and love. Without their benevolence and grace, the researchers could not have finished the study. Without the following people and organizations' complete permission and support—who openly offered to help in any way they could and promised to see this through to completion—this report and its preparation would not have been possible. To Mr. John Louise M. Marcaida, subject adviser and mentor teacher, thank you for your guidance and mentorship in shaping the Researchers to be responsible researchers, students, and citizens of the school and country. His remarkable teaching, insights, and professionalism have been instrumental in the researcher's success in their research study. The researchers would like to extend their heartfelt gratitude to Mr. Khyle M. Rivera for his invaluable support and guidance throughout their study. The direction the researchers took with their research project was greatly influenced by his openness to share his knowledge and provide helpful criticism. The researchers intend to express gratitude to the Bulaon-San Fernando Jeepney Drivers who participated in a research study and welcomed the researchers with open arms. The Researchers are incredibly grateful for their support and kindness, as the study would not have been possible without their participation. Finally, thanks to the researchers' loving and passionate families and friends for providing a haven and constant moral, physical, and emotional support, which enabled them to complete this study.

REFERENCES

About Philippines (2023). The Jeepney Phaseout: Balancing Progress and Heritage. Medium. https://medium.com/@delapenajoevrick/the-jeepney-phaseout-balancing-progress-and-heritage-de3c6443dcfb.

Agpaoa, B. F. C., Gallevo, H. M. U., Lasco, R. S. M., Roma, P. A. G., Tan, B. Y., & Vallespin, M. R. (2024). Steering Towards Sustainable Mobility: A Holistic Examination of Public Utility Vehicle Modernization Program Impact on Commuting Public and Private School Students in the University Belt, Manila, Philippines. Agpaoa, Brickette, FC, Gallevo, Helena Maria, U., Lasco, Rohann Sherry, M., Roma, Pretty Angel, G., Tan, Blessie, Y., & Vallespin, Mc Rollyn, D.(2024). Steering Towards Sustainable Mobility: A Holistic Examination of Public Utility Vehicle Modernization Program Impact on Commuting Public and Pri.

Andalecio, A. B. P., Aquino, K. E. C., Cruz, C. F. A., De Guzman, A., & Kiong, N. T. C. (2020, April). Implementation, challenges and stakeholders' perception of modernized Jeepneys in Metro Manila. In Journal of Physics: Conference Series (Vol. 1529, No. 3, p. 032067). IOP Publishing.

Atos, M. S. Q., Cabe, K. H. B., Gomez, C. J. E., & Padupad, C. L. O. (2021). Modernized Tradition: Transformation of Public Transport. https://animorepository.dlsu.edu.ph/conf_shsrescon/2021/paper_spl/2

Baluyot, M. K., Cuenca, C., Custodio B. P., Jazmines, S. A. E. (2017). B8-4 An Ergonomic Study on the Ideal Interior of Jeepneys Based on Anthropometric Measurements of Filipinos. The Japanese Journal of Ergonomics, 53. https://doi.org/10.5100/jje.53.S64

Baracao, E., Casimiro, R., Manuzon, E., & Ramos, V. (2023). Palayan Jeepney Operators and Drivers Association and the Proposed Public Utility Vehicle Modernization Program. The Quest: Journal of Multidisciplinary Research and Development, 2(3).

Bautista, N. B. & Moya, R. N. (2023, September 3). Jeepney modernization program: Drivers have a steep price to pay. https://www.philstar.com/headlines/2023/09/03/2293549/jeepney-modernization-program-drivers-have-steep-price-pay

Biona, J. B. M., Lopez, N. S., & Hecita, I. J. (2023). Re-calibrating the Jeepney Modernization Program: Policy Issues and Recommendations. https://www.dlsu-jrig.com/s/Recalibrating-the-Jeepney-Modernization-Program.pdf

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2) 77-101. https://doi.org/10.1191/1478088706qp063oa.

Castro, R. L. (2019). The Philippine Jeepney: A Symbol of Philippine Culture and Nationalism. Philippine Sociological Review, 67(1), 56-76. DOI: 10.1353/psr.2019.0003

Cerio, C. T. (2017). THE MOTORCYCLE TAXI PHENOMENON IN THE PHILIPPINES: IS THE DEMISE OF JEEPNEY POSSIBLE? International Journal of Tourism & Hospitality Reviews, 4(2), 44–52. https://doi.org/10.18510/ijthr.2017.421

Clavecillas, R. C., Bathan, G. M., Maglantay, R. S., Rogelio, J. P., Munsayac, F. E. T., & Baldovino, R. G. (2018). Design and Finite Element Analysis of Customized Local Road Vehicles (CLRV): The Case for the Tricycle and the Philippine Jeepney. In TENCON 2018-2018 IEEE Region 10 Conference (pp. 1758-1761). IEEE.

Department of Science and Technology (2023). DOST TOUTS E-JEEP, LPG-POWERED JEEPS FOR PUJ MODERNIZATION. https://pcieerd.dost.gov.ph/news/latest-news/513-dost-touts-e-jeep-lpg-powered-jeeps-for-puj modernization.

Dimalanta, R., Atienza, J. M., & Samonte, E. (2019). Putting Transport Workers and Commuters First. https://cids.up.edu.ph/wp-content/uploads/2023/03/Putting-Transport-Workers-and-Commuters-First-The-Route-to-Just-Transition-in-Public-Transport-Modernization.pdf

Estipular, E. J. (2020). Looking into the Implementation of Public Utility Vehicle Modernization Program.

Fernandez, H.A. (2019). Do Filipinos dream of electric jeepneys? Eco-Business. https://www.eco-business.com/news/do-filipinos-dream-of-electric-jeepneys/

Gatarin, G. R. (2024, March). Modernizing the ‘king of the road’: Pathways for just transitions for the Filipino jeepney. Urban Governance, 4(1), 37–46. https://doi.org/10.1016/j.ugj.2023.11.0.

Gumasing, M. J. J., Ramos, E. D. R., Corpuz, J. N. C., Ofianga, A. J. B., Palad, J. M. R., Urbina, L. G. B., ... & Ong, A. K. S. (2024). Factors Influencing the Adoption of Electric Jeepneys: A Philippine Perspective. World Electric Vehicle Journal, 15(7), 284.

Guno, C. S., A. A. Collera, and C. B. Agaton (2021). "Barriers and Drivers of Transition to Sustainable Public Transport in the Philippines," World Electric Vehicle Journal, 12/1 (2021), 46. https://doi.org/10.3390/wevj12010046.

Guno, C. S., Collera, A. A., & Agaton, C. B. (2021). Barriers and drivers of transition to sustainable public transport in the Philippines. World Electric Vehicle Journal, 12(1), 46.

Hennink, M., Hutter, I., & Bailey, A. (2020). Qualitative Research Methods. https://uk.sagepub.com/en-gb/eur/qualitative-research-methods/book242878

Kaiser, E. (2023). What is social awareness and how does it foster socialization and empathy?

Landayan, S. A., Magtanong, A. P., Palma, A. M., Rait, M. J., Ramos, J. C., Villar, A. J., & Vallespin, M. R. (2024). From Routes to Resilience: Exploring Manila Jeepney Drivers' Demographics and Perspectives on Proposed Public Utility Vehicle Modernization Program (PUVMP) through Thematic Analysis.

Lu, B. J. (2024.). Navigating the landscape of jeepney modernization. https://www.pna.gov.ph/opinion/pieces/813-navigating-the-landscape-of-jeepney-modernization

Malasique, A. M. P., Rubio, W., & Rosete, M. A. L. (2022). Analyzing the Implementation of the Public Utility Vehicle Modernization Program (PUVMP) to the Employment of PUV Drivers in the Philippines. Journal of Industrial Engineering & Management Research, 3(1), 45 - 62. https://doi.org/10.7777/jiemar.v3i1.250.

Manuel, R. (2019). I'm a jeepney driver in the Philippines. Here's what I'm afraid of.

Mateo-Babiano, I., Recio, R. B., Ashmore, D. P., Guillen, M. D., & Gaspay, S. M. (2020). Formalizing the jeepney industry in the Philippines–A confirmatory thematic analysis of key transitionary issues. Research in transportation economics, 83, 100839. https://doi.org/10.1016/j.retrec.2020.100839

Mendoza, T. C. (2021). Addressing the "Blind Side" of the Government's Jeepney "Modernization" Program (Vol. 2). UP CIDS Discussion Paper. https://cids.up.edu.ph/wp-content/uploads/2022/02/UP-CIDS-Discussion-Paper-2021-02.pdf.

Mercurio, R. (2021). Making public transportation work better for Filipinos. Philstar.com. https://www.google.com/amp/s/www.philstar.com/business/2021/01/18/2071099/making-public-transportation-work-better-filipinos/amp/

Obilor, E. I. (2023). Convenience and purposive sampling techniques: Are they the same?

Piquero, P. (2024). P25 fare increase: Jeepney drivers to demand this hike if… https://cebudailynews.inquirer.net/571185/p25-fare-increase-jeepney-drivers-to-demand-this-hike-if

Quinney, L., Dwyer, T., & Chapman, Y. (2016). Who, where, and how of interviewing peers: Implications for a phenomenological study. Sage Open, 6(3), 2158244016659688. https://doi.org/10.1177/2158244016659688

Ranis, R., Conquilla, J., Buncaras, Z., & Tus, J. (2021). The Jeepney Drivers and Their Lived Experiences During the COVID-19 Pandemic: A Phenomenological Qualitative Study in the Philippines. International Journal of Advance Research and Innovative Ideas in Education, 7(1). https://doi.org/10.6084/m9.figshare.14033339.v1

Savilla, J. C., Mojica, H. A., Macaya, J. M. R., Reyes, P. A., & Zerda, J. K. G. (2024, April 1). Perception of the Jeepney Drivers on the Jeepney Modernization in Indang, Cavite. April-May 2024, 43, 1–9. https://doi.org/10.55529/jmc.43.1.9

Solina, A. F. M. (2023). The (Crooked) Road to Modernity: Analyzing the Socioeconomic

Stahl, N. A., & King, J. R. (2020). Expanding approaches for research: Understanding and using trustworthiness in qualitative research. Journal of Developmental Education, 44(1), 26-28. https://jstor.org/stable/45381095

Sunio, V., Gaspay, S., Guillen, M. D., Mariano, P., & Mora, R. (2019). Analysis of the public transport modernization via system reconfiguration: The ongoing case in the Philippines. Transportation Research Part A: Policy and Practice, 130, 1–19. https://doi.org/10.1016/j.tra.2019.09.004.

Tiglao, N. C. C., Ng, A. C. L., Tacderas, M. A. Y., & Tolentino, N. J. Y. (2023). Crowdsourcing, digital co-production and collaborative governance for modernizing local public transport services: The exemplar of General Santos City, Philippines. Research in Transportation Economics, 100, 101328.

Yu, L. S. (2024). Can jeepney fares stay at P15 after modernization? Experts fear it could double. Rappler https://www.rappler.com/business/jeepney-fare-hike-after-modernization-experts-fear-doub/

Zagzebski, L. (2017). What is knowledge? The Blackwell guide to epistemology, 92-116. https://doi.org/10.1002/9781405164863.

Zulueta, T. M. T., Ong, A. K. S., German, J. D., Gumasing, M. J. J., & Chico, J. C. D. (2024). Implications of the Progression to Sustainable Public Transportation: An Insight into Modern Jeepney Shift from the Philippines. Sustainability, 16(10), 3912.

APA Citation:

Cunanan, M. R. P., Rosel, J. L., Balilo, A. A. O., Lugue, L. J. C., Sandot, A. P., Pamintuan, R. M., David, S. D. D., Marcaida, J. L. M., & Tayag, D. M. N. (2024). BEEP BEEP BEEP: STEERING THE PERCEPTION OF JEEPNEY DRIVERS TOWARDS JEEPNEY MODERNIZATION. Ignatian International Journal for Multidisciplinary Research, 2(8), 1118–1132. https://doi.org/10.5281/zenodo.13346354

Corresponding author: *johnlouisemarcaida@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

BEST PRACTICES OF MOTHER TONGUE BASED-MULTILINGUAL EDUCATION IN SAN ANTONIO DISTRICT

Melvin Paul Aunzo-Sinay

Dappat Integrated School, City of Ilagan, Isabela, Philippines

https://doi.org/10.5281/zenodo.13329159

ABSTRACT

The main objective of this study is to identify the best practices of teachers and administrators in the implementation of the Mother Tongue-Based Multilingual Education in San Antonio District, City of Ilagan, Isabela. The study used descriptive method of research this method is appropriate to the study since it tried to describe the best practices of the respondents on the implementation of the MTB-MLE in San Antonio District, San Antonio, City of Ilagan, Isabela. The respondents of the study are (7) seven School Heads and 74 teachers of Kindergarten, Grades I, II, and III. The results perceived by the respondents as best practices in MTB-MLE implementation are (a). The language and education practices of MTB-MLE have clear directions on the program; (b). MTB-MLE curriculum is aligned with the level and experience of the learners; (c). The learner's mother tongue is used as medium of instruction in school; (d). The respondents usually use real object to demonstrate concepts; and (e). School authorities impress on the learner's importance of learning the mother tongue.

Keywords: *Best Practices, Mother Tongue-Based Multilingual Education, Implementation*

INTRODUCTION

A child's sense of identity is said to be rooted from his or her mother tongue, but sometimes children in the Philippine schools are punished for not speaking English, which led a child to eventually view English as language of success and consequently makes

their mother tongue irrelevant. This is both psychologically and culturally damaging. Students think that they do not need to pass their mother tongue to the next generation, which would mean a significant cultural loss. However, there is nothing permanent as change. Last 2012, the format of Philippine school dramatically changed. Two major components of the K to 12 Bill that were pushed in the congress are the two-year extension in the secondary school and the implementation of Mother Tongue Based, Multilingual Education (MTB-MLE). The legislation was implemented immediately of which many concerns emerged. Educators, unprepared of the dramatic change, felt so uncomfortable and some were rattled. Furthermore, parents were shocked with the fact that there is now 13 years of schooling (including kindergarten). In many cases, parents were not oriented or there was no immediate awareness-raising and mobilization. This made parents unaware of educational change such as the MTB-MLE. In addition to these, some schools, especially those in the far-flung areas lack learning modules, tools and other facilities.

The researcher being an elementary teacher in a public school has observed both positive and negative effects of the implementation of MTB-MLE on learners, teachers, and the teaching-learning process. Positively, it has been evident in the school where the researcher teaches that pupils from Kinder I to Grade III have the advantage of expressing their thoughts, opinions, and understanding in MTB-MLE with so much ease and confidence since it is their first language and at the same time the medium of instruction. It is also said that these children are learning one of the most important part of their cultural identity while studying that is the value of their mother tongue. On the other hand, as one of the teachers who teaches MTB-MLE, the researcher together with teachers in their school, personally experiences and observes that teaching in the Kinder I to Grade III is challenging because learning modules, materials, tools, and facilities are insufficient which make the teaching and learning process difficult. Also, after Grade III, pupils have a hard time in the transition period because as they reach Grade IV mother tongue is no longer the medium of instruction, but it will be the English language which is a new and completely a foreign language to them. This transition makes pupils hesitant to participate in the discussion because in their last years in school, they use their mother tongue.

There are indeed many concerns and questions from the teachers and parents with regard the implementation of the MTB-MLE in the country. Because of the many concerns and questions the goodness in the MTB-MLE implemented is not seen and appreciated by the stakeholders. In this connection therefore, this study on the best practices of Mother Tongue Based-Multilingual Education is undertaken, with the ultimate purpose of highlighting the MTB-MLE programs and activities that are good. When a best practice in the implementation of MTB-MLE is seen, stakeholders would better appreciate the program and would surely support its implementation, making it more successful.

Research Questions

The study aimed to find out the best practices of teachers and administrators in the implementation of the Mother Tongue-Based Multilingual Education in San Antonio District, City of Ilagan, Isabela. Specifically, it tried to the answer to the following questions:

1. What is the profile of the respondents in terms of:
    a. Educational attainment
    b. Position
    c. Length of service
    d. Dialect used at Home
2. What are best practices in the MTB–MLE implementation as perceived by teachers and administrator?
3. Is there a significant difference in the perception of teachers on the best practices of the MTB – MLE when grouped according to their profile?
4. Is there a significant difference in the perception of teachers and administrator on the best practice of MTB-MLE?

METHODOLOGY

Research Design

The study made use of the descriptive method of research. According Sevilla (2006) the descriptive method is the collection, presentation, and description of data in order to test hypotheses or to answer questions concerning the current status of the subject of the study. Thus, this method is appropriate to the study since it tried to describe the best practices of the respondents on the implementation of the MTB-MLE in San Antonio District, San Antonio, City of Ilagan, Isabela.

Locale of the Study

The study was conducted at San Antonio District, City of Ilagan, Isabela. This district is one of the many districts in the City Division of Ilagan. Thus, the study involves the 18 elementary schools in the district of San Antonio.

Selection and Description of the Respondents

The respondents of the study are seven School Heads and the 74 teachers of Kindergarten, Grades I, II, and III in San Antonio District, SY 2016-2017.

Data Gathering Instrument

Primarily, this study made of a questionnaire adopted by the researcher from the study of Williams, Metila, Pradilla and Dido (2014). Likewise, it also made use of informal interviews and observations so as to get the general descriptions of the real observations/perceptions of teachers and administrators.

Data Gathering Procedure

The researcher asked permission, in writing, from to the Schools Division Superintendent (thru channel) for the conduct of the study. Upon approval, the study was conducted in various elementary schools under San Antonio District. The researcher floated the questionnaires personally and conducted informal interviews to the teachers and administrators whom he met in the schools he went to.

Statistical Treatment and Data Analysis Procedure

To address the research questions outlined in Chapter I, various treatments were used. To answer the first question on the profile of the respondents, the frequency count was used. As to the best practices of the respondent's frequency count was also used. For problems 3 and 4 chi-square was used. This looked into the difference in the perceptions of the respondents as to the best practices they have in MTB-MLE implementation.

RESULTS and DISCUSSION

1. What is the profile of the respondents in terms of:

a. Educational attainment

Table 1
Frequency and Percentage Distribution of the Respondents
in Terms of Their Educational Attainment

Educational Attainment	Administrators		Teachers	
	f	%	*f*	%
Doctoral Graduate	0	0	0	0
With Doctoral Units	0	0	0	0
Masteral Graduate	1	14	8	11
With Masteral Units	6	86	56	76
College Graduate	0	0	10	13
Total	7	100	74	100

The table 1 gives the frequency and percentage distribution of the respondents in terms of their educational attainment. It shows in the table that 86 percent of administrators and 76 percent of teachers are master's unit holder while only 14 percent of administrators and 11 percent of teachers are master's graduate. None has doctoral units or doctoral degree. The data above implies that many of the respondents have gone further in their studies. There looking deeper units the table, it can be decided that all the administrators meant for further studies as compared to the teachers for are only 13 percent of teachers who did not yet enroll into further studies or masteral course. Thus, they only hold the bachelor's degree.

b. Position

Table 2
Frequency and Percentage Distribution of the Respondents
in Terms of Position

Position	Administrators		Teachers	
	f	%	*f*	%
Principal II	1	14	0	0
Principal I	1	14	0	0
Head Teacher III	2	29	0	0
Head Teacher I	3	43	0	0
Master Teacher II	0	0	1	1
Master Teacher I	0	0	1	1
Teacher III	0	0	30	42
Teacher II	0	0	3	4
Teacher I	0	0	37	50
Substitute Teacher	0	0	1	1
LSB Teacher	0	0	1	1
Total	7	100	74	100

The table 2 provides the frequency and percentage distribution of the respondents when grouped according to position.

It shows that out of 81 respondents, 50 percent hold Teacher I position, followed by 42 percent having Teacher III position. Moreover, there are three Head Teacher I and two Head Teacher II. Also, there is one Substitute Teacher and one LSB Teacher. The table further gives a picture that in San Antonio District, most teachers hold Teacher I and Teacher III items awhile head teachers are mostly Head Teacher I item since many of them are not yet finished with their master's degree they cannot yet move to master teacher position.

c. Length of Service

Table 3
Frequency and Percentage Distribution of the Respondents
in Terms of Length of Service

Length of Service	Administrators		Teachers	
	f	%	*f*	%
31-40 Years	3	43	0	0
21-30 Years	3	43	0	0
11-20 Years	1	14	21	28
6-10 Years	0	0	19	26
0-5 Years	0	0	34	46
Total	7	100	74	100

Table 3 elucidates the frequency and percentage distribution of the respondents according to the time they serve in the Department of Education.

It shows that the 34 or 46 percent are in service for 0-5 years and 19 or 26 percent are serving the DepEd for 6-10 years. For the administrators, one or 14 percent is 11-20 years in service and three or 43 percent are 21-30 years in service.

This implies that the most of the teacher respondents are novice's teacher since they are five years and below in DepEd while administrators are quite long already in the service.

d. Dialect at Home

Table 4
Frequency and Percentage Distribution of the Respondents
in Terms of Their Dialect at Home

Dialect Used at Home	Administrators		Teachers	
	f	%	*f*	%
Tagalog	0	0	4	5
Ilocano	6	86	65	88
Ibanag	1	14	5	7
Total	7	100	74	100

Table 4 reveals the frequency and percentage distribution of the respondents when grouped according to the dialect used at home.

The table shows that 86 percent of the administrator's respondent and 88 percent of the teacher respondents are Ilocano speaking. This tells that majority of the teachers and administrators are adept with the Ilocano dialect and are able to use well the Ilocano dialect as their mother tongue in school because many all of them use it at home. This finding confirms the DepEd policy that the teachers who are to teach mother tongue need to know the mother tongue by heart. The administrators likewise can supervise the teachers in their mother tongue-based instruction because they are also familiar with the language.

2. What are best practices in the MTB–MLE implementation as perceived by teachers and administrator in terms of:

a. Programs

Table 5
Frequency and Rank Distribution of the MTB-MLE
Best Practices in Terms of Programs

On Programs	Frequency	Rank
The language and education practices of MTB-MLE have clear directions.	58	1
Trainings are given to build the professional capacities of teachers.	55	2
Monitoring, evaluation and documentation are used to assess learners' progress.	53	3
Studies for the language of the community are acceptable to mother tongue/ native speakers.	51	4
A preliminary research provided information about the language of the community.	32	5
Awareness-raising / mobilization were done to generate support for the program.	24	6

The table 5 exhibits the frequency and rank distribution of the best practices of the respondents in line with MTB-MLE.

The table tells that 58 percent of the respondents perceive that the “language and education practice of the MTB-MLE have clear directions.” This is followed by “trainings are given to build the professional capacities of the teachers with 55 teachers. However not many of the respondents perceive a “preliminary research provided information about the language of the community and an “awareness-raising/mobilization were done to generate support for the program” as a best practice in the district.

b. Instruction

Table 6
Frequency and Rank Distribution of MTB-MLE
Best Practices in Terms of Instruction

On Instruction	Frequency	Rank
MTB-MLE curriculum is aligned with the level and experience of the learners.	61	1
The local community teaches the children the dialect and culture of the place.	53	2.5
Teachers are oriented on the framework and objectives of MTB-MLE.	53	2.5
Lesson plan are provided to guide teachers.	49	4
The learner’s first exposure to reading is in mother tongue.	42	5
Teachers use list of learning outcome and indicators of learners’ experience.	38	6

Table 6 present the frequency and rank distribution of the MTB-MLE best practices in San Antonio District, City of Ilagan, Isabela in terms of instruction.

The table bares that 61 of the teachers and administrators of San Antonio District perceive that the MTB-MLE curriculum is aligned with the level and experience of the learners. On the contrary, only 38 or less than 50 percent of the respondents see the usage of list of learning outcomes and indicators of learners’ experience as practiced in their schools. Likewise, only 42 said that “the learners’ first language exposure to reading is in their mother tongue.” There are therefore perceived as not much observed in the district. This finding is similar with Walter and Trammell’s (2010) study on the effectiveness of MTB-MLE which revealed that through there was an improvement in the academic performance of the learners taught in mother tongue, still the full effect of this program on the school success of the students is emphasized as yet to be seen. Though Dekker’s Kom Experimental Mother Tongue Education Project of Cameroon, Dumatog, and

Dugiang on the Lubuangan Project in Kailanga, Philippines showed that using mother tongue contributes to the performance pupils, however, the significant gains of this MTB-MLE program will still be proved since it is still very new to the education department.

c. Language Use

Table 7
Frequency and Rank Distribution of the Respondents' MTB-MLE Best Practices in Terms of Language Use

On Language	Frequency	Rank
Learners' mother tongue is used as medium of instruction in school.	66	1
The learners understand and can use confidently their mother tongue.	59	2
English is slowly introduced and reinforced while continuing the use of mother tongue.	51	3
Learners are proud of their mother tongue and culture and respect the mother tongue and cultures of others.	50	4
At the end of the MTB-MLE program learners have mastered and loved their mother tongue and are ready for second language learning.	46	5
The learners' proficiency in math and science improved when mother tongue is used as medium of instruction.	41	6

Table 7 reveals the frequency and rank distribution of the respondents' MTB-MLE best practices as to the language use.

The table illustrates that 66 teachers out of 74 practice the "learners' mother tongue is used as medium of instruction in school" and it ranked 1. This is followed by "the learners understand and can use confidently their mother tongue." However, among the practices given, the item on "the learners' proficiency in science and math improved when mother tongue is used as medium of instruction" ranked last. This means that many of the respondents did not see the effect of the usage of mother tongue in the science and math proficiency of their students. It is true the pupils are able to express themselves using their mother tongue but, its effect to their math and science is not very much felt. This is maybe because most of the terms use is science and math do not have equivalent or

translation in the dialect (e.g. square root, perimeter). This finding is contradicted to the study of Toquero (2010) that using the mother tongue (Ilokano) to teach the basic concepts of numbers and operations helps build a strong foundation for the understanding and learning of higher mathematics. This approach is effective not only in getting the interest of students in the lesson but as a springboard in teaching new mathematical concepts and principles and in deepening student understanding on why mathematical operations or processes work.

d. Teaching Materials

Table 8
Frequency and Rank Distribution of the Respondents' MTB-MLE Best Practices in Terms of Teaching Materials

On Teaching Materials	Frequency	Rank
Real objects are used to demonstrate concepts.	65	1
Picture cards are used to facilitate classroom discussion.	63	2
MTB-Materials are appropriate to the language, culture and context of the learners.	49	3
Materials are aligned with the capacities of the learners.	45	4
There are reading materials in the mother tongue.	44	5
Teaching materials/resources in the mother tongue are available/provided.	41	6

Table 8 points out the frequency and rank distribution of the respondents' MTB-MLE best practices in terms of teaching materials.

The table shows that item number 5 "real objects are used to demonstrate concepts" which ranked 1 with 65 teachers practicing it and "pictures are used to facilitate classroom discussion" ranked 2. Moreover, only 41 of the 74 teachers said that teaching materials or resources in mother tongue are provided or available. Thus, not all of the teachers therefore were given teaching materials in the teaching of mother tongue. This finding can be the reason why Wa-Mbaleka's (2014) study on the perceptions of teachers on the mother tongue-based education result shows that teachers' perception "could not reveal with certainty whether or not they believe an impact of MTBMLE exists on learning in general" because as stated here, not all teachers are given and provided materials in

teaching of the mother tongue-based education which is necessary in its effective implementation. The findings in the study Mother Tongue-Based Multilingual Education: The Case of Cervantes District (Sanchez, Tomas, and Pe 2023) show that some of the teachers are improvising and contextualizing instructional materials to make their instruction more meaningful and more engaging, thereby improving the performance of the learners. The teacher's perception of contextualization goes with some works of literature. For instance, Reyes et al. (2019) testified contextualization is one of the keys to engaging the students in the teaching-learning process because they can relate their situations to their lesson. In fact, several studies claimed that contextualization significantly increases the learning of students (e.g., Chen et al., 2019; Perin, 2011; Moghaddas, 2013; Ning et al., 2017; Wang et al., 2021).

e. Stakeholders Support

Table 9
Frequency and Rank Distribution of the Respondent' MTB-MLE
Best Practices in Terms of Stakeholders Support

On Stakeholders Support	Frequency	Rank
School authorities impress on the learners the importance of learning the mother tongue.	62	1
Parents encourage their children to learn their mother tongue.	57	2
Local and national authorities/ officials support the mother tongue program.	43	3
Local communities assist the learners in learning the mother tongue.	40	4
Local and national agencies (DOLE, DSWD…) cooperate for the implementation of the MTB-MLE.	31	5

Table 9 gives the frequency and rank distribution of the respondents' MTB-MLE practices in terms of stakeholders' support.

The table shows that item on 3 "School authorities impress on the learners the importance of learning the mother tongue" ranked 1 and "Parents encourage their children to learn their mother tongue" ranked 2. However, "the local and national agencies cooperate in the implementation of MTB-MLE" ranked last. This implies that this practice is not much perceived by the teachers and administrators. This finding can be attributed to the fact that though the program is pushed to be implemented and although the information dissemination is not widespread. This finding is associated with Wa-Mbaleka (2014) study that enough trainings does not seen to have occurred to allow successful implementation

as perceived by teachers of mother tongue-based education in the Philippines. Thus, parents and other stakeholders need to be included in the information drive or campaign thereby promoting the mother-tongue based multi-lingual education. Through this, schools, parents and other stakeholders can have a wider and clearer vision about the aims, goals, and objectives of MTB-MLE and that their understanding can lead them to have a complete support towards its success. As the old African proverb goes," It takes a whole village to raise a child" give backbone to the support that this program needs. Informative drives are not necessary for parents and the community, but also to teachers alike.

3. Is there a significant difference in the perception of teachers on the best practices of the MTB – MLE when grouped according to their profile?

a. Educational Attainment

Table 10
Results of Significant Difference in the Perceptions of Teachers as to the Best Practices in MTB-MLE When Grouped According to Their Educational Attainment

Educational attainment of teachers and their perceptions as to the best practices in MTB-MLE	Computed Value of	Tabular Value of	Analysis	Decision	Remarks
Program	21.71	21.03	>	Reject	Significant
Instruction	28.33	18.31	>	Reject	Significant
Language	28.00	18.31	>	Reject	Significant
Material	27.51	21.01	>	Reject	Significant
Support	16.00	15.51	>	Reject	Significant

Table 10 exhibits the results of significant difference in the perceptions of teachers as to the best practices in MTB-MLE when grouped according to their educational attainment.

It is evident from the results that the computed Chi-square values are greater than the respective Chi-square tabular values. Hence, the null hypothesis is rejected at 0.05 level of significance. Thus, there is significant difference in the perceptions of the teachers as to be the best practices in MTB-MLE when grouped according to their educational attainment. It implies that the teachers regardless of their educational qualifications perceive differently their best practices in MTB-MLE in terms of the program, instruction, language, materials and support. It can be further stated based from the findings that those teachers with master's units have more varied best practices in MTB-MLE than the other groups of teachers.

b. Position

Table 11
Test of Significant Difference in the Perception of Teachers as to the Best Practices in MTB-MLE When Grouped According to Their Position

Perceptions of teachers as to the best practices in MTB-MLE when grouped according to position	Computed Value of	Tabular Value of	Analysis	Decision	Remarks
Program	50.51	43.77	>	Reject	Significant
Instruction	47.93	37.65	>	Reject	Significant
Language	43.43	37.65	>	Reject	Significant
Material	48.92	43.77	>	Reject	Significant
Support	32.14	31.41	>	Reject	Significant

The test of significant difference in the perception of teachers as to the best practices in MTB-MLE when grouped according to their position is presented in table 11.

It is reflected from the test that the computed values of Chi-square are greater than their corresponding Chi-square tabular values. This signifies the rejection of the null hypothesis at 0.05 level of significance. Therefore, significant difference exists in the perceptions of teachers as to the best practices in MTB-MLE when grouped according to their position. It means that the teachers differ from each other in their perceptions as to the best practices in MTB-MLE in terms of program, instruction, language, materials, and support. In particular, Teacher I have more varied best practices in MTB-MLE than the rest of the teachers.

c. Length of Service

Table 12
Test of Significant Difference in the Perceptions of Teachers as to the Best Practices in MTB-MLE When Grouped According to Their Length of Service

Perceptions of teachers as to the best practices in MTB-MLE when grouped according to length of service	Computed Value of	Tabular Value of	Analysis	Decision	Remarks

Program	45.43	36.42	>	Reject	Significant
Instruction	32.00	31.41	>	Reject	Significant
Language	35.80	31.41	>	Reject	Significant
Material	48.29	36.42	>	Reject	Significant
Support	26.32	26.30	>	Reject	Significant

The table 12 shows the test of significant difference in the perceptions of teachers as to the best practices in MTB-MLE when grouped according to their length of services.

The test reveals that the Chi-square computed values are greater than the respective Chi-square tabular values. For this reason, the researcher rejects the null hypothesis at 0.05 level of significance. Thus, there is significant difference in the perceptions of teachers as to the best practices in MTB-MLE when grouped according to their length of service. It manifests that the best practices in MTB-MLE in terms of program, instruction, language, materials, and support are perceived differently by the teachers when they are grouped according to the numbers of years of service. In particular, the teachers with 0-5 years of services have varied best practices in MTB-MLE that the rest of the teachers. This finding confirms the previous table that Teacher I (usually those new in service or 0-5 years) use more of the practices mentioned that the rest of the teachers.

d. Dialect at Home

Table 13
Test of Significant Difference in the Perceptions of Teachers as to the Best Practices in MTB-MLE When Grouped According to their Dialect Spoken at Home

Perceptions of teachers as to the best practices in MTB-MLE when grouped according to dialect spoken	Computed Value of	Tabular Value of	Analysis	Decision	Remarks
Program	23.14	21.03	>	Reject	Significant
Instruction	18.83	18.31	>	Reject	Significant
Language	24.83	18.31	>	Reject	Significant
Material	21.86	21.03	>	Reject	Significant
Support	20.00	15.51	>	Reject	Significant

The best of significant difference in the perceptions of teachers as to the best practices in MTB-MLE when grouped according to their dialect spoken at home is exhibited in Table 13.

It is evident from the test that the computed values of Chi-square are greater than the corresponding Chi-square tabular values. Hence, the null hypothesis is rejected at 0.05 level of significance. Thus, significant difference exists in the perceptions of teachers as to the best practices in MTB-MLE when grouped according to their dialect spoken at home. It implies that the teachers who use different dialect at home perceive the MTB-MLE best practices of San Antonio District, differently. The Ilocanos identified some with the best practices maybe because the MTB-MLE used in San Antonio District is Ilocano. It implies that the teachers with Ilocano as their dialect at home perceive differently their best practices in MTB-MLE in terms of program, instruction, language, materials, and support than those who speak Ibanag and Tagalog in the home. This finding can be attributed to the fact that Ilocano is the mother tongue taught in school.

4. Is there a significant difference in the perception of teachers and administrator on the best practice of MTB-MLE?

Table 14
Results of Significant Difference in the Perceptions of the Teachers and Administrators as to the Best Practices in MTB-MLE

Perceptions of teachers and administrators as to the best practices in MTB-MLE	Computed Value of	Tabular Value of	Analysis	Decision	Remarks
Program	22.71	12.59	>	Reject	Significant
Instruction	14.14	12.59	>	Reject	Significant
Language	12.67	11.07	>	Reject	Significant
Material	12.71	12.59	>	Reject	Significant
Support	12.80	9.49	>	Reject	Significant

Table 14 presents the results of significant difference in the perceptions of the teachers and administrators as to the best practices in MTB-MLE. It is revealed from the results that the computed values of Chi-square, are greater than the respective Chi-square tabular values. Hence, the null hypothesis is rejected at 0.05 level of significance. Thus, there is significant difference in the perceptions of the teachers and administrators as to the best practices in MTB-MLE. It implies that the teachers have different perceptions as

to the best practices in MTB-MLE along program, instruction, language, materials and support from those of the administrators. Based from the findings, the teachers apply more of the best practices in MTB-MLE than the administrators. Also, this finding can be well attributed to the result of the study of Mbaleka (2014) where it was stated that "it is not conclusive to state with certainty whether or not the Philippines is well prepared for the implementation of MTBMLE" which can explain why teachers have different perceptions as to the best practices in the program.

Conclusions

Based on the findings of the study the following conclusions are given:

Since most of the teachers are in the DepEd for 0-5 years, they are still novice teachers. Some of the teachers have not yet gone to further studies as evidenced by the 13 percent teacher respondents without master's units. On the other hand, all administrators have gone further in their studies with 86 percent having masters unit and 14 percent master's graduate and 43 percent of the administrator hold Head Teacher I item and many have been in the service for 21-40 years. Moreover, San Antonio is an Ilocano region, thus,

Ilocano is used as their mother tongue and majority of the teachers and administrators are proficient in the Ilocano dialect.
As to the difference in the perception of the teachers whom grouped according to their profile, it can be said that their perception significantly differs.

Likewise, the teachers and administrators MTB-MLE practices significantly differ.

Recommendations

In the light of the findings and conclusion, the researcher proposes the following:

1. Since there is a different best practice of the teachers in the implementation of the MTB-MLE, it is recommended that DepEd officials' re-orient teachers as to the MTB-MLE program.
2. Since administrators have no formal training on MTB-MLE, DepEd needs to require them to attend one so that they would be able to guide their teachers in the implementation of the program.
3. In terms of instruction of MTB-MLE best practices the teachers and administrator use list of learning outcome and indicators of learners' experience.
4. The DepEd should supports and provides the teachers in terms of teaching materials/resources in the mother tongue so that the implementers of MTB-MLE are fully equipped and to give best outcome of the program.

Compliance with Ethical Standards

This research is an original study and was conducted as a basis in recommending for an appropriate and effective mode of delivery. Authors of books, journals, publications, as well as websites from the internet which were used as references in the conduct of this study are properly acknowledged and cited. Schools Division Superintendent, School Heads and Teachers consent was adopted before the conduct of this study. Further, confidentiality of the data/documents generated from the respondents' performance is highly ensured. All the data collected will solely be used for the purpose of this study.

Acknowledgments

This study is a product of great hard work and diligence of the researcher and wonderful people who contributed so much for its completion.

The researcher wishes to extend his profound gratitude to the following people who have rendered so much love and effort to accomplish this study for without them, this will not be significant and successful:

Dr. Precilo L. Buslig, Dean of the Graduate School for his help and encouragement to finish this study.

Dr. Charina G. Alejo, his adviser, for her patience, support, and word of encouragement.

Mrs. Benedicta Uy, his statistician, for the untiring guidance and effort to examine the statistical treatment and data analysis of this study.

The member of panel: Dr. Salome S. Carino, Dr. Vilma C. Cabrera, Dr. Violeta S. Directo for the significant comments and suggestions for the betterment of this study.

Mrs. Benelyn P. Jamora, Secretary of the Graduate School for the patience, support, and continuous motivation to finish this study.

Dr. Denizon P. Domingo, Schools Disision Superintendent of the Division of the City of Ilagan, for approving the letters needed in floating the questionnaire.

The Kinder to Grade 3 teachers of San Antonio District for cooperating and giving their honest and reliable response.

To his beloved parents, Melchor U. Sinay and Robelina A. Sinay, whom the researcher will always be indebted for their love and untiring support. To this siblings, Melchor A. Sinay Jr., Rey Mark A. Sinay, Ruby Mhelle A. Sinay, and his nephew, Rven Jeius A. Sinay for extending their time and love. To his sister-in-law, Venus A. Sinay, for the words of wisdom and pieces of advice. And to his relatives, who in other way have rendered their strength and time. To his love one, Mr. Bryan John V. Daluddung, who always pushing him to pursue this dream.

Lastly, to Almighty God for sustaining the researcher with needed strength and wisdom for him to accomplish this study. Without His presence this will all ho in vain.

REFERENCES

Allen, (2002), Factors Affecting the Implementation of the MTB-MLE as Perceived by Teachers in Baguio and Benguet. Retrieved from https://scholar.google.com.ph

Chen, M.P. (2019). Effects of caption and gender on junior high students' EFL learning from iMap-enhanced contextualized learning. Elsevier. Retrieved from https://www.sciencedirect.com

DepEd Order #31, Series of 2013. Retrieved from www.deped.gov.ph

Moghaddas, B. (2013). The Effect of Contextualization on the Iranian EFL Learners' Performance in Reading Tasks. International Journal of Educational Int. J. Adv. Multidiscipline. Res. (2022). 9(3): 52-71 70 Science and Research (IJESR). Retrieved from https://www.researchgate.net

Ning, N. (2017). The direct and moderating effect of learning orientation on individual performance in the banking industry in China: Contextualization of high-performance work systems. Asia Pacific Journal of Human Resources. Retrieved from https://onlinelibrary.wiley.com

Perin, D. (2011). Facilitating Student Learning Through Contextualization (Assessment of Evidence Series).Retrieved from https://ccrc.tc.columbia.edu

R.A No. 10533, Enclosure to DepEd Order No. 43, s. 2013. Retrieved from www.deped.gov.ph

Reyes, J.D., Insorio, A.O., Ingreso, M.V., Hilario, F.F., & Gutierrez, C.R. (2019). Conception and Application of Contextualization in Mathematics Education. International Journal of Educational Studies in Mathematics, 2019, 6(1), 1-18. Retrieved from https://www.researchgate.net/publication

Sanchez, Tomas and Pe, (2023), Mother Tongue-Based Multilingual Education: The Case of Cervantes District. Retrieved from Journal of Humanities and Social Studies. Retrieved from https://al-kindipublisher.com/

Sevilla, Consuelo, (1997), Methods of Research. Retrieved from https://books.google.com.ph/books/about/AnIntroductiontoResearchMethods

Toquero, E. C. (2010). Using Ilokano in teaching basic number concepts and operations in Arithmetic. Isabela State University, Isabela. Retrieved from https://researchgate.net

Walter and Trammel, (2010), MTB-MLE in the Philippines: Perceptions, Attitudes and Outlook. Retrieved from https://mlephilofiles.wordpress.com

Wang, X. (2021). Exploring the Relationship between Community College Students' Exposure to Math Contextualization and Educational Outcomes. Retrieved from https://link.springer.com

Wa-Mbaleka, Safary, (2014) "English Teachers' Perceptions of the Mother Tongue-Based Education Policy in the Philippines" European Journal of Research and

Reflection in Education in Educational Science No.4 Vol.2. Retrieved from https://researchgate.net

Williams, Metila, Pardilla and Dido, (2014), Understanding Best Practices in Mother Tongue-Based Multilingual Education in the Philippines. Retrieved from https://actrc.files.wordpress.com

APA Citation:

Aunzo-Sinay, M. P. (2024). BEST PRACTICES OF MOTHER TONGUE BASED-MULTILINGUAL EDUCATION IN SAN ANTONIO DISTRICT. Ignatian International Journal for Multidisciplinary Research, 2(8), 899–917. https://doi.org/10.5281/zenodo.13329159

melvinpaul.sinay@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

BOOKLET ON LANGUAGE LEARNING ARTICULATION DEVELOPMENT (BOOKLLAD): ENHANCING READING SKILLS

Claire D. Cadiao[1]
Marie Candy L. Celeste, Ph.D.[2]

[1]Maila Paderes Aritalla National High School, Schools Division of Passi City, Iloilo, Philippines
[2]West Visayas State University Calinog Campus, Calinog, Iloilo, Philippines

https://doi.org/10.5281/zenodo.13292126

ABSTRACT

Reading proficiency is crucial for academic success, yet many early secondary students struggle with key components like phonics, vocabulary, comprehension, and fluency, hindering their progress and future opportunities. To address this, the Booklet on Language Learning Articulation Development (BOOKLLAD) was designed as an intervention to improve reading skills among Grade 7 learners. This study employed a pretest-posttest experimental design to evaluate BOOKLLAD's effectiveness at Maila Paderes Aritalla National High School in Jaguimitan, Passi City, Iloilo, during the 2023-2024 school year. Twenty-six students participated in a 20-day intervention, with a researcher-developed test assessing phonics, vocabulary, comprehension, and fluency. The instrument's reliability was validated through Cronbach's Alpha and expert review. Data analysis using SPSS included frequency counts, means, standard deviations, and the Wilcoxon Signed Rank Test.The findings revealed significant improvements, with average pre-intervention scores rising to above-average post-intervention. The statistically significant differences between pretest and posttest scores confirm BOOKLLAD's effectiveness in enhancing reading skills. The results align with theories like Schema Theory, Cognitive Load Theory, and the Zone of Proximal Development, highlighting the impact of structured, scaffolded, and personalized learning activities on reading comprehension and retention. The study emphasizes the importance of active engagement, scaffolded support, and customized learning in reading instruction and recommends that the Department of Education develop targeted programs to encourage

innovative teaching approaches. BOOKLLAD demonstrates significant potential as a tool for improving reading skills in Grade 7 students.

Keywords: *BOOKLLAD, Reading skills, Grade 7 learners, Language learning*

INTRODUCTION

Reading proficiency is a crucial component of academic success, and schools must address this foundational skill to ensure that learners can effectively engage with the broader curriculum. Students who lack the necessary reading skills often struggle to comprehend other subjects, leading to a cycle of poor performance that can negatively impact their overall well-being. This issue has been exacerbated by the recent shift to distance learning during the COVID-19 pandemic, where restrictions on face-to-face classes necessitated the use of printed modules. While essential during this period, these modules did not fully address the learning gaps, particularly among struggling readers. In Junior High School, these gaps have manifested as significant difficulties in reading and comprehension, persisting even as in-person classes resumed.

In 2023, oral reading assessments conducted by teacher advisers revealed that many students, especially in Grades 7 through 10, were reading at levels significantly below their grade. These students faced challenges in letter and word recognition, articulation, vocabulary, comprehension, and fluency. Additional assessments showed that 96% of Grade 7 students and 78% of students from Grades 7-10 were at a frustration level in reading comprehension. Despite the introduction of various reading programs and interventions mandated by the Department of Education (DepEd), these challenges persisted, highlighting the need for more effective and targeted solutions.

To address these gaps, the "Booklet on Language Learning Articulation Development (BOOKLLAD): Enhancing Reading Skills" was developed as an innovative intervention. BOOKLLAD aims to provide learners with a structured and engaging framework for improving reading skills, specifically focusing on articulation, vocabulary, comprehension, and fluency. Unlike video-based interventions, which have been shown to enhance reading comprehension through multimedia engagement (Gabor and Celeste, 2024), BOOKLLAD leverages the traditional yet effective medium of print. The booklet format is designed to provide a tangible, accessible, and self-paced learning resource that can be easily integrated into daily classroom activities or used independently by students. While video-based materials engage learners through visual and auditory stimuli, BOOKLLAD emphasizes the hands-on, interactive nature of print, which allows students to engage with the material at their own pace, fostering deep comprehension and retention.

The Department of Education has identified deficiencies in reading comprehension as a critical factor contributing to low achievement levels in core subjects like English, Math, and Science (DepEd, 2023). In this context, the BOOKLLAD program was

implemented at Maila Paderes Aritalla National High School to improve the reading proficiency of Grade 7 learners. The program aligns with Republic Act No. 9155, the Governance of Basic Education Act of 2001, which encourages educators to develop school-based projects that enhance the teaching-learning process (Republic Act No. 9155, 2001).

BOOKLLAD draws on theories of language acquisition, literacy development, and educational psychology, adopting a holistic approach to language learning. It recognizes the interconnectedness of articulation and reading, guiding learners through targeted activities to develop clear pronunciation alongside reading fluency, comprehension, and vocabulary. By examining the effectiveness of BOOKLLAD in enhancing reading skills, this study contributes to the existing literature on literacy education and provides practical insights for educators, curriculum developers, and policymakers. Ultimately, the goal is to empower learners with the linguistic competencies necessary for academic success and to thrive in a diverse and multilingual world.

Research Questions

This study aimed to determine the effect of Booklet on Language Learning Articulation Development (BOOKLLAD) in teaching Grade 7 learners at Maila Paderes Aritalla National High School year 2023-2024.

Specifically, it aimed to answer the following questions:

1. What is the Pretest performance of the respondents?
2. What is the Posttest performance of the respondents?
3. Is there a significant difference in the Pretest and Posttest reading performance of the respondents?

METHODOLOGY

Locale of the Study and Respondents

This research was conducted in a public secondary school in Passi City, Iloilo, during the 2023-2024 academic year. The study focused on Grade 7 learners, who were selected using a purposive sampling method based on their reading proficiency levels. A total of 26 students participated in the study, all of whom were identified as needing improvement in key reading areas, including phonics, vocabulary, comprehension, and fluency. The demographic details of the respondents, such as age and gender, were consistent with typical Grade 7 students in the Philippines, generally ranging from 12 to 13 years old.

Data Gathering Procedure

The research utilized a pretest-posttest experimental design, which is well-suited for measuring changes resulting from an intervention. The study began with securing

necessary permissions from relevant authorities and obtaining consent from the participants. The procedure was as follows:

Pretest: A baseline assessment was conducted to gauge the initial reading skills of the participants using a researcher-made reading assessment tool.

Intervention: The 20-day BOOKLLAD intervention was administered. This intervention included a series of structured activities focused on improving phonics, vocabulary, comprehension, and fluency. The intervention was designed to be engaging and scaffolded, with each activity building on the previous one to reinforce learning and improve articulation.

Posttest: After the intervention, a posttest was conducted using the same assessment tool to measure any changes in the students' reading skills.

Research Instruments

The primary instrument used in this study was a researcher-developed reading assessment tool. This tool was designed to measure key components of reading proficiency, including phonics/sound recognition, vocabulary, comprehension, and fluency. The instrument consisted of multiple items, each targeting different aspects of reading skills. It was validated by experts in the field of education and literacy, and a pilot test was conducted to ensure its reliability. The instrument achieved a Cronbach's Alpha coefficient of 0.890, indicating a high level of internal consistency.

Data Analysis

Data were analyzed using both descriptive and inferential statistics. Descriptive statistics, such as frequency counts, percentages, means, and standard deviations, were used to summarize the data and provide an overview of the respondents' reading skills. For the inferential analysis, the paired samples Wilcoxon Signed Rank Test was employed. This non-parametric test is appropriate for comparing related samples, particularly when the data do not necessarily follow a normal distribution. The test compared the pretest and posttest scores to determine the statistical significance of the changes observed.

Scope and Limitations

This study was limited to a small sample size of 26 students from a single public secondary school, which may limit the generalizability of the findings to other populations. The intervention period was relatively short, spanning only 20 days, which may also affect the long-term retention of the reading skills gained. Additionally, while the study focused on key components of reading proficiency, it did not account for other factors that might influence reading development, such as socio-economic background or home literacy environment. Despite these limitations, the study provides valuable insights into the

effectiveness of structured reading interventions like BOOKLLAD in improving specific reading skills among early secondary students.

RESULTS

Pretest Performance of Grade 7 Learners.

The average pretest score of 27.69 suggested that, initially, Grade 7 learners at Maila Paderes Aritalla National High School had a moderate level of proficiency in language learning and articulation development.

Table 1

The Pretest Performance of the Respondents

Category	Mean	SD	Description
Pretest	27.69	9.21	Average

Note: The scores were described using the following scale and description: (48.01 – 60.00) Excellent, (36.01 – 48.00) Above Average, (24.01 – 36.00) Average, (12.01 – 24.00) Below Average, (0.00 – 12.00) Poor

Posttest Performance of the Grade 7 Learners

The posttest results of the study revealed that the mean score of the respondents was 40.38 with a standard deviation of 7.46, categorizing their performance as “Above Average” according to the scoring scale used.

Table 2

The Posttest Performance of the Respondents

Category	Mean	SD	Description
Post Test	40.38	7.46	Above Average

Note: The scores were described using the following scale and description: (48.01 – 60.00) Excellent, (36.01 – 48.00) Above Average, (24.01 – 36.00) Average, (12.01 – 24.00) Below Average, (0.00 – 12.00) Poor

The Differences in the Pre-test and Post-test Performances of the Respondents

The Wilcoxon Signed Rank Test results indicated a significant improvement ($p = 0.000$) in the performances of Grade 7 learners from the pre-test to the post-test phase, as shown in Table 3.

Table 3

The Wilcoxon-Signed Rank Tests for the Significance of the Differences in the Pre-test and Post-test Performances of the respondents

Compared Variables	N	Mean Rank	Sum of Ranks	Z	Sig.
Group (Experimental Pretest and Posttest)				4.439***	.000
Negative Ranks	1	1.00	1.00		
Positive Ranks	25	14.00	350.00		
Ties	0				
Total	26				

p***<0.001

DISCUSSION

The Wilcoxon Signed Rank Test results indicated a significant improvement (p = 0.000) in the performances of Grade 7 learners from the pretest to the posttest phase, as shown in Table 3. This statistical finding supported the rejection of the null hypothesis, suggesting that there was indeed a meaningful difference in the students' reading comprehension abilities following the implementation of the Booklet on Language Learning Articulation Development (BOOKLLAD) intervention. The observed improvement underscored the effectiveness of structured interventions like BOOKLLAD in enhancing students' language learning and articulation skills (Sadiku, 2015). Such interventions were crucial in addressing the challenges highlighted in previous studies, including the impact of global school closures on educational outcomes (de Vera, 2022) and the persistent issues in reading proficiency among Filipino students (San Juan, 2019; UNICEF). Moreover, the significant difference in pretest and posttest performances aligned with research emphasizing the complex nature of reading comprehension and its essential role in academic success (Helardez, 2021; Tomas et al., 2021). These findings highlighted the importance of targeted strategies in improving reading proficiency, thereby supporting overall student development and academic achievement (Block & Israel, 2005; McKown & Barnett, 2007; Alghonaim, 2020). Furthermore, the positive outcomes of the BOOKLLAD intervention reflected the effectiveness of structured language learning approaches and the importance of teacher facilitation in enhancing student comprehension (Singhal, 2001; Alyousef, 2006). By addressing specific reading comprehension challenges identified in previous studies (Vertucio, 2019; Albdour, 2015), interventions like BOOKLLAD contributed significantly to bridging educational gaps and fostering comprehensive student learning experiences.

Future studies could further investigate the specific impact of BOOKLLAD on different aspects of language learning, including speaking, reading, and writing skills.

Longitudinal studies could also track the progress of students over time to assess the sustainability and effectiveness of such interventions beyond immediate improvements observed in pretest and posttest comparisons.

Conclusions

The conclusions drawn from this study highlight the significant impact of the Booklet on Language Learning Articulation Development (BOOKLLAD) on improving the reading skills of Grade 7 students at Maila Paderes Aritalla National High School. Initially, the pretest results categorized the students' reading abilities as average, indicating a basic proficiency in fundamental skills such as decoding, comprehension, and vocabulary. However, this average performance also revealed notable gaps in more advanced reading strategies, critical analysis, and deeper textual understanding, underscoring the need for targeted intervention.

The introduction of BOOKLLAD as an instructional tool proved to be highly effective, as evidenced by the substantial improvement in the students' posttest performance. The students advanced from an average to an above-average level in their reading skills, demonstrating the program's ability to address both foundational and advanced literacy needs. This outcome not only validates the program's approach but also highlights its potential to serve as a key component in educational strategies aimed at enhancing reading proficiency.

The study's findings provide compelling evidence of BOOKLLAD's success in fostering significant gains in literacy among early secondary students. The statistically significant differences between the pretest and posttest scores confirm the program's efficacy and suggest that such interventions can play a crucial role in overcoming literacy challenges. As such, the continued implementation and expansion of BOOKLLAD could further enhance students' reading abilities, leading to improved academic performance across subject areas and contributing to their overall educational development.

Recommendations

Based on the findings of the study, several recommendations can be made for different stakeholders:

Department of Education (DepEd) Officials. The findings of this study offered valuable insights that can guide DepEd officials in developing targeted programs and training initiatives within the English curriculum. By integrating the effective teaching strategies identified in this research, DepEd can enhance professional development opportunities for teachers, focusing on areas such as active engagement techniques and scaffolded support. Furthermore, the study highlighted the importance of tailored interventions to address specific learning needs, promoting a more inclusive and impactful educational environment across schools nationwide.

Teachers. For educators, the results of this study served as a catalyst for innovation and professional growth. Armed with evidence-based practices from the BOOKLLAD intervention, teachers can refine their instructional approaches to foster deeper engagement and comprehension among students. Incorporating structured reading activities and personalized learning experiences can enhance teaching effectiveness, ultimately creating more enriching classroom experiences that cater to diverse learning styles and abilities.

English Teachers. This study presented an opportunity for English teachers to explore and implement novel methodologies aimed at improving language learning outcomes. By leveraging the findings, English teachers can integrate innovative teaching strategies into their lessons, such as schema theory-based activities and cognitive load management techniques. This approach not only enhanced students' language proficiency but also cultivated critical thinking and analytical skills necessary for academic success in English.

Researchers. For researchers in the field of education, this study offered a practical application of theoretical frameworks and research methodologies. Engaging with the BOOKLLAD intervention provided researchers with hands-on experience in educational intervention studies, contributing to the advancement of knowledge in effective teaching practices. Moreover, the study equipped researchers with insights into the practical implications of their theoretical knowledge, supporting future studies and academic contributions in educational research.

Learners. Students benefited directly from the outcomes of this study through enhanced educational practices and tailored learning experiences. By integrating evidence-based strategies into the curriculum, learners receive targeted support that fosters their academic growth and development. The findings informed educators and policymakers on effective approaches to teaching reading skills, ensuring that students receive a quality education that prepares them for lifelong learning and future endeavors.

Future Researchers. This study served as a foundational resource for future researchers interested in exploring similar topics or expanding upon the findings presented. By documenting the effectiveness of the BOOKLLAD intervention, this research provided a reference point for further investigation into educational interventions and their impact on student outcomes. Future researchers can build upon these insights, contributing to ongoing inquiry and innovation in educational practices, thereby advancing the field and improving educational outcomes globally.

Compliance with Ethical Standards

In conducting this study, the researchers maintained strict adherence to ethical standards throughout the entire research process. Informed consent was obtained from all respondents prior to their participation, ensuring that they were fully aware of the study's purpose and procedures. Participants were explicitly informed of their right to withdraw from the study at any time without any negative repercussions. Anonymity was

rigorously upheld, with all personal identifiers removed to protect the identities of the participants.

The researchers always safeguarded the well-being of the respondents, ensuring that their participation did not cause any harm or distress. There were no conflicts of interest influencing the conduct of the study, and the researchers ensured that all findings were presented objectively and without bias. Plagiarism was strictly avoided, with all sources and references appropriately cited.

The results of the study were utilized solely for academic and research purposes, contributing to the understanding of the effectiveness of the Booklet on Language Learning Articulation Development (BOOKLLAD) in enhancing reading skills among Grade 7 learners. Through these measures, the researchers ensured the highest standards of ethical integrity in the study.

Acknowledgments

Foremost, the researcher would like to express her sincere gratitude and appreciation to the following people who helped her to finish this study:

Dr. Rosario Clarabel C. Contreras, Campus Administrator, whose unwavering commitment and invaluable support have significantly aided the researcher in successfully conducting the study;

Dr. Liela C. Buenviaje, Dean of College of Education, for her commendable support and motivation towards the improvement of this study;

Dr. Marie Candy L. Celeste, thesis adviser, whose encouragement from the conceptualization stage of this thesis greatly motivated the researcher and provided essential guidance and corrections;

Recel T. Cabral, panel member, for imparting her knowledge and essential recommendations for more comprehensive interpretation to the results of the study;

Dane Marie L. Parreño, panel member, for her invaluable support and guidance for completing the content of the research study;

Reynes L. Sumaylo, panel member, for her patience and suggestions for the improvement of this study;

Joahna F. Tibus, statistician, for her expert assistance in the statistical analysis and interpretation of the data for this research;

Miguel L. Palmares III, College Instructor, Passi City College, for his invaluable guidance and insights during the conceptualization of this research study;

Dr. Ma. Roselyn J. Palcat, CESO VI, Schools Division Superintendent of Passi City, Iloilo for her invaluable support and consent in conducting the research study;

Dr. Nelson P. Palma, Principal IV, Passi National High School for allowing and facilitating the pilot testing phase of this research;

Dr. Mary Faith M. Lidawan, Dr. Lorelie C. Altamia, Dr. Roda B. Seduco and Maryful Grace C. Pabiona as validators, for the insightful comments and corrections for the improvement of the Booklet and the research instrument.

Mary Jo P. Aliento, Head Teacher III, Maila Paderes Aritalla National High School, for her invaluable support and thoughtful considerations that greatly help in conducting the research study;

Classmates and friends in the master's program of West Visayas State University Calinog-Campus, for the stimulating discussions and especially to all the fun shared in the last three years in the campus;

Her family: Marvin B. Cadiao, her husband, parents and siblings for their support throughout this study;

Above all, to the Almighty God, for the knowledge and guidance that He gave to accomplish this scholarly endeavor.

REFERENCES

Albdour, W. M. (2015). The Difficulties that Seventh Grade Students Face in Comprehensive Reading Skill for English Curricula. *Journal of Education and Practice,* 6(27), ISSN 2222-1735 (Paper) ISSN 2222-288X.

Alghonaim, Ali. (2020). Impact of Related Activities on Reading Comprehension of *EFL Students. English Language Teaching.* 13. 15. 10.5539/elt.v13n4p15.

Alyousef, H. S. (2006). Teaching Reading Comprehension to ESL/EFL Learners. *Journal of Language and Learning,* 5, 379-380.

Block, C., & Israel, S. (2005). *Reading first and beyond: The complete guide for teachers and literacy coaches.* Thousand Oaks, CA: Corwin Press.

De Vera, B. O. (2022). Lockdown's impact: Unicef cites poor reading skills among PH kids. Inquirer.net. https://newsinfo.inquirer.net/1576573/lockdowns-impact-unicef-cites-poor-reading-skills-among-ph-kids

Gabor, R. E., & Celeste, M. C. L. (2024). DIGITAL READING ADVENTURES: DEVELOPING AND EVALUATING VIDEO-BASED MATERIALS FOR READING COMPREHENSION. Ignatian International Journal for Multidisciplinary Research, 2(5), 895–912.https://doi.org/10.5281/zenodo.11178864

Helardez, C. M. (2015). *Reading Comprehension Level and Vocabulary Skills of Grade II Pupils and their Academic Performance in English of St. Paul University Philippines.*

McKown, B. A., & Barnett, C. L. (2007). Improving reading comprehension through higher order thinking skills (Master's thesis, Saint Xavier University). Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/28/09/00.pdf

Republic Act No. 9155, S. No. 2191, H. No. 10732, 98 OG No. 2, 194 (2002). (2001, August 11). An Act instituting a framework of governance for basic education, establishing authority and accountability, renaming the Department of Education, Culture and Sports as the Department of Education, and for other purposes. https://elibrary.judiciary.gov.ph/thebookshelf/showdocs/2/7353

Sadiku, Lorena. (2015). The Importance of Four Skills Reading, Speaking, Writing, Listening in a Lesson Hour. *European Journal of Language and Literature*. 1. 29. 10.26417/ejls.v1i1.p29-31.

San Juan, R. (2019, December 3). Philippines lowest in reading comprehension among 79 countries. Philstar.com. https://www.philstar.com/headlines/2019/12/03/1974002/philippines-lowest-reading-comprehension-among-79-countries

Singhal, M. (2001). Reading Proficiency, Reading Strategies, Metacognitive Awareness and L2 Readers. The Reading Matrix.

Tomas, Mary Jane & Villaros, Erleo & Galman, Sheena. (2021). The Perceived Challenges in Reading of Learners: Basis for School Reading Programs. Open *Journal of Social Sciences*. 09. 107-122. 10.4236/jss.2021.95009.

UNICEF Philippines. (2021). Philippines early childhood education: Kindergarten to Grade 4 longitudinal research summary report 2021. https://www.unicef.org/philippines/media/3586/file/UNIPH-2022-longitudinalresearch.pdf

Vertucio, N. A. (2019, January 18). Reading Comprehension Skills in English of Grade 7 Students at San Nicolas National High School S.Y 2018-2019. https://ojs.aaresearchindex.com/index.php/AAJMRA/article/view/9140#:~:text=The%20findings%20revealed%20that%20majority,of%20the%20respondents%20in%20reading

APA Citation:

Cadiao, C. D., & Celeste, M. C. L. (2024). BOOKLET ON LANGUAGE LEARNING ARTICULATION DEVELOPMENT (BOOKLLAD): ENHANCING READING SKILLS. Ignatian International Journal for Multidisciplinary Research, 2(8), 523–533. https://doi.org/10.5281/zenodo.13292126

Corresponding author: *claire.delacruz1994@deped.gov.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

CAPABILITY, OPPORTUNITY, AND MOTIVATION LEVEL IN TABLE TENNIS THROUGH CLUB MODE TEACHING

Dr. Qin Weifeng[1],
Dr. Janette C. Magalona[2]

[1] *Anhui University of Finance and Economics, Benghu City, China*
[2] *Philippine Normal University Visayas, Cadiz City, Philippines*

https://doi.org/10.5281/zenodo.13292425

ABSTRACT

This study deeply explores the capability, opportunity and motivation level of students in table tennis teaching, aiming to provide a basis for improving the learning effect of students using the club mode teaching approach. Research questions revolve around students' physical and mental abilities, social and psychological opportunities, and intrinsic and extrinsic motivations. This study also focuses on whether there are significant differences in these aspects among students of different ages, genders and majors. Key findings revealed that table tennis athletes possessed high level of physical and psychological capabilities. Athletes demonstrated high social and psychological opportunities, and high intrinsic and extrinsic motivation. No significant difference in capabilities, opportunities, and Motivation when grouped as to age. No significant difference in opportunities and motivation in terms of sex, while there was a significant difference in the capability in terms of sex. Significant difference was revealed on capabilities, opportunities, and Motivation when grouped as to majors. Based on the research results, it is recommended to evaluate students' learning progress and develop targeted teaching strategies to improve students' mastery of table tennis and enhance their competitive level. Overall, this study will provide useful reference for table tennis club mode teaching approach and promote students' learning effect and competitive performance. For administrators to allocate resources for facilities and provide support for teacher training.

***Keywords*:** *Capability, club mode teaching, opportunity, motivation level, table tennis*

INTRODUCTION

Teacher-Coach plays a vital role in promoting physical and mental well-being of the learners and players. They feel responsible to promote wellness and well-being of students especially in the current information age where a significant proportion of the population has adopted a sedentary lifestyle. Student actions that facilitate effective learning and constructive interaction within the community, as articulated by Wang (2020) states that behaviors are cultivated within and beyond the school environment, including activities within the Table Tennis Club. Understanding and managing student behavior is crucial for developing emotional intelligence, fostering positive relationships, and instilling vital life skills such as responsible decision-making. Students have the flexibility to select courses at any point during the week or attend classes with any teacher offering the same course (Club) at any time slot throughout the week. Enabling them to select courses that align with their abilities and interests, and stimulate their subjective initiative of active learning and seeking desires, as well as maximize students' learning outcomes (Tian, 2019). The course selection mechanism of the school leads to physical education so that every teacher will have a high sense of responsibility for his work and a sense of urgency to improve his ability; It breaks the traditional unit teaching system, makes the goal of college physical education more suitable for the development of students' personality, and combines it with the long-term goal of cultivating lifelong healthy qualified talents.

Table tennis is an example of an open skill sport, which rapidly raises levels of tension and negative thinking and is difficult to manage the emotions of the players. As a result, table tennis is one of the most difficult sports for an athlete to continually sustain top performance (Bai Ning and Magalona, 2024). Interventions in applied sport psychology are typically implemented using the psychological skills training model, which refers to the "systematic and consistent practice of mental or psychological skills for the purpose of improving performance, increasing enjoyment, or achieving greater sport and physical activity satisfaction" (Weinberg, 2019).

Student or athlete’s behaviors refer to acquired actions that facilitate effective learning and constructive interaction within the community, as articulated by Wang (2020). Through club mode teaching, table tennis students basically master the position, posture, footwork, serve, forehand fast attack, backhand push (dial ball) and other technology; table tennis teachers use various forms of teaching methods, make technical action learning from easy to difficult, different, step by step, gradually improve, and pay attention to ideological and political leading role, cultivate students’ lifelong sports thought. Furthermore, Bai Ning and Magalona (2024) stressed that coaches in tennis demonstrated a very high level of confidence, social skills and decision-making abilities which influence the athlete’s performance.

To be able to investigate the table tennis club mode teaching using Capability, Opportunity, and Motivation, Behavior Analysis a COM-B framework (Michie, et al., 2014) was used. It is a procedure of investigation that is highly used in humanities field for behavioral analysis. This study will attempt to employ this framework in Physical

Education. It identifies three factors that need to be present for any behavior to occur: capability, opportunity, and motivation.

This study intends to analyze the behavior of the club members in Table Tennis as this may provide insights into the current ability of club mode teaching, specifically in Table Tennis. Michie et al. (2011) suggest that individuals require capability (C), opportunity (O), and motivation (M) to engage in a behavior (B). They introduced the COM-B model to facilitate the comprehension of behavior within a given context and to identify behavioral targets, forming the foundation for designing effective interventions.

Research Questions

To give light to the problem, the researchers sought to answer the capability, opportunity and motivation levels of Table Tennis athletes.

1. What is the capability level of the students in table tennis in terms of:
   1.1 Physical Abilities
   1.2 Selected Psychological Instruct
2. What is the opportunity level of the students in table tennis in terms of:
   2.1 Social Opportunities
   2.2 Psychological Opportunities
3. What is the motivation level of the students in table tennis in terms of:
   3.1 Intrinsic Motivation
   3.2 Extrinsic Motivation
4. Is there a significant difference in the capability level, opportunity level, and motivation level of the students in table tennis under the club mode teaching when grouped in terms of:
   4.1 Age
   4.2 Sex
   4.3 Major

Hypotheses:

1. There is no significant difference in the capability level, opportunity level, and motivation level of the students in table tennis under the club mode teaching when grouped in terms of:
   1.1 Age
   1.2 Sex
   1.3 Major

METHODOLOGY

Research Design

The study utilized quantitative research approach, focusing on collecting, processing, testing, and analyzing information to derive meaningful conclusions. The primary objective is to evaluate the capability level of student-respondents, gauge the motivation levels among students in the context of table tennis, and assess the opportunity level, defined as the perceived satisfaction derived from the environment by the students. Descriptive research is a sort of research that aims to characterize a condition, problem, or occurrence in a methodical, factual, accurate, and objective manner. It tries to put into words what is. Adams & Lawrence (2019) mentioned that descriptive research collected information about the overall distribution characteristics and provides information about the overall structure, phenomena, etc. Descriptive statistics used a strict random sampling method to select the study population for statistical processing of the information obtained. The COM-B Model developed by Susan Michie, et.al 2011, Barker, et. al. (2016) was used.

Research Locale and Participants

This study was conducted in 5 universities in Anhui province, China. A total number of 300 respondents who were enrolled in Table Tennis Physical Education classes through club Mode Teaching.

Research Instrument

A researcher-made survey questionnaire was used. To ensure the quality of the instrument, the researcher-made questionnaire underwent validation by five professors who are experts in the field of Table Tennis and coaching. In crafting the instrument, careful consideration was given to the requirements for designing a strong data collection tool. These experts were provided with the instrument for critiquing, reviewing, and evaluating its content. The primary objective at this stage was to ascertain the validity of the questionnaire items. A mean score of 4.42 which was very high validity was used for pilot test involving 20 participants who are not part of the actual respondents but had been granted permission to participate in the pilot testing phase

Data Gathering Procedure

Data was collected using structured questionnaires and assessments designed to measure capability, opportunity, and motivation. The instrument assessed for validity and reliability using Cronbach Alpha. After an excellent result was obtained the necessary permission from the university president to conduct the study to the actual participants. Descriptive statistics such as mean, standard deviation, and frequency distribution was employed to characterize the research variables. The researcher, personally administering the questionnaire, took care to ensure the comfort of the participants during

the process. Data collection and processing procedures were carefully planned to ensure the accuracy and reliability of the data. Subsequently, quantitative data analyses were conducted.

Data Analysis

The study follows the ethical standard of research. After gathering all the data, the researchers used the Weighted Mean, Standard Deviation, independent t test and ANOVA.

RESULTS

This part includes the discussion of results.

Table 1*The Capability Level of The Students in Table Tennis in Terms of Physical Abilities and selected Psychological Instruct*

Indicators	M	SD	VI
Physical Abilities	**2.91**	**0.74**	**High**
Selected Psychological Instruct	**3.14**	**0.64**	**High**

Scale: 1.00-1.75 Very low; 1.76-2.50 Low; 2.51-3.25 High; 3.26-4.00 Very high

Table 2 *The Opportunity Level of The Students in Table Tennis in Terms of Social and Psychological Opportunities*

Indicators	M	SD	VI
Social Opportunities	**3.14**	**0.64**	**High**
Psychological Opportunities	**3.22**	**0.62**	**High**

Scale: 1.00-1.75 Very low; 1.76-2.50 Low; 2.51-3.25 High; 3.26-4.00 Very high

Table 3 *The Motivation Level of The Students in Table Tennis in Terms of Intrinsic and Extrinsic Motivation*

Indicators	M	SD	VI
Intrinsic Motivation	**3.15**	**0.64**	**High**
Extrinsic Motivation	**2.75**	**0.76**	**High**

Scale: 1.00-1.75 Very low; 1.76-2.50 Low; 2.51-3.25 High; 3.26-4.00 Very high

Table 4.*1* *Significant Difference in The Capability Level of The Students in Table Tennis Under the Club Mode Teaching in Terms of Age*

Indicators	T -value	P -value	VI	Ho

Age	1.19	.11	NS	Accepted
Sex				
Male	3.69	.00	S	Rejected
Female	3.62	.01	S	Rejected
Major	1.09	.01	S	Rejected

Table 4.2 *Significant Difference in The Opportunity Level of The Students in Table Tennis Under the Club Mode Teaching in Terms of Age*

Indicators	T -value	P -value	VI	Ho
Age	0.43	.33	NS	Accepted
Sex				
Male	0.65	.26	NS	Accepted
Female	0.67	.25	NS	Accepted
Major	2.19	.01	S	Rejected

Table 4.3
Significant Difference in The Motivation Level of The Students in Table Tennis Under the Club Mode Teaching

Indicators	T -value	P -value	VI	Ho
Age	0.61	.54	NS	Accepted
Sex				
Male	0.59	.57	NS	Accepted
Female	0.84	.43	NS	Accepted
Major	2.10	.03	S	Rejected

DISCUSSION

Table 1 presents the statistical results on the Capability Level of Students in Table Tennis in Terms of Physical Abilities which refers to the extent of their physical proficiency, encompassing strength, speed, agility, coordination, endurance, and flexibility. This level is crucial in executing table tennis techniques and movements effectively. Understanding this capability level provides a foundation for assessing students' readiness, identifying training needs, and designing targeted interventions to enhance their performance. Furthermore, the outcomes of the evaluation of students' capability levels in table tennis, specifically focusing on Physical Abilities with a mean 2.91 and an SD of .74 which is high. The findings suggest potential areas for improvement, emphasizing the importance of refining aspects related to strength and adaptability to emerging trends. Moreover, the analysis of physical capabilities in table tennis among students under club mode teaching reveals commendable strengths in various dimensions. Petersons et al. (2019), they revealed that university students are both highly active and highly sedentary. The

curriculum demonstrates efficacy in cultivating key aspects of physical capability. However, the nuanced findings highlight specific areas that warrant attention for further refinement and enhancement, emphasizing the iterative nature of educational practices in sports. The results align with previous research by Fawver et al., (2019), who emphasized the importance of a comprehensive curriculum in Table Tennis teaching, covering technical skills, tactical concepts, and age-appropriate physical exercises. Additionally, their study corroborates the need for teachers to employ modern teaching methods in tennis courses, reflecting the broader applicability of these conclusions. Manubag et al., (2023) stressed that the multifaceted nature of capability development is further unraveled as these studies collectively reveal the symbiotic relationship between training methods and skill enhancement

On the capability level of students in table tennis, as measured by Selected Psychological Instruct, the indicators presented in Table 1 provide valuable insights into various psychological factors that contribute to success in table tennis. The overall result, with a mean score of 3.14, reinforces the high psychological capability of the students in table tennis. This assessment aligns with the scale provided, categorizing the psychological capability as "High." This analysis provides a solid foundation for further investigations and the development of targeted interventions to enhance psychological aspects crucial for success in the sport. The integration of club mode teaching can be tailored to capitalize on these strengths and address specific areas for improvement in the psychological profile of table tennis players. The findings resonate with existing literature on the importance of psychological factors in sports performance (Wang et al., 2023). Psychological skills such as concentration, resilience, and motivation have been recognized as key contributors to success in sports, including table tennis. While our study indicates high capabilities in table tennis through club mode teaching, diverse perspectives from (Zhang et al., 2019) underscores the need for nuanced considerations in assessing and enhancing student skills.

Table 2 shows the opportunity level of students in table tennis, as assessed in terms of social opportunities, plays a pivotal role in shaping their overall experience and performance in the sport. The mean score of 3.14, categorizes the social opportunity level as "High." This aligns with the scale provided, highlighting the generally positive social environment within the context of table tennis clubs. Moreover, the analysis of social opportunities in table tennis emphasizes the importance of effective communication, community building, and diverse competitive experiences. While the overall social opportunity level is high, targeted improvements in competition variety may further enhance the holistic development of table tennis players within club settings. These findings provide a foundation for refining club mode teaching strategies and establishing an evaluation framework that addresses both psychological and social dimensions for comprehensive player development. Deelen et al., (2019) study's focus on effective communication and community building in table tennis aligns with supports the need for enhanced competition variety, reinforcing our findings. Additionally, endorse the broader social benefits identified, enriching the understanding of social opportunities and supporting the development of targeted club mode teaching strategies.

The opportunity Level of Students in Table Tennis in Terms of Psychological Opportunities refers to the availability of psychological resources and support that enable students to develop and maintain positive psychological states for optimal performance. This includes having access to mental training, counseling, and other psychological interventions that help them manage stress, enhance concentration, maintain motivation, and cope with setbacks. These psychological opportunities are crucial for fostering a resilient and confident mindset in table tennis players. Table 2 discloses the findings of an evaluation exploring the opportunity level of students in table tennis, specifically delving into Psychological Opportunities. The highest mean scores spotlight strengths within the psychological dimension, revealing positive aspects. Concurrently, the lowest mean scores draw attention to potential areas for improvement, providing valuable insights into the psychological opportunities influencing students engaged in table tennis through club mode teaching.

The mean score of 3.22, categorizes the psychological opportunity level as "High." This aligns with the scale provided, indicating that students in table tennis clubs have access to a rich array of psychological opportunities for development. Moreover, the analysis of psychological opportunities in table tennis through club mode teaching highlights the positive impact on students' mental skills and well-being. The consistently high scores across indicators indicate a robust psychological support system within the club setting. These findings provide a foundation for the development of targeted interventions and the formulation of an evaluation framework to enhance psychological aspects of player development in table tennis. The focus on mental skills training and positive psychological attributes in table tennis, as reflected in the indicators. The broader psychological benefits identified in Indicators 6 to 10 align with the findings of Deelen et al., (2019), emphasizing the positive impact of sports participation on resilience, self-confidence, goal-setting, and emotional regulation. The psychological dimension is essential for enhancing concentration, resilience, and intrinsic motivation, all contributing to optimal performance (Xu & Tang, 2022).

Table 3 presents the Motivation Level of Students in Table Tennis in Terms of Intrinsic Motivation refers to the internal drive and desire that students have to engage in and excel at table tennis. This motivation is fueled by their enjoyment of the sport, a sense of accomplishment, and the personal satisfaction derived from skill development and achievement. It is a critical aspect of their overall motivation and crucial for sustained engagement and progress in table tennis. It highlights the findings of an evaluation probing into the motivation levels of students in table tennis, specifically examining Intrinsic Motivation. The highest mean scores spotlight the strengths within this motivational dimension, elucidating positive aspects. Meanwhile, the lowest mean scores draw attention to potential areas for enhancement, providing a nuanced understanding of the intrinsic motivational factors influencing students engaged in table tennis through club mode teaching.

Additionally, it provides insights into the intrinsic motivation level of students in table tennis within the context of club mode teaching. Intrinsic motivation, characterized

by a genuine love for the sport and an internal drive to engage in table tennis, plays a crucial role in shaping a student's commitment and enjoyment of the game. The analysis of the indicators reveals a generally high level of intrinsic motivation among the students, as reflected by the mean scores and standard deviations. It highlights the students' enjoyment, positive affective responses, and the acknowledgment of personal development as key components of intrinsic motivation. This aligns with existing literature emphasizing the importance of enjoyment and personal growth in sustaining intrinsic motivation (Weinberg & Gould, 2023). The mean score of 3.15, categorizes the intrinsic motivation level as "High." This aligns with the scale provided, indicating that students participating in table tennis through club mode teaching are intrinsically motivated, driven by the inherent satisfaction derived from the sport. The emphasis on enjoyment, positive affective responses, and personal development in fostering intrinsic motivation in table tennis aligns with the perspectives. The findings related to deep passion, goal-setting, and sustained commitment are consistent with the principles of self-determination theory.

The motivation level of students in table tennis in terms of extrinsic motivation refers to the external factors that influence their desire to participate in and perform well in the sport. This includes rewards, recognition, praise, competition, and other external incentives that drive their motivation. Extrinsic motivation can be important in motivating students initially, but it is typically less sustainable in the long run compared to intrinsic motivation, which is rooted in personal enjoyment and satisfaction. Table 3 illuminates the outcomes of an evaluation probing into the motivation levels of students in table tennis, specifically exploring Extrinsic Motivation. The highest mean scores underscore areas of strength within this facet of motivation, shedding light on positive aspects. Chelladurai & Kim (2022) have examined the social dynamics in table tennis clubs, emphasizing the importance of a supportive community in bolstering motivation and commitment among players. Meanwhile, the lowest mean scores draw attention to potential areas for improvement, offering crucial insights into the extrinsic motivational factors influencing students engaged in table tennis through club mode teaching.

A mean score of 2.75, categorizes the extrinsic motivation level as "High." This reflects the influence of various external factors such as awards, recognition, and competition on students' motivation to participate in table tennis. Moreover, the analysis of extrinsic motivation in table tennis reveals a complex interplay of factors. While certain external rewards and recognition contribute to a high extrinsic motivation level, there is variability in responses, and some aspects of extrinsic motivation exhibit lower levels. These findings underscore the importance of understanding the nuanced relationship between intrinsic and extrinsic motivations in the context of table tennis club teaching. The observation of a mixed profile in extrinsic motivation within table tennis aligns with the findings of Akelaitis and Malinauskas (2019), who emphasize the limited effectiveness of certain external rewards in sustaining engagement. The recognition of variability in responses and lower levels in specific aspects resonates with their perspective. While the overall categorization as "High" in extrinsic motivation aligns with the multifaceted nature of external factors, acknowledging the nuanced relationship between intrinsic and extrinsic motivations, as highlighted by additional research, enriches the understanding

of the motivational dynamics in table tennis clubs. The recognition of intrinsic motivation's role in sustaining long-term commitment in sports, aligns with the findings of the current study. Additionally, Lim emphasize the significance of extrinsic motivation in providing additional incentives and rewards, support the conclusion that both intrinsic and extrinsic factors contribute to the overall high motivation level within club mode teaching. These readings reinforce the success of the teaching approach in creating a balanced motivational climate, addressing diverse student needs, and contributing to sustained engagement and performance in table tennis.

Table 4.1 shows the significant difference on the capability of students under club mode teaching in terms of sex and their majors but no significant difference in terms of age. The data signifies that club mode teaching may distinctly impact certain aspects of capability, emphasizing the need for targeted instructional strategies. The mean differences, standard errors, and confidence intervals further substantiate these findings. While some capabilities benefit significantly, others remain consistent across majors. This analysis contributes valuable insights for tailoring teaching approaches in table tennis across diverse skill domains, forming the groundwork for a specialized evaluation framework. The detailed data-driven approach underscores the multifaceted impact of club mode teaching on students' capabilities, providing a comprehensive understanding for educators and practitioners in the field.

Table 4.2 shows the significant difference in the opportunity level in table tennis under club mode teaching in terms of major. While no significant difference on age and sex when categorized as male and female. Hatzipanagos et al. (2020) as cited by Chen (2024) stressed evaluation enables teachers to provide feedback and guidance to students based on their actual performance on real-world tasks and problems. Gould & Weinberg (2014) stressed that psychological quality includes concentration, self-confidence, willpower, and so on. Research has shown that good psychological quality can improve individual performance and technical ability in competition.

The importance of socializing, and the development of connections are crucial to an individual's well-being and mental health. Human needs and social relation an opportunity to develop connections that can satisfy an individual's emotional needs and enhance self-esteem and a sense of belongingness. Holt-Lunstad, et al (2010) analyzed multiple studies and found a significant association between social connections and mortality risk. Lack of social connections increases an individual's risk of death, while positive social connections can extend life.

Table 4.3 shows significant differences in motivation levels among students learning table tennis through club mode teaching based major. The results indicate that both Age, and sex, being male and female data shows there are no significant differences in motivation levels regarding technology-related aspects, positive affective responses to the sport experience, inner drives to play for enjoyment, and deep passion and genuine love for table tennis. These findings suggest that teachers should consider the different motivations behind students' participation, particularly regarding majors to create more

inclusive and tailored teaching approaches that cater to the diverse needs and motivations of their students. Myers et al. (2020) showed that maintaining positive competitive relationships and respect helps to increase athletes' motivation to play, making them more competitive and confident in defeating their opponents.

The hypothesis for capabilities, opportunities, and motivation when grouped as to age was accepted. Capabilities in terms of sex and when grouped as to male and females was rejected. Moreover, opportunities and motivation in terms of sex and when grouped as to male and female was accepted. While capabilities, opportunities, and motivation in terms majors was rejected.

Conclusions

Based on the study's findings, the researcher came up with the following conclusions.

The evaluation of students in table tennis reveals a high overall capability level in both physical and psychological dimensions through club mode teaching. This underscores the effectiveness of the integrated approach in cultivating well-rounded skills and highlights the success of the teaching methodology in enhancing student capabilities.

The evaluation of students in table tennis highlights a high overall opportunity level, considering both social and psychological dimensions through club mode teaching. This underscores the effectiveness of the integrated approach in providing diverse opportunities for community engagement, skill development, and overall well-being. The findings support the importance of a holistic approach in enhancing students' experiences and opportunities in the sport.

In conclusion, the evaluation of students in table tennis reveals a high overall motivation level through club mode teaching. The balanced integration of intrinsic and extrinsic motivation fosters a supportive environment where students engage in the sport for both enjoyment and external incentives. This comprehensive approach aligns with research emphasizing the importance of addressing diverse motivational factors for sustained engagement and performance in table tennis.

Therefore, in the capability level of the students in table tennis under the club mode teaching in terms of sex was rejected. The capability level, opportunity level, and motivation level of the students in table tennis under the club mode teaching when grouped in terms of Majors was rejected. The capability level, opportunity level, and motivation level of the students in table tennis under the club mode teaching when grouped in terms of age was accepted. The opportunity level and motivation level of the students in table tennis under the club mode teaching when grouped in terms of sex and when grouped as to male and female was accepted. Results provides an important indication for a thorough study on planning the club mode teaching.

Recommendations

Based on the findings and conclusions drawn from the study, the following recommendations are given:

School Administrators. Encourage the adoption of club mode teaching in table tennis programs within the school. Allocate resources for facilities and provide support for teacher training in this methodology. Facilitate collaboration between teachers and external clubs to enrich the overall table tennis learning experience.

Coaches/Teachers. Embrace club mode teaching strategies in table tennis lessons, tailoring approaches to meet the diverse needs of students based on age, gender, and major. Actively engage students in the table tennis community, fostering inclusivity and a sense of belonging.

Table Tennis Students. Take an active role in leveraging the opportunities provided by club mode teaching. Participate enthusiastically in training, competitions, and community-building activities to enhance your skills and contribute to the vibrant table tennis community.

Future Researchers. Build on the current study as a foundation for future research on table tennis education. Explore additional factors influencing capability, opportunity, and motivation levels, contributing to the development of a robust evaluation framework. Consider longitudinal studies to track the long-term impact of club mode teaching.

Compliance with Ethical Standards

The authors declare compliance in ethical standards. After getting the approval from the university administrators/heads, getting the permission from the teachers/trainers' and students to conduct the questionnaire. The researchers guaranteed that all the data gathered from the respondents remained confidential. Proper citations of related literature and studies are maintained. Moreover, there is no bias or prejudice in the findings and results of the study.

Acknowledgments

The authors are very grateful to our creator for the wisdom, strength and good health to accomplish this investigation. Immeasurable appreciation to all participants involved, administrators, professors involved, validators, family members, friends, editors and to all who contributed to the completion of this study. Anhui province higher education institution quality engineering research project: Anhui province higher education institution sports club system teaching operation present situation and the sustainable development research--take Anhui university of finance and economics (2023jyxm0376).

REFERENCES

Adams, K. and Lawrence, E. (2019). Research methods, statistics and applications, 2nd ed., SAGE Publications, Inc., California.

Akelaitis, A., & Malinauskas, R. (2019). The expression of emotional skills among individual and team sports male athletes. Pedagogics, Psychology, Medical-Biological Problems of Physical Training and Sports, 22(2), 62. https://doi.org/10.15561/18189172.2018.0201.

Barker, F., Atkins, L., & De Lusignan, S. (2016). Applying the COM-B behaviour model and behaviour change wheel to develop an intervention to improve hearing-aid use in adult auditory rehabilitation. *International Journal of Audiology*, *55*(sup3), S90-S98.

Chelladurai, P., & Kim, A. C. H. (2022). Human resource management in sport and recreation. Human kinetics.Chelladurai, P., & Kim, A. C. H. (2022). Human resource management in sport and recreation. Human kinetics.

Chen, Bingxin (2024). Development And Validation Of An Online Evaluation Instrument In Aerobics. Unpublished Dissertation, Jose Rizal University.

Deelen, I., Ettema, D., & Kamphuis, C. B. M. (2019). Sports participation in sport clubs, gyms or public spaces: How users of different sports settings differ in their motivations, goals, and sports frequency.

Fawver, B., Beatty, G. F., Roman, J. T., & Kurtz, K. (2019). The status of youth coach training in the United States: Existing programs and room for improvement. International Sport Coaching Journal, 7(2), 239-251.

Gould, D. and Weinberg, R. (2014). Foundations of sport and exercise psychology. Champaign, IL: Human Kinetics.

Holt-Lunstad, et al. (2010). Social relationships and mortality risk: A meta-analytic review. PLoS Medicine, 7(7), e1000316.

Manubag, M., Kilag, O. K., Peñalosa, B., Timtim, J. M., Padilla, J. B., & Abendan, C. F. (2023). Empowering Skills Development: Exploring the Role of Technology Management in Technical Vocational Education Enhancement. Excellencia: International Multi-disciplinary Journal of Education (2994-9521), 1(5), 195-208.

Michie, S. van Stralen, M. & West, R. (2011). The behavior change wheel: A new method for characterizing and designing behavior change interventions. Implementation Sci, vol. 6 (1). doi:10.1186/1748-5908-6-42.

Michie, S. et al. (2014) Changing Behavior to Improve Clinical Practice and Policy. Department of Clinical, Educational and Health Psychology, University College London, WCIE 6BT, UK.

Myers, N. D., Chase, M. A., Beauchamp, M. R., & Jackson, B. (2020). Athletes' perception of Coaching Competency Scale II – High school teams. Educational and Psychological Measurement, 70, 477-494. Link Nazarudin, B. H. N. M., Fauzee, O. S. M., Jamalis, M., Geok, K. S., & Din, A. (2020). Coaching leadership styles and athlete satisfaction among Malaysian

Ning, B., & Canizares-Magalona, J. (2024). INFLUENCE OF TENNIS COACHES ON ATHLETES' SELF-EFFICACY. Ignatian International Journal for Multidisciplinary Research, 2(4), 245–256. https://doi.org/10.5281/zenodo.10937517

Peterson, N. E., Sirard, J. R., Kulbok, P. A., DeBoer, M. D., & Erickson, J. M. (2019). Sedentary behavior and physical activity of young adult university students. Research in Nursing & Health, 41(1), 30–38. doi:10.1002/nur.21845.

Tian, X. (2019, January). Research on the In-And-After-Class Integration of Club-based Teaching in Physical Education of Colleges and Universities. In 3rd International Seminar on Education Innovation and Economic Management (SEIEM 2019) (pp. 621-623). Atlantis Press.

Wang, H. M., Zhu, X. M., Ruan, Y. F., & Yu, P. (2020). Research on Teaching Mode of Basketball Club in Colleges and Universities. Journal of Hefei University of Technology (Social Sciences), 01.

Wang, L. (2023). How self-reflection and resilience can affect pre-competition anxiety? Evidence from national competitive table tennis in adolescent players. Current Psychology, 42(14), 12034-12044.

Weinberg, R. S. (2019). Psychological skills training. In D. Hackfort, R. J. Schinke, & B. Strauss (Eds.). Dictionary of sport psychology: Sport, exercise and performing Arts (pp. 230–231). Elsevier. https://doi.org/10.1016/C2016-0-03935-9.

Weinberg, R. S., & Gould, D. (2023). Foundations of sport and exercise psychology. Human kinetics.

Xu, Y., Liu, D., & Tang, D. S. (2022). Decent work and innovative work behavior: Mediating roles of work engagement, intrinsic motivation and job self-efficacy. Creativity and Innovation Management, 31(1), 49-63.

Zhang, Y., Kim, M., Wang, J. J., & Pitts, B. (2019). Reversing the tide of sport globalization from west to east? Examining consumer demand for table tennis clubs in the U.S. International Journal of Sports Marketing and Sponsorship, 19(2), 217–235. doi:10.1108/ijsms-07-2019-0059.

APA Citation:

Weifeng, Q., & Magalona, J. C. (2024). CAPABILITY, OPPORTUNITY, AND MOTIVATION LEVEL IN TABLE TENNIS THROUGH CLUB MODE TEACHING. Ignatian International Journal for Multidisciplinary Research, 2(8), 648–661. https://doi.org/10.5281/zenodo.13292425

jayceemagz@gmail.com
361694002@qq.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

CARING FOR CANCER PATIENTS AND THEIR FAMILIES: THE LIVED EXPERIENCES OF NURSING STUDENTS

Alexie Rose P. Depacaquivo, Nica Bettina A. Ruaya
Christian Emmanuel Enriquez RN, MAN, DPS-TM

Nursing Department, University of San Carlos, Cebu City, Philippines

https://doi.org/10.5281/zenodo.13291979

ABSTRACT

This qualitative study examines the experiences of nursing students providing care for cancer patients and their families. The study uses thematic analysis to identify themes and patterns in the experiences of sixteen students through in-depth interviews. The results reveal a complex environment with strong emotional bonds, career advancement, and the importance of support networks. Nursing students reported various emotions, including nervous anticipation, empathy, and resilience, as they navigated the complexities of cancer care. Challenges such as lack of professional experience and perceived limitations were mitigated by guidance and support from mentors and peers. The study underscores the importance of comprehensive education and support systems to prepare nursing students for the emotional and practical demands of oncology nursing.

Keywords: *Cancer care, nursing students, lived experiences, qualitative research, thematic analysis, emotional challenges, support systems.*

INTRODUCTION

Nursing education is a complex process that combines classroom learning with practical clinical experiences. Understanding nursing students' perceptions of these experiences is crucial for assessing the effectiveness of clinical education in preparing future nurses. Clinical experiences significantly influence students' confidence, competence, and professional identity. A study focusing on nursing students' experiences caring for cancer

patients and their families is essential for nursing education practices. Duchscher (2008). By identifying potential gaps in education and training, curricula can be tailored to better prepare students for complex and critically ill patients.

The stress, grief, and moral dilemmas they encounter in these situations can be overwhelming (Hoover et al., 2010). The emotional and psychological toll of caring for cancer patients and their families can be overwhelming, leading to the development of support mechanisms and interventions that enhance students' resilience, coping strategies, and emotional well-being. The relationships between nursing students, cancer patients, and their families are central to holistic, patient-centered care, which can improve communication and patient-family interaction, leading to enhanced patient outcomes and satisfaction.

Understanding these dynamics can contribute to improved communication and patient-family interaction, leading to enhanced patient outcomes and satisfaction (Babore et al., 2018).

In conclusion, a study examining the lived experiences of nursing students in caring for cancer patients and their families can improve nursing education, enhance student support systems, and ultimately benefit patient care quality. By addressing the emotional, psychological, and educational aspects of these experiences, this research can contribute to a more compassionate and competent nursing workforce and improved patient outcomes.

The research study utilizes Albert Bandura's Social Cognitive Theory, George Engel's Biopsychosocial Model, and Jean Watson's Theory of Human Caring to understand the complex nature of caring for cancer patients and their families. Bandura's theory emphasizes the importance of modeling, imitation, and observational learning in developing new behaviors and abilities, making it relevant to nursing students. Engel's biopsychosocial model considers social, psychological, and biological aspects of cancer treatment, emphasizing the connections between health and well-being. Watson's Theory of Human Caring emphasizes the importance of caring as a universal human experience, transcending cultural barriers, and provides guidance for researchers studying the complex interactions between emotions, relationships, and the human spirit in healthcare settings.

Research Questions

This qualitative study investigates the challenges faced by student nurses in providing comprehensive care for cancer patients and their families, highlighting the potential for stress, burnout, and discontent, as a result of their limited knowledge and abilities.

1. What are the experiences of the nursing students during oncology placement in the hospital?
2. What are the triumphs and challenges of student nurses when taking care of a cancer patient?

3. What did the nursing students feel during the oncology placement in the hospital?

Assumptions

Nursing students' experiences in caring for cancer patients and their families are significantly shaped by the emotional and psychological challenges they encounter, as well as the support and guidance they receive from mentors and the healthcare team.

METHODOLOGY

This chapter details the research design, setting, instruments, respondents, data procedure, and ethical considerations for the study "Caring for cancer patients and their families: The lived experiences of nursing students." The study aims to improve coping strategies for future nursing students.

The study analyzed the experiences of third-year nursing students at the University of San Carlos in caring for cancer patients during their oncology placement. Using a descriptive phenomenological research design, the researchers conducted one-on-one interviews with respondents to understand the challenges and aspects of their care. The study included male and female third-year nursing students who had experienced duty rotations at the Cebu Cancer Institute Hospital. The participants were chosen based on their mental health and experience in caring for sick patients. The study excluded individuals who were not enrolled in the nursing department, Level 3 students, had not had a duty rotation, or had a cognitive-affecting condition. The research aimed to identify common themes and patterns in the experiences of nursing students caring for cancer patients.

The study utilized the interview guide method, a structured qualitative research method that uses open-ended questions to facilitate in-depth conversations between researchers and participants. This method aims to gather nuanced insights into an individual's experiences, perspectives, or opinions on a specific topic, ensuring consistency across interviews and flexibility to explore emergent themes.

The researchers certified interview questions with an oncology clinical nurse, aiming to elicit thoughtful answers about the practical, psychological, and emotional aspects of providing treatment in cancer settings. The questions aimed to elicit reflections from participants about their experiences, obstacles, and tactics for empathetic care, promoting open discourse and discussing their lived experiences.

1. Could you tell us how you feel about your oncology placement in the hospital?
    - 1.1 How do you feel when you are working with cancer patients?
    - 1.2 How many hours are you exposed in your oncology placement?
    - 1.3 Do you feel worried, stressed, depressed, or alright during your oncology placement?

2. What are the problems and challenges encountered during your oncology placement?
    2.1 Can you describe these difficulties?
    2.2 Why do you think you are having these difficulties?

3. How did you overcome the problems you had when working with cancer patients?
    3.1 What do you do to maintain a sense of emotional and mental control during your oncology placement?
    3.2 What are your suggestions for minimizing the impact of facing the challenges of taking care of a cancer patient?

The University approved and reviewed and approved the research paper prior to the study's implementation. The researchers conducted face-to-face interviews with third year nursing students, adhering to the Data Privacy Act of 2012, which requires the anonymization of respondent names and the separation of personally identifiable information from research results. This act protects the privacy rights and dignity of participants in sensitive studies involving healthcare experiences.

The study adhered to strict confidentiality guidelines, respecting the privacy rights of participants, and fostering confidence between participants and researchers. The data was discarded after usage, and participants provided 15 minutes to answer questions without compensation. Data analysis was handled by researchers using industry-standard encryption algorithms to secure sensitive data. The encrypted files were stored on password-protected devices, accessible only to authorized researchers and advisers. Regular audits and monitoring procedures were implemented to trace access and identify illegal attempts to compromise the system. Hard copies of confidential documents were retained in an expanded plastic envelope, ensuring the integrity and confidentiality of the data for the duration of the study.

The study employed Braun and Clarke's thematic analysis, which involves familiarizing oneself with the data through transcription, reading, and re-reading. Initial codes are generated by identifying relevant segments, and codes are collated into potential themes. Data is gathered for each theme, including respondent verbatim and related studies. Themes are named and accurately represent the data, and the final output is related to the research questions and related literature.

The study focuses on the reliability and quality of qualitative research, as proposed by Lincoln and Guba in their 1985 book "Naturalistic Inquiry." The researchers used the phenomenological theory to ensure a systematic and well-structured approach to understanding nursing students' experiences. They obtained ethical approvals, confidentiality, and informed consent from participants before conducting the study. The findings were shared with participants to ensure accurate representation.

Transferability was achieved through direct participant quotes and examples from the interview, with member checking as a validation strategy. The study's transferability is

discussed in the scope and limitations, and practical recommendations are provided based on the findings.

Dependability was achieved through a descriptive phenomenological research design and the interview method, which aligns with the research questions. Regular consultation sessions with knowledgeable instructors were conducted to identify potential biases or gaps. Consistency in the data collection process was observed to reduce variability. Findings were presented to participants for feedback and alignment with their lived experiences.

Confirmability was achieved through open-ended questions for interviews, participant statements, and transparent documentation of modifications and progress through a Gantt chart. These elements of methodological rigor are essential for assessing the rigor and quality of qualitative research.

RESULTS AND DISCUSSION

Theme 1. Professional Inexperience

Albert Bandura's social cognitive theory emphasizes the importance of guided learning and practical experience in clinical placements. These placements allow students to apply theoretical knowledge in real-life situations, witness best practices, and receive feedback. However, students often lack knowledge and experience in cancer care, leading to difficulties in providing quality care. A 2018 study by Kapucu & Bulut found students feeling inadequate and powerless in providing quality care and struggling to adjust to the fast-paced environment and workload due to the disproportionate ratio of patients to nurses.

Skill Deficit. Many students felt that their clinical skills were insufficient for the demands of cancer care.

Respondent 1: “There are many unfamiliar drugs. Also, the work there was very fast that we didn’t know what to do in the facility” (2:59-3:06)
Respondent 13: “Due to the greater ratio of patients, we, the student nurses along with the nurses, had to work double time just to cater to everyone’s treatment and care.” (2:02-2:12)

Lack of Knowledge. There is insufficient knowledge and information prior to the rotation.

Respondent 4: “In a general sense, it’s a new ward, so thereby it’s a new topic and thereby it’s a whole lot of new things” (1:08 - 1:17)
Respondent 12: “Maybe because you are new to the place, you have recently been put in the area, in that rotation. It was your 1st time to encounter… that situation.” (3:50 - 4:15)

Theme 2. Nervous Anticipation

Student nurses often experience nervous anticipation before starting clinical rotations in oncology. This anxiety is a major subject, combining anxiety, doubt, and excitement. A study from Turkey by Kapucu & Bulut in 2018 found that students experienced extreme anxiety during their first clinical experience in an oncology service. Social cognitive theory suggests modelling and observational learning can help reduce anxiety related to anticipation. Students can develop coping mechanisms by observing experienced nurses handle difficult situations. The biopsychosocial model explains that physiologic stress responses, psychological fear, and social pressures contribute to anxiety. Resolving these issues can help reduce anxiety.

Fear of the Unknown. The anticipation of encountering new and challenging situations was a common source of nervousness.

Respondent 1: “At first, I was nervous because I didn’t have any idea in taking care of these types of patients.” (1:45 - 1:50)
Respondent 5: “It was a mix of fear and, of course, excitement for the exposure.” (0:05 - 0:10)
Anxiety. Respondents expressed uncertainty about their ability to handle the emotional demands of caring for cancer patients.
Respondent 6: “From when I first heard that we were going to have our oncology replacement during our hospital, for our clinical duties, I think I was a bit anxious in finding out that we were going to be handling patients of all kinds of prognosis.” (1:46 - 2:05)
Respondent 8: “So, at first I was anxious because it's my first time being assigned there and… yeah mostly anxious” (0:08 - 0:25)

Theme 3. Reflective Engagement

Reflective engagement in nursing involves examining events through biology, psychology, and society, promoting lifelong learning and professional development. This approach helps nursing students identify strengths and areas for growth. Examining emotional experiences, such as empathy and anxiety, can improve preclinical training and patient care. (Kapucu, 2017) Oncology placements significantly impact nursing students' emotional well-being and professional growth, highlighting the importance of reflective engagement.

Self-Reflection. Regular self-reflection helped students understand their experiences and improve their practice.

Respondent 4: “I am the nurse. I am a student nurse and, of course, I am trying to learn, but at the same time, I’m still giving you my quality care.” (5:07 - 5:16)
Respondent 16: “In having these difficulties, keep a clear mind, reflect, or rationalize your interventions, and most importantly, understand them.” (3:37 - 4:00)
Professional Growth. Reflection contributed to their professional development and preparedness for future challenges.

Respondent 4: “If you want to foresee, you want to understand what you want to foresee, of course, you need to learn, and learning takes a long process. And as we know, everyone grows at different paces, and everyone learns at different paces. Sometimes, students learn for two weeks, sometimes a student can learn it in a day, so it’s a matter of creating a more inclusive period for all students to learn the topic, so much so that it’s sufficient enough for them to understand, thereby anticipate and foresee on how they would administer their quality nursing care.” (11:34 - 12:15)
Respondent 5: “The difficulties were a challenge I was really willing to pick up on.” (2:40 - 2:45)

Theme 4. Guidance and Support

Peers who provide support and guidance are crucial in nursing education, as they offer opportunities for modelling, constructive conduct, and self-efficacy development. Mentors can also aid in resilience and confidence building. A supportive atmosphere with mentorship, psychological stress management skills, and sufficient therapeutic resources is essential. The study by Moghimian et al’s (2018) highlights that collaboration with peers allows nursing students to share experiences, exchange knowledge, and provide mutual encouragement, fostering a supportive learning environment. Providing guidance and support improves confidence, nursing knowledge, skills, psychosocial well-being, self-development, and insights needed for end-of-life care. (Kent et al., 2012).

Mentorship. The presence of supportive instructors and staff helped students navigate their clinical placements.

Respondent 1: “Maybe with the help of the CCI nurses and also our CI, I think we managed working with cancer patients” (3:29 - 3:37)
Respondent 3: “What I did, was to ask for help, ask for guidance, especially to the nurses in the facilities, to be able for them to help me and my challenges.” (4:57 - 5:10)
Peer Support. Sharing experiences and challenges with fellow students provided a sense of solidarity.
Respondent 9: “I tried to talk to my other groupmates, or other student nurses, about my feelings, so that my feelings will not be bottled up” (4:47 - 4:55)
Respondent 14: “By helping each other as a team like sharing learnings, cooperating with each other when there are necessary times to be handled, was also the reason that brought us to a meaningful exposure” (2:41 - 2:55)

Theme 5. Perceived Limitations

The biopsychosocial model suggests that nursing students may feel limited in their capacity to provide care due to deficiencies in three domains: psychological unpreparedness, lack of biological information, and social difficulties. In an oncology placement, students face limitations in providing quality care to cancer patients due to knowledge gaps and skills gaps. (Sanford et.al., 2011. A 2012 study from Komprood found that limited information given to students before the rotation affected their service,

and the curricula's narrow focus on cancer nursing further limited their exposure and knowledge.
Knowledge Gaps. Students expressed concerns about their lack of comprehensive medical knowledge.

Respondent 2: “For me, it was due to not enough information or I wasn’t able to retain the information or knowledge that I get through books. I wasn’t able to apply them properly.” (4:45 - 5:08).
Respondent 6: “Really, because we're student nurses where there are limitations of what we can, of what we can do, of what we can do as student nurses. We can't insert IVs, we can't do this, we can't do that.” (6:45 - 7:00)
Emotional Boundaries. Many students struggled to maintain emotional boundaries, feeling deeply affected by their patients’ conditions.
Respondent 6: “It's really hard to see them being in that state knowing that they could have had their whole lives ahead of them, but instead you know like that.” (4:46 - 4:55)
Respondent 10: “So apart from that the challenges would be….. separating your, your emotions for the best intervention available.” (5:00 - 5:15)

Theme 6. Resilience

Resilience in nursing students can be developed through observing and imitating others' actions, developing psychological coping mechanisms, enhancing confidence through practical experience, and receiving social support from peers and mentors. The biopsychosocial model emphasizes resilience as a multifaceted concept, demonstrating it through staying focused, seeking support from peers and mentors, and finding meaning in their work despite personal challenges. This helps nursing students deliver quality care to the best of their capabilities. (Moghimian et al, 2019).
Adaptability. Students learned to adapt quickly to the challenging conditions.

Respondent 9: “I overcame the problems I had in working with cancer patient by adapting to the environment” (3:47 - 3:54).
Respondent 14: “However, a few days have passed, and we were able to adapt to our RLE exposure.” (1:15 - 1:21)

Emotional Strength. Developing emotional strength was essential for coping with the stressors of the role.

Respondent 4: “During that time, it’s a matter of, again, willpower. Understanding that, okay, they [the patients] are pitiful, but at the same time, you have the responsibility over them, so you have to power through again.” (9:00 - 9:14).
Respondent 7: “I guess the biggest way I overcame those challenges was through, as cheesy as it may sound, determination and remembering your purpose” (8:06 - 8:18)

Conclusions

The study reveals the emotional and practical challenges faced by third-year nursing students during their oncology placement at the University of San Carlos. The students experienced anxiety and excitement, reflecting their response to a new environment. Initially, they felt inadequacy and perceived limitations, but overcame these through strategic support systems and reflective practices. The students experienced a range of emotions, from fear and stress to a growing sense of confidence and accomplishment. The study emphasizes the importance of structured support and mentorship in helping nursing students manage the complexities of cancer care, enhancing their ability to provide compassionate care while maintaining their psychological well-being. The students' resilience, support, and reflective practices contributed to a positive overall outcome, with a sense of accomplishment and professional growth. The overall experience was not predominantly negative, highlighting the importance of structured support and mentorship in nursing education.

Recommendations

The nursing curriculum should include more comprehensive oncology care modules to equip students with the necessary knowledge and skills to provide quality treatment to cancer patients and their families. Resources should be allocated for training sessions focusing on psychological support, palliative care, and empathic communication. Mentorship programs should also be established.

Nursing instructors should employ experiential learning techniques like role-plays, simulations, and case studies to enhance students' understanding of the psychosocial aspects of cancer treatment. They should encourage empathy and self-awareness by encouraging reflection on their experiences. Clinical instructors should provide comprehensive orientations to students about their roles and responsibilities during their oncology placement.

Nursing students can enhance their understanding of cancer patients' psychological and emotional needs through programs that emphasize empathy and self-care. They can avoid burnout and compassion fatigue by scheduling regular debriefing meetings with mentors or peers and receiving group or individual feedback from clinical instructors to develop future coping strategies.

Cancer patients and their families can effectively communicate their choices, concerns, and needs to healthcare providers. They can also utilize resources from community organizations or medical facilities like support groups and counselling programs. Patients can actively participate in their care by asking questions, researching treatments, and sharing their beliefs and choices.

Researchers are exploring the impact of cultural, socioeconomic, and regional characteristics on nursing students' experiences caring for cancer patients and their families. They aim to evaluate the impact of nursing education and training on the

standard of care, enhancing the nursing curriculum and clinical practice. They also explore new approaches to address the psychological needs of cancer patients and their families.

Compliance with Ethical Standards

Minimizing the risk of harm

The study aims to minimize the risk of harm by providing participants with a low level of risk during the interview process. Participants may reveal personal information, making them feel uncomfortable, but the researchers expect a low level of risk. They can withdraw their participation at any time without penalty or loss of benefits. A debriefing session is provided to ensure participants are well and safe after the interview.

The study involved an interview intervention, participant selection, and data preservation. Participants were informed about the purpose, procedure, benefits, and duration of the interview. Researchers ensured data safety and confidentiality by keeping each participant's unique number assigned and data linked to it. Participants were not given information outside the research team, and transcripts and data were destroyed after use. Participants were informed they could decline participation or withdraw at any time, and no adverse consequences would be expected if they refused or withdrawn. Researchers obtained separate consent for participation and interview recording, and participants could contact the researchers with any questions about the research or their rights. The study aimed to maintain anonymity and confidentiality.

REFERENCES

Babore, A., Bramanti, S., Lombardi, L., Stuppia, L., Trumello, C., Antonucci, & T., Cavallo, A. (2018, December 19). The role of depression and emotion regulation on parenting stress in a sample of mothers with cancer. Springer Link, 27, 1271–1277. https://link.springer.com/article/10.1007/s00520-018-4611-5

Duscher, J. (2008, October). A process of becoming: the stages of new nursing graduate professionals' role transition. NIH, 39(10):441-50. https://pubmed.ncbi.nlm.nih.gov/18990890/

George L. Engel, The Clinical Application of the Biopsychosocial Model, The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine, Volume 6, Issue 2, January 1981, Pages 101–124, https://doi.org/10.1093/jmp/6.2.101

Hoover, B. (2010, October). Exploring Oncology Nurses Attitude Towards Suicide in Cancer Patients. Fisher Digital Publications, https://fisherpub.sjf.edu/cgi/viewcontent.cgi?article=1007&context=nursing_etd_masters&fbclid=IwZXh0bgNhZW0CMTAAAR14G2BlROb M96xrjogxG6w_fRah2zFwZ6OI1gcNimLT5z47JJRHdJFjr-

E_aem_AaOlnNAcFk01QZO2yX5p3nzOeWIinMCpAc59h5iFT6IdlOX_4Ak-4n4FtxRl7FnJhomraCdueGdLDQbrhJIT86by
Kapucu, S. & Bulut, H. (2018). Nursing Students' Perspectives on Assisting Cancer Patients. PubMed Central, 5(1), 99-106. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5763448/
Kent, E., Rowland, J., Northouse, L., Litzelman, K., Chou, W., Shelburne, N., Timura, C., O'Mara, A., & Huss, K. (2016, March). Caring for Caregivers and Patients: Research and Clinical Priorities for Informal Cancer Caregiving. Review Article, 122 (13), 1987-95. https://acsjournals.onlinelibrary.wiley.com/doi/pdfdirect/10.1002/cncr.29939
Komprood, S. (2012, January). Nursing Student Attitudes toward Oncology Nursing: An EvidenceBased Literature Review. UND Scholarly Commons, 1. https://commons.und.edu/cgi/viewcontent.cgi?article=5871&context=theses
Kusnanto, H., Agustian, D., & Hilmanto, D. (2018, June). Biopsychosocial model of illnesses in primary care: A hermeneutic literature review. NIH, 7(3), 497–500. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6069638/
Moghimian, M., Irajpour, A., & Arzani, H. (2019, March). The Inter-professional Dimensions of Spiritual Care for Chronically Ill Patients: A Qualitative Study. Wolters Kluwer, 8(1), 34-39. https://journals.lww.com/nams/fulltext/2019/08010/the_inter_professional_dimensions_of_spiritual.6.aspx
Mukhalalati, B., Elshami, S., Eljaam, M., Hussain, F., & Bishawi, A. (2022, July 28). Applications of social theories of learning in health professions education programs: A scoping review. NIH, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9367215/
Sanford, J., Townsend-Rocchiccioli, J., Quiette, K., & Trimm, D. (2011, February). "I See My Mother's Face": Student nurse experiences caring for cancer patients. ScienceDirect, 15(1), 46 - 52. https://www.sciencedirect.com/science/article/abs/pii/S1462388910000918
Wei, H. & Watson, J. (2018, December 13). Healthcare interprofessional team members' perspectives on human caring: A directed content analysis study. NIH, 6(1), 17–23. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6608670/
Social Learning Theory—Albert Bandura. In: Akpan, B., Kennedy, T.J. (eds) Science Education in Theory and Practice. Springer Texts in Education. Springer, Cham. https://doi.org/10.1007/978-3-030-43620-9_7
Watson MJ. New Dimensions of Human Caring Theory. Nursing Science Quarterly. 1988;1(4):175-181. doi:10.1177/089431848800100411

APA Citation:

Depacaquivo, A. R. P., Ruaya, N. B. A., & Enriquez, C. E. (2024). CARING FOR CANCER PATIENTS AND THEIR FAMILIES: THE LIVED EXPERIENCES OF NURSING STUDENTS. Ignatian International Journal for Multidisciplinary Research, 2(8), 497–507. https://doi.org/10.5281/zenodo.13291979

Corresponding author: *cepenriquez2018@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

CHATBOT APPLICATION AND ACADEMIC PERFORMANCE IN PHYSICS

Joselito Y. Bulabos, MA
Victoria C. Millanar, EdD

Holy Name University
Janssen Heights, J. A. Clarin Street Dampas District
Tagbilaran City, Bohol, Philippines

https://doi.org/10.5281/zenodo.13151546

ABSTRACT

This study evaluated the effectiveness of a chatbot application in enhancing Grade 8 learners' performance in Physics at San Agustin National High School, Sagbayan District, Bohol, for the school year 2022-2023. A quasi-experimental design was employed, with the experimental group using the chatbot application and the control group receiving traditional instruction. Pre-tests and post-tests assessed performance improvements. The results revealed that while the traditional method showed modest improvements—shifting learners from the "developing" category to "approaching proficient" and "proficient"—the chatbot intervention led to substantial gains. The experimental group demonstrated significant progress, achieving higher categories such as "advanced" and "proficient." Statistical analysis confirmed a significant difference favoring the chatbot group in post-test performance and mean gain scores. These findings suggest that the chatbot application effectively enhanced learners' performance in Physics compared to traditional methods. The study underscores the potential of integrating educational chatbots to address learning challenges and improve academic outcomes.

Keywords: *Chatbot, Educational Technology, Learning Outcomes, Physics Instruction, Technology Integration*

INTRODUCTION

Educational technology encompasses various emerging tools designed to enhance teaching and learning processes. Chatbot applications represent a promising

yet underutilized technology in academic contexts. A chatbot is a programmed application embedded within platforms like messaging services or web applications, designed to automate responses to user inquiries by sending predefined messages. Accessible via mobile phones or other devices, chatbots offer a free, convenient way for users to interact with educational content, provided they are not Globe or TM subscribers, as the messaging services are free for Smart, TalknTxt, and Sun subscribers.

Educational chatbots are specifically designed to leverage this technology to improve academic outcomes. While the integration of chatbots in commercial settings has gained traction due to their effectiveness in customer interactions—Luo et al. (2019) found that chatbots are four times more effective than inexperienced workers in driving customer purchases—its potential in education remains relatively unexplored. Kumar (2021) highlighted that educational chatbots could enhance learning performance and teamwork, suggesting significant benefits for their application in educational settings.

Recent educational performance metrics underscore the need for such technological advancements. The 2018 Programme for International Student Assessment (PISA) reported that the Philippines scored 357 in science, below the average of participating OECD countries as cited (Parojenog & Pabalan, 2024). Furthermore, the Philippines' position dropped to 51st out of 132 countries in the Global Innovation Index, a decline from its improving trajectory since 2014 (Arayata, 2021). This decline is reflected in the struggles faced in science education, including Physics, which remains a concern for many schools (Nava & Camarao, 2017) and is exacerbated by limited instructional materials (Orleans, 2007).

To address these challenges, the present study aims to evaluate the effectiveness of a chatbot application in improving academic performance in Physics. The chatbot, delivered through a messenger application, seeks to provide high-quality, accessible learning materials anytime and anywhere. By integrating chatbot technology into Physics instruction, this study hopes to offer a modern solution to the issues of accessibility and engagement in learning.

The research is grounded in several theoretical frameworks. The Technology Acceptance Model (TAM), proposed by Davis (1989), emphasizes that the perceived usefulness (PU) and perceived ease of use (PEU) of a technology are crucial for its acceptance and utilization. The chatbot intervention aims to enhance physics learning by being useful, user-friendly, and accessible via widely used mobile platforms. The Technological Pedagogical Content Knowledge (TPACK) framework (Mishra & Koehler, 2006) further supports this approach by underscoring the need for integrating technological, pedagogical, and content knowledge in educational technology applications.

The SMAR model (Puentedura, 2014) also provides a structured approach to technology integration, encompassing Substitution, Augmentation, Modification, and Redefinition. This model suggests that technology should replace existing practices, enhance and modify activities, and redefine learning experiences. The chatbot

application aligns with these phases by substituting traditional learning materials, augmenting accessibility, modifying traditional activities with interactive features, and redefining student-teacher interactions.

The International Union of Pure and Applied Physics (IUPAP, 1999) and Ellermeijer & Tran (2019) highlight the importance of leveraging technology in education. They stress the role of Physics in driving technological advancement and the potential of technology to make learning more relevant and engaging. Studies by Corpuz (2017) and Delos Santos et al. (2020) emphasize the need for innovative solutions to address learning challenges and engage students.

In conclusion, this study seeks to explore the effectiveness of chatbot technology in enhancing Physics education using a framework grounded in TAM, TPACK, and the SMAR model. By providing students with accessible and engaging learning resources, this research aims to contribute to improving educational outcomes and addressing the challenges faced in Physics instruction.

Research Questions

This study aimed to determine the effectiveness of using a chatbot application via messenger in enhancing the performance of Grade 8 learners in Physics at San Agustin National High School, Sagbayan District, Bohol, for the school year 2022-2023.

Specifically, this seeks to answer the following questions:

1. What is the performance of the control group using the traditional method of delivering instruction in the:
   . 1.1. Pretest; and
   1.2. Posttest?
2. What is the performance of the Experimental Group using the chatbot application in delivering instruction in the:
   2.1. Pretest; and
   2.2. Posttest?
3. Is there a significant difference between the pretest and posttest of the Control group and the Experimental Group?
4. Is there a mean gain performance in the posttest between the control and experimental groups?

METHODOLOGY

This succeeding discussion deals with the research design, subjects of this investigation, research environment, data gathering procedure, the instrument used, and the statistical technique employed in testing the data.

Research Design

This study employed a quasi-experimental research design. The researcher used a researcher-made test to evaluate the performance of two groups of respondents through pre-tests and post-tests. Purposive sampling was utilized to select respondents for the experimental group based on the minimum requirement of having access to gadgets that could use messenger applications. The same sampling method was applied to the control group to ensure that the mental capabilities of both groups were comparable. Data collected were analyzed using a t-test and mean to determine the effectiveness of the intervention in enhancing the learners' performance in Physics.

Research Environment

The research locale for this study was the learners from two selected Grade 8 sections at San Agustin National High School in San Agustin, Sagbayan, Bohol. Sagbayan, located in the interior part of Bohol, is 2.4 km from the municipality center. The largest school in the municipality had an enrollment of 1,758 students, with 55 teaching staff and 6 non-teaching staff for the 2022-2023 school year. San Agustin National High School was chosen due to its large student population, which allowed the appropriate respondents to be selected for the study.

Research Participants

The study's respondents were Grade 8 learners from San Agustin National High School, divided into two groups. Grade 8 learners were selected due to their enrollment in a Physics curriculum relevant to the study's topic. Group A, the control group, consisted of 48 learners, while Group B, the experimental group, had the same number. These sections were chosen because their average performance on a diagnostic test conducted during the first week of Quarter 1 for the 2022-2023 school year was nearly identical. Group A had an average score of 84.43, and Group B had an average score of 84.12. Group B was selected as the experimental group due to its slightly lower average performance and because all learners in this group had Android phones, meeting the minimum requirement for implementing the intervention.

Research Instrument

To gather the necessary information, the researcher used a researcher-made test. Three different San Agustin National High School science teachers reviewed and validated this test. Additionally, to ensure quality, the test was pilot tested with 30 random Grade 8 students at the school who were not part of the study’s direct respondents.

Data Gathering Procedure

Gathering of Data. The researcher sought and obtained permission from the district supervisor of Sagbayan and the principal of San Agustin National High School to conduct the research, distribute the researcher-made test, and implement the

intervention. Upon receiving approval, the researcher first contextualized common Physics topics for inclusion in the chatbot intervention. The final draft of these contextualized learning materials was then developed into a chatbot application. After creating the chatbot intervention, the researcher conducted an orientation for the study's participants.

Table 1. Implementation Activities.

DAYS	CONTROL GROUP	EXPERIMENTAL GROUP
Week 1	• Orientation of the direct participants of the study • Distribution of parents' consent	• Orientation of the direct participants of the study • Distribution of parents' consent
Week 2	• Retrieval of parents' consent Conduct of Pre-Test	• Retrieval of parents' consent Conduct of Pre-Tests
Week 3	• Distribution of contextualized printed learning materials	• Orientation & demonstration on how to access and use the Chatbot Intervention • Distribution of available links to the Chatbot Application
Week 4 - 11	• Follow-up and monitoring of the participants	• Follow-up and monitoring of the participants
Week 12	• Conduct Post-Test	• Conduct Post-Tests

Table 1 outlines the overall activities conducted during the implementation of the study. In the first week, the researcher held an orientation for both groups to explain the study's purpose and the respondents' rights and welfare. During this orientation, informed consent forms were distributed. Due to the pandemic, health protocols were followed, with only 20 students allowed per classroom. The orientation was conducted in two sessions for each group to ensure adherence to safety measures. Respondents were informed that their participation was voluntary, their privacy would be protected, and all data would be destroyed after the study.

In the second week, the researcher collected informed consent from parents and administered a pre-test to both groups. The following week, contextualized learning materials were distributed to the control group. The experimental group received an orientation and demonstration on accessing and using the chatbot application. After confirming that participants understood how to use the chatbot, links to the application were sent to the experimental group. The content provided through the chatbot was the same as the printed materials given to the control group, differing only in the method of access—digital for the experimental group and printed for the control group.

Classes were conducted for both groups from the fourth to the eleventh week, with the researcher ensuring that the same topics were covered simultaneously. In the experimental group, the researcher monitored the use of the chatbot application, while in the control group, the use of printed materials was overseen. The researcher addressed technical issues for the experimental group and ensured that all control group participants received their printed materials.

After all topics were covered, the researcher administered a post-test to assess the performance of both groups. To ensure validity, the test items were re-shuffled. Data were collected immediately after the post-test, and responses were tallied, collated, tabulated, and analyzed according to the study's objectives.

Data Analysis

To identify the performance of the two groups of respondents, the percentage was used:

$$\% = \frac{f}{N} \times 100$$

Where: % = Percent
f = Frequency
N = Number of cas

The computed percentage will be interpreted using the following grading scale:

Grading Scale	Description
36 and above	Advance
34 - 35	Proficient
32 - 33	Approaching Proficient
30 - 31	Developing
and below	Beginning

29

To determine the level of interest of the experimental group in learning physics using a chatbot, the weighted mean of the responses to the survey questionnaire will be used.

$$W = \frac{\sum fw}{\sum f}$$

Where:

Wm = weighted mean
$\sum$ = Summation
f = frequency of the respondents who responded on the given scale
w = weight of the category specified in the scale

To identify the significant difference between the pre-test and post-test of the control and experimental groups, the paired t-test was used:

Paired t-test formula:

$$t = \frac{\sum D}{\sqrt{[N(\sum D^2) - (\sum D)^2] / (N-1)}}$$

Where:

t = t-value
D = difference between the two samples (A-B)
N = sample size

RESULTS

This chapter presents, analyzes, and interprets the study's data. It is divided into four sections: the first section details the performance of the control group, which used the traditional method; the second section covers the performance of the experimental group, which used the chatbot intervention; the third section compares the performance between the control and experimental groups; and the fourth section examines the differences in mean gain between the two groups.

Table 2. Performance of the control group using the traditional method.

Category	Score		Pretest		Posttest	
			f	%	f	%
Advanced	36 - 40		-	-	-	-
Proficient	34 - 35		-	-	12	25
Approaching Proficient	32 - 33		8	17	6	12.5
Developing	30 - 31		35	73	18	37.5
Beginning	< 30		5	10	12	25
	Total		48	100	48	100

Table 2 shows the pretest and posttest performance of the control group using the traditional instruction method. In the pretest, 35 respondents, or 73%, scored between 30 and 31, placing them in the developing category, while 5 respondents, or 10%, were in the beginning category. This result indicated that many respondents were still at the developing stage of learning Physics before the study was implemented, and in the post-test, 18 respondents, or 37.5%, remained in the developing category. In contrast, another 37.5% moved to the approaching proficient and proficient categories. This slight increase in performance suggests that the traditional method of instruction effectively improved the learners' performance in Physics.

Table 3. Performance of the experimental group using the chatbot intervention.

Category	Score	Pretest		Posttest	
		f	%	f	%
Advanced	36 - 40	-	-	5	11
Proficient	34 - 35	-	-	15	31
Approaching Proficient	32 - 33	10	21	25	52
Developing	30 - 31	29	60	3	6
Beginning	< 30	9	19	-	-
	Total	48	100	48	100

Table 3 shows the experimental group's performance exposed to the chatbot application. In the pre-test, 29 respondents, or 60%, scored between 30 and 31, placing them in the developing category, while 10 respondents, or 21%, were in the approaching proficient category. Similar to the control group, the pre-test results in the experimental group were low.

In the post-test, the experimental group's performance improved significantly. The results showed 11% in the advanced category, 31% in the proficient category, and 52% in the approaching proficient category. This improvement indicates that exposure to the chatbot intervention enhanced the experimental group's performance in Physics.

The findings suggest that the chatbot intervention was effective in increasing the learners' scores. This supports Tumaneng's (2012) assertion that ICT integration should focus on learning with ICT tools rather than just the technology itself. The ease of using the chatbot and learners' familiarity with mobile phones contributed to this improvement. Additionally, as noted by Habibi (2014), students lacking resources often lose interest and motivation. The chatbot intervention addressed issues related to the availability of learning materials, helping students achieve better performance in Physics.

Table 4. The significant difference between the pretest and posttest of the Control group and the Experimental group.

Variables	Mean ± SD	Computed t-value	P-value	Interpretation

Pretest between Control & Experimental Group	12.6±3.6 13.0±4.2	-0.64	0.52	Not Significant
Posttest between Control & Experimental Group	15.83±8.3 23.6±5.7	-5.94	0.0000032	Significant
Pre & posttest Control Group	12.6±3.6 15.8±8.3	-3.08	0.003	Significant
Pre & Posttest Experimental Group	13.0±4.2 23.6±5.7	-12.01	0.000016	Significant

Table 4 summarizes the differences between the pre-test and post-test results of the control and experimental groups. The t-test results indicated that the pre-test t-value of -0.64 was less than the p-value of 0.52, showing no statistically significant difference between the pre-test performances of the control and experimental groups. In contrast, the post-test results revealed a p-value of 0.0000032, indicating a statistically significant difference between the two groups.

These findings suggest that the two groups' performance was similar before the intervention, confirming their appropriateness for the study. However, the significant difference in post-test results indicates that the experimental group performed better after using the chatbot application. This suggests that the chatbot intervention effectively improved the respondents' performance in Physics.

Table 5. Mean gain performance of the control and experimental groups.

Variables	Mean of pretest	Mean of posttest	Mean gain
Control Group	12.58	15.83	3.25
Experimental Group	12.87	23.53	10.66

Table 5 presents the respondents' mean performance gains after the intervention. The control group had a mean gain of 3.25, while the experimental group achieved a mean gain of 10.66. This result indicates that the experimental group, which used the chatbot intervention, outperformed the control group, which used the traditional teaching method. Overall, the findings suggest that the chatbot intervention was more effective in enhancing learners' performance in Physics than the traditional method.

Higgins (2003) emphasized that the goal of integrating ICT into education is to improve teaching effectiveness and student learning. The results of this study support the notion that using chatbot technology significantly enhances learning outcomes in Physics, demonstrating the benefits of ICT integration in education.

DISCUSSION

Findings

The analysis of the data yielded the following findings:

1. In the Control group using the traditional method of delivering instruction**,** the pre-test result disclosed that prior to the study's implementation, 73% of the learners scored in the *developing category,* while after the observation period, the post-test showed that the learners scored in the *approaching proficient (25%) and proficient (12.5%)* categories. It can be inferred that the traditional method of delivering instruction can slightly increase the learners' performance in Physics.

2. In the experimental group using the Chatbot application in delivering instruction, the pre-test showed that 60% scored at *developing* and 21% at *approaching proficient* categories. In the post-test, the experimental group improved to higher categories: 11% in the *advanced* category, 31% in the *proficient,* and 52% in the *approaching proficient* categories. The result revealed that a significant number of respondents attained the performance of "approaching proficient" after implementing the chatbot intervention. It can be inferred that the chatbot intervention enhances the performance of the learners of the experimental group in learning Physics.

3. There was no significant difference in the pre-test results between the control and experimental groups; however, a significant difference was observed in the post-tests. This implies that after the study was implemented, the performance of the control and experimental groups differed in favor of the group treated with the Chatbot intervention.

4. The study's results revealed that each group of respondents performed well on mean gain. However, the mean gain score of the experimental group was much higher than that of the control group. This can be inferred from the fact that the experimental group performed better on learning physics using the chatbot application than the control group using the traditional method of delivering instruction.

Conclusions

The findings indicate that while the traditional method of instruction led to a slight improvement in Physics performance, the Chatbot intervention significantly enhanced learner outcomes. The control group showed some progress, with a shift from "developing" to "approaching proficient" and "proficient" categories. In contrast, the experimental group demonstrated substantial gains, with notable improvements in higher performance categories such as "advanced" and "proficient" after using the Chatbot. The significant difference in post-test results and the higher mean gain of the experimental group confirm that the Chatbot application was more effective in improving Physics performance than the traditional method.

Recommendations

Based on the findings and conclusion derived from the study, the researcher presents the following recommendations:

1. Expand Use of Chatbot Technology

Schools should consider incorporating chatbot applications into their teaching strategies, especially for subjects like Physics. The effectiveness of the chatbot intervention in this study suggests that it can significantly enhance learners' understanding and performance. Expanding the use of this technology could provide similar benefits across various subjects.

2. Provide Training for Teachers

To maximize the benefits of digital tools like chatbots, teachers should receive training on integrating such technologies into their curricula. Professional development programs can equip educators with the skills to effectively use and manage chatbot applications, ensuring they can support and enhance student learning.

3. Conduct Further Research

Additional studies should be conducted to explore the effectiveness of chatbots in different educational contexts and subjects. Research could also investigate the long-term impact of chatbot interventions on student learning and engagement, as well as their potential to address diverse learning needs.

4. Enhance Technical Support

Schools should ensure that adequate technical support is available for both students and teachers when implementing chatbot interventions. Addressing technical issues promptly can help maintain the effectiveness of the tool and ensure a smooth learning experience for students.

5. Incorporate Student Feedback

Collect and analyze feedback from students using chatbot applications to continually improve the intervention. Understanding students' experiences and challenges with the technology can provide valuable insights for refining and optimizing its use in future educational settings.

Compliance with Ethical Standards

This study adhered to ethical standards by obtaining informed consent from all participants, ensuring confidentiality, and maintaining voluntary participation without coercion. No harm came to participants, and the study received ethics committee approval. Researchers declared no conflicts of interest and reported findings transparently and honestly. Cultural sensitivity was respected throughout the research process.

REFERENCES

Arayata, M. C. (2021). PH 51st ranking in 2021 Global Innovation Index an achievement. Philippine News Agency. https://www.pna.gov.ph/articles/1154233

Camarao, M. K. G., & Nava, F. J. G. (2017, November). High school students' difficulties in physics. In A paper presented at the National Conference on Research in Teacher Education (NCRTE), Quezon City, The Philippines.

Corpuz, A. C. (2017). Difficulties encountered, learning strategies and academic performance in physics of Psychology students. Journal of Social Sciences (COES&RJ-JSS), 6(2), 365-374.

Delos Santos, J. R. N., Cornillez, E. E., Carillo, V. D., & de los Santos, G. N. (2020). Mobile games and academic performance of university students. International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN, 2278-3075.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS quarterly, 319-340.

Ellermeijer, T., & Tran, T. B. (2019). Technology in teaching physics: Benefits, challenges, and solutions. Upgrading physics education to meet the needs of society, 35-67.

Habibi, Z., & Habibi, A. (2014). The effect of information technology in teaching physics courses. The Eurasia Proceedings of Educational and Social Sciences, 1, 391-396.

Higgins, S. J. (2003). Does ICT improve learning and teaching in schools?. BERA, British Educational Research Association.

IUPAP, (1999). The Importance of Physics to Society. https://iupap.triumf.ca/C12/IUPAP_AIMS.html

Kumar, J. A. (2021). Educational chatbots for project-based learning: investigating learning outcomes for a team-based design course. International journal of educational technology in higher education, 18(1), 65.

Luo, X., Tong, S., Fang, Z., & Qu, Z. (2019). Frontiers: Machines vs. humans: The impact of artificial intelligence chatbot disclosure on customer purchases. Marketing Science, 38(6), 937-947.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. Teachers college record, 108(6), 1017-1054.

Orleans, A. V. (2007). The condition of secondary school physics education in the

Philippines: Recent developments and remaining challenges for substantive improvements. The Australian educational researcher, 34(1), 33-54.
Parojenog, R., & Pabalan, A. P. (2024). Enhancing Basic Education Standards: A Framework for Quality Advancement. Available at SSRN 4801978.
Puentedura, R. R. (2014). SAMR: A contextualized introduction. Lecture at Pine Cobble School. Retrieved March, 13, 2014.
Tumaneng Manaligod, H. J. (2012). Integration of information & communication technology in public secondary schools in metro-Manila, Philippines.

APA Citation:

Bulabos, J. Y., & Millanar, V. C. (2024). CHATBOT APPLICATION AND ACADEMIC PERFORMANCE IN PHYSICS. Ignatian International Journal for Multidisciplinary Research, 2(8), 83–95. https://doi.org/10.5281/zenodo.13151546

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

CORE BEHAVIORAL COMPETENCIES AND TEACHERS' JOB SATISFACTION: BASIS FOR TEACHER COMPETENCY DEVELOPMENT PLAN

Rosalie W. Ambasa, Gina F. Labitad

PHINMA Cagayan de Oro College, Philippines

https://doi.org/10.5281/zenodo.13346977

ABSTRACT

The role of teachers' core behavioral competencies is fundamental in their performance, satisfaction and overall effectiveness in the workplace. The study described the level of core behavioral competencies in terms of self-management, professionalism and ethics, results focus, teamwork, service orientation and innovation; the level of teachers' job satisfaction in terms of work and workplace, supervisor and management, benefits and rewards, recognition, communication and coworker relationship; and determined the relationship between the teacher's core behavioral competencies and job satisfaction. Using the descriptive correlational method, and an adopted and modified questionnaire, 510 secondary teachers of Valencia City were surveyed. The study used the mean, standard deviation, and Pearson-r correlation in analyzing the data. Findings of the study revealed that teachers in the Division of Valencia were consistently demonstrating their core behavioral competencies. Additionally, teachers were satisfied with their jobs in terms of the variables. The correlation analysis showed a positive significant correlation between the teachers' core behavioral competencies, particularly in self-management and job satisfaction. The study proposed a teacher competency development plan to develop and improve the respondents' competencies in terms of professionalism and ethics and their job satisfaction in terms of coworker relationships. Therefore, the significant relationship observed between core behavioral competencies and teachers' job satisfaction emphasized the vital part of a high level of core competence in enhancing the teacher's job fulfillment. The study recommends investing in strategies to reinforce the development of competencies that contribute to promoting a joyful and satisfied teaching force.

Keywords: *core behavioral competencies, job satisfaction*

INTRODUCTION

Education at all levels dwells on effective teaching and learning. They are keys towards creating students who have commendable academic, socio-emotional, and behavioral well-being. Also, they are indicators of quality teachers and quality teaching performance which are relevant factors that make up a well-designed education system. Generally, teachers are considered as the most significant resources in the educational arena and their competencies impact the performance of their students. Research suggests that teachers' competencies, which are a combination of knowledge, skills, attitude and behavior, and personal characteristics, contribute to an improved quality of learning. These competencies, which include classroom management, instructional delivery, assessment, personal and behavioral, are believed to have positive impact in students' learning. Moreover, behavioral competencies of teachers are considered as one of the most important factors that influence students' performance (Soriano, 2019).

Within the Philippine context, the Department of Education (DepEd 2019) is dedicated to offering its members chances to connect their accomplishments and contribute significantly to the realization of the institution's vision and mission; to foster individual and team development, involvement and dedication professionally (DepEd, 2019). Based on this idea, DepEd uses Results-Based Performance Management System (RPMS) open communication about responsibilities, goals, and key results areas—as well as how they connect to the department's overarching objectives—are made possible through the supervisor and employee's collaborative efforts. The platform that the department offers centers on the agreement upon performance and behavior standards that can lead to improvements in teachers' competencies. The teacher's effectiveness is determined by how well and consistently they demonstrate actions that are relevant to the skills, as well as by how they use their various talents to complete tasks and deliver superior performance. The DepEd's Results Based Performance Management System–Philippine Professional Standard for Teachers (RPMS-PPST) lists the following core behavioral competencies, which should be the foundation for creating a professional development plan: self-management competence, professionalism and ethics competence, results focus competence, teamwork, service orientation, and innovation(DepEdRPMS-PPST,2021).

However, all the efforts of the government regarding training of teachers are all in vain if they choose to leave their jobs. In an article by Malipot (2022), it was reported that over 100 teachers in Cebu City resigned from service and are processing their clearances as they prepare to leave the country to work abroad. In that article, Rudy Bernardo of the Alliance of Concerned Teachers (ACT) pointed out that it is heartbreaking how teachers who started teaching full of good intentions to mentor the youth eventually got demoralized upon experiencing first-hand the system of the teaching profession in the country. Teacher job satisfaction (TJS) can be defined as the emotional reactions of teachers to their jobs or teaching roles. Ozkan (2022) cited that the job satisfaction of teachers is influenced by various elements such as school and teacher-specific attributes,

demographic shifts, and external and internal influences.

The Department of Education (DepEd) acknowledges the relevance of enhancing and equipping teachers' with skills and knowledge necessary to be able to deliver the goods to their students. However, teachers who are not satisfied with their job could not be at their best in terms of commitment and productivity. Teachers have been placed in different struggling situations which caused complains regarding too much paper works, power tripping by their superiors, students-teacher ratio, and lower salaries compared to other professionals along with loan sharks, unjustifiable monetary contributions and politics in the workplace. Hence, as a general observation, public school teachers are dissatisfied with their profession.

Further, the goal of this study was to create a Teachers Competency Development Plan (TCDP) fitted to the needs of secondary teachers of the Division of Valencia City. Such TCDP was to be anchored on their core behavioral competencies as well as their job satisfaction levels in terms of work and workplace, supervisor and management, benefits and rewards, recognition, communication and relationship with colleagues. With the help of this study, the Division Office Personnel can map ways to help develop the core behavioral competencies of the teachers as well as their level of satisfaction. Further, these contributed to the fulfillment of DepEd's long-term goal of providing inclusive and equitable quality of education and promoting lifelong learning.

Research Questions

The study aimed to determine the level of teachers' core behavioral competencies and job satisfaction in District 6 of the Division of Valencia City for the School Year 2024-2025. The results of the study served as bases for crafting the Teachers' Competency Development Plan.

Specifically, the study aimed to answer the following questions:

1. What is the level of core behavioral competencies as perceived by the respondents in terms of self-management, professionalism and ethics, results focus, teamwork, service orientation and innovation?

2. What is the respondents' level of job satisfaction in terms of work and workplace, supervisor and management, benefits and rewards, recognition, communication and coworker relationship?

3. Is there a significant relationship between the teachers' perceived level of core behavioral competency and their job satisfaction?

4. Based on the findings of the study, what Teacher Competency Development Plan can be designed?

Research Hypothesis

Research questions 1, 2 and 4 were hypotheses – free. On the basis of research question 3, the null hypothesis was tested at a 0.05 level of significance.

Ho: There is no significant relationship between the core behavioral competencies of the teachers and their job satisfaction in terms of work and workplace, supervisor and management, benefits and rewards, recognition, communication and coworker relationship.

METHODOLOGY

Research Design

This research employed a descriptive correlational methods research which utilized a descriptive design to gather data and information about the core behavioral competencies of teachers as well as their job satisfaction as basis for crafting a teacher competency development plan. The study was also correlational in nature as it identified and determined the relationship between the teachers' core behavioral competencies and their job satisfaction which served as the basis for the crafting of a Teacher Competency Development Plan. Consequently, the researcher used research tools including research questionnaires alongside an interview for triangulation in order to gather data and elaborate the responses provided by the respondents. The qualitative data gathered through the interview were utilized to substantiate the quantitative responses of the respondents.

Study Setting

The research was conducted in the Division of Valencia City, Bukidnon. Valencia City is considered the most populous landlocked city in Mindanao which served as the center for trade and commerce in the province of Bukidnon. It is classified as second-class component city and has thirty- one (31) component barangays. Almost every barangay has a public primary school providing the basic education needs of its residents; the largest of which is Valencia City Central School. Secondary education has also been made accessible to all students by legislating integrated schools almost in every barangay. Educational institutions within the city are a combination of public and private schools. Presently, Division of Valencia City serves the community with thirty-four (34) Elementary Schools, twenty-six (26) Integrated School and seven (7) National High Schools.

Research Respondents

The respondents of the study were the five hundred ten (510) secondary school teachers of the Division of Valencia City for the school year 2023-2024.

Sampling Technique

The research utilized purposive sampling in identifying the Integrated Schools to be considered as respondents of the study since there were integrated schools with only a few teachers. On the other hand, the respondents from Valencia National High School, a mega school, were identified using the Slovin's formula.

Research Instruments

In the first part, the research used DepEd's Results-Based Performance Management System–Philippine Professional Standard for Teachers (RPMS-PPST) list of behavioral competencies, which includes self-management competence, professionalism and ethics competence, results focus competence, teamwork, service orientation, and innovation(DepEd RPMS-PPST,2021) in order to identify and determine the level of teachers' competencies. It is a standardized tool that uses a Likert Scale starting with 1 being the scale, which means that the teacher respondent is hardly demonstrating the said competency up to five which signifies that the teacher is considered a role model in terms of demonstrating the competencies.

Part 2 is a tool patterned from the study of Troeger (2021) used to determine the teachers' perceived level of job satisfaction in terms of work and workplace, supervision and management, benefits and rewards, recognition, communication and relationships with co-teachers. It uses a 5-point Likert Scale with one (1) signifying a high level of dissatisfaction and five embodying a high level of satisfaction. An Interview was carried out to support, enhance and substantiate the responses of the teachers. Part 3 consists of six (6) questions, which triangulated the data in the other parts. It served as the part that yielded the qualitative responses from the respondents that substantiated the results.

The third part of the questionnaire consists of 6 open-ended questions to substantiate the numerical responses of the respondents.

Validity and Reliability

In this study, Part 1 of the questionnaire is a standardized instrument based on the DepEd Order 2, s. 2015, the National Adoption and Implementation of the Philippine Professional Standards provides the standard for the questionnaire. Therefore, there was no need for a test of validity and reliability. However, in Part 2, the teacher-made questionnaire underwent a validity test and pilot testing to determine its reliability. The questionnaire was validated by experts with a score of 4.86, which signified that the questionnaire demonstrates very high validity, ensuring the provision of unbiased data for the investigation.

To test its reliability, the questionnaire was pilot-tested to schools not part of those considered as respondents but having the same characteristics as them. The instrument was tested last June 4, 2024, at Banlag Integrated School and Lumbo Integrated School. It was good to note the teachers who answered the instrument for pilot-testing understood the statements and did not have any queries as to the meaning of the statements

provided. The reliability analysis of the instrument yielded the Cronbach's Alpha value of 0.980 which indicated that the items have high level of consistency.

Additionally, the respondents answered open-ended questions to substantiate the numerical responses. After gathering all the responses, the results were subjected to a reliability test where the Cronbach's Alpha was measured and interpreted using SPSS.

Data Gathering Procedure

Upon the approval of the proposal by the Dean of Graduate Studies of PHINMA Cagayan de Oro College, the researcher asked permission from the Schools Division Superintendent of the Division of Valencia City where the study will be conducted with the approved letter. In the gathering of data, the researcher administered the questionnaires in the pre-identified schools in the above-mentioned division. The researcher followed the protocol of asking permission from each school's principal and school head before requesting the teachers to answer the questionnaires. The researcher made sure that she was available should there be queries from the respondents about how they answered the questions. After the questionnaires were collected, responses were tallied and recorded accurately. The data gathered underwent the necessary and corresponding statistical procedures. Additionally, researcher conducted a methodological triangulation to validate the responses and substantiate the results. Qualitative answers of the responses were recorded and used to substantiate the numerical responses. All information obtained from the questionnaire and interviews were considered confidential.

System of Scoring

This study utilized the following scoring system that allowed an objective assessment of the answers of the respondents. Additionally, the scoring procedure provided a quantitative measure for evaluating the level of core behavioral competencies and the job satisfaction of the respondents.

PART I. Core Behavioral Competencies

Scale	Range	Description	Interpretation
5	4.50 – 5.00	Always	Role Model
4	3.50 – 4.49	Very Often	Consistently Demonstrates
3	2.50 – 3.49	Sometimes	Occasionally Demonstrates
2	1.50- 2.49	Rarely	Inconsistently Demonstrates
1	below 1.49	Never	Hardly Demonstrates

PART II. Teachers' Job Satisfaction

Scale	Range	Description	Interpretation
5	4.50 – 5.00	Strongly Agree	Very Satisfied
4	3.50 – 4.49	Agree	Satisfied
3	2.50 – 3.49	Neutral	Undecided
2	1.50 - 2.49	Disagree	Dissatisfied
1	below 1.49	Strongly Disagree	Very Dissatisfied

Statistical Treatment of Data

To answer the problems stated in this study, the researcher employed statistical procedures. Descriptive Statistics was used in finding the level of core behavioral competencies of the respondents in terms of the variables. Here, the mean, as the preferred measure of central tendency, was used to describe the responses based on the scale. Standard Deviation was also identified in order to describe how dispersed were the responses of the participants. Additionally, to find the relationship between the core behavioral competencies and teachers' job satisfaction, the research employed the Pearson r Coefficient.

Scope and Limitation

This study limited its scope in assessing the perceived level of core behavioral competencies in terms of the following specific sub-variables such as self-management, professionalism and ethics, results-focus, teamwork, service orientation and innovation. Other factors and variables not included thereof are beyond the scope of this study. This study is also constrained only to secondary teachers within the Division of Valencia City for the School Year 2024-2025.

Furthermore, the study delimited itself to the perceived level of teachers' job satisfaction in terms of work and workplace, supervisor and management, benefits and rewards, recognition, communication and coworker relationship. Moreover, this research endeavor aimed to propose a Teacher Competency Development Plan (TCDP) which will help in equipping teachers of the necessary core behavioral competencies.

The research involved the five hundred six (506) respondents of in-service basic education teachers of the Division of Valencia City. These respondents came from pre-selected Integrated Schools and all the National High Schools within the Division. To ensure a comprehensive and reliable representation, it exclusively involved teachers from public schools.

RESULTS

Research Question 1. What is the level of core behavioral competencies as perceived by the respondents in terms of self-management, professionalism and ethics, results focus, teamwork, service orientation and innovation?

This research recognized the various competencies of educators in the field to provide quality education among learners. It focuses on determining the level of core behavioral competencies of the respondents in terms of self-management, professionalism and ethics, results focus, teamwork, service orientation and innovation.

By understanding the level of the respondents' core behavioral competencies, researchers can identify patterns and trends with respect to the competencies possessed by the respondents as well as those competencies they need to improve on. This information can inform directed interventions and support mechanisms to address the developmental needs of teachers.

Table 1 Distribution of Respondents' Level of Core Behavioral Competencies in terms of Self-Management

Indicators	Mean	Standard Deviation	Description
Sets personal goals and directions, needs and development.	3.44	0.66	Sometimes
Undertakes personal actions and behaviour that are clear and purposive and takes into account personal goals and values congruent to that of the organization.	3.78	0.58	Very Often
Displays emotional maturity and enthusiasm for and is challenged by higher goals.	3.87	0.69	Very Often
Prioritizes work tasks and schedules (through Gantt charts, checklists, etc.) to achieve goals.	3.70	0.63	Very Often
Sets high quality, challenging, realistic goals for self and others.	3.74	0.51	Very Often
Overall	***3.69***	**0.39**	**Very Often**

Legend:

4.50 – 5.00	*Always/Role Model*	*1.50- 2.49*	*Rarely/Inconsistently Demonstrates*
3.50 – 4.49	*Very Often/Consistently Demonstrates*	*1.49 below*	*Never/Hardly Demonstrates*
2.50 – 3.49	*Sometimes/Occasionally Demonstrates*		

Table 1 presents the respondents' core behavioral competencies in terms of self-management with an overall mean of 3.69 (SD=0.39), described as Very Often and interpreted as Consistently Demonstrates. These results highlight the ability of the respondents to manage their own emotions, behaviors, work, and time. Teachers'

emotional intelligence is crucial for creating a positive learning environment as well as support students' emotional development. When teachers are able to regulate their emotions and behavior, they can better respond to challenging situations, build strong relationships and model healthy emotional expression. Results validated the study of Smith (2022) when he opined that teachers with high self-management are better able to manage their own emotions, effectively implement strategies to address difficulties both personally and professionally and practice self-care.

However, teaching can be emotionally and mentally demanding, and teachers often experience a range of extreme emotions. Unmanaged negative emotions like anger or stress can disrupt teacher-students relationship, impair teaching effectiveness and lead to burn out.

Additionally, the highest-rated indicator, display emotional maturity and enthusiasm for and is challenged by higher goals, got a mean of 3.87 (SD=0.69), described as Sometimes and interpreted as Occasionally Demonstrates. These marks focus on the importance of modeling emotional regulation and coping skills, creating a healthy and conducive workplace and being open to continuous learning. Emotionally mature teachers are better able to respond constructively to challenging situations and build strong and supportive relationships with students. Moreover, enthusiastic teachers demonstrate excitement and energy about the subject matter use varied strategies to capture students' interests and inspire students to be more curious and motivated to learn. This is supported by the study of Bieg (2022), which emphasized that enthusiasm has a direct impact on students' emotions and engagement in educational settings.

Conversely, the indicator set personal goals and directions, needs and development got the lowest mean of 3.44 (SD=0.66), described as Sometimes and interpreted as Occasionally Demonstrates. This means that teachers' are making sure their goals are reached as advocated by their leaders.

As a result, they tend to set relatively low goals and avoid those that are challenging and difficult. Teachers may be hesitant to set overly ambitious or difficult goals because of fear of failure. To them, challenging goals carry a higher risk of not being met, which can be demotivating for both teachers and students. Also, teachers already have a heavy workload, and adding very difficult goals can feel like an unmanageable burden. They may prioritize maintaining a sustainable pace over striving for stretch goals.

Another culprit to teachers setting low goals in the lack of resources that could sustain the accomplishment of the goals. Achieving ambitious goals often requires additional time, training, or materials that teachers may not have access to. The perceived lack of support can discourage setting such goals. Likewise, in terms of teaching and learning, teachers avoid setting the bars too high for students because this could undermine their confidence if they struggle to meet such goals. Hence, teachers may opt for more modest and achievable targets.

This finding negates the study of Odindo (2020), which said that Filipino teachers' strategies were above average indicating a strong ability to set high goals. Accordingly,

Filipino teachers are highly motivated to set high goals by intrinsic factors like commitment to the profession, belief in the divine providence and a desire to bring about positive change and transform the lives of their students. Emphasis on goal setting among Filipino teachers reflects a broader commitment to personal growth, effective teaching practices and the empowerment of students.

Table 2 Distribution of Respondents' Level of Core Behavioral Competencies in terms of Professionalism and Ethics

Indicators	Mean	SD	Description
Demonstrates the values and behaviour enshrined in the Norms and Conduct and Ethical Standards for public officials and employees (RA 6713).	3.75	0.53	Very Often
Practices ethical and professional behaviour and conduct taking into account the impact of his/her actions and decisions.	3.70	0.58	Very Often
Maintains a professional image: being trustworthy, regularity of attendance and punctuality, good grooming and communication.	3.61	0.57	Very Often
Makes personal sacrifices to meet the organization's needs.	3.64	0.60	Very Often
Act with a sense of urgency and responsibility to meet the organization's needs, improve system and help others improve their effectiveness.	3.67	0.51	Very Often
Overall	**3.67**	**0.42**	**Very Often**

Legend:

4.50 – 5.00	*Always/Role Model*	*1.50- 2.49*	*Rarely/Inconsistently Demonstrates*
3.50 – 4.49	*Very Often/Consistently Demonstrates*	*1.49 below*	*Never/Hardly Demonstrates*
2.50 – 3.49	*Sometimes/Occasionally Demonstrates*		

Table 2 shows the distribution of respondents' level of core behavioral competencies terms professionalism and ethics with an overall mean score of 3.67 (SD=0.42), described as Very Often and interpreted as Consistently Demonstrates. This means that teachers actively manifest the attributes mentioned above, as evidenced by the consistently high mean scores and low standard deviations.

These results display the obligation of the teachers to the teaching profession. They exhibit a strong commitment driven by intrinsic motivations like their belief in their role as trustees of the nation's cultural and educational heritage and their desire to elevate national morality, promote pride and instill allegiance to the constitution. Also, they are focused and dedicated to prepare students for life and transforming lives through education. This relates to the study of Dahl (2020) which emphasized that professionalism is demonstrated by practitioners taking charge of their work because they are the best ones who comprehend its objectives, procedures, and results.

The indicator, demonstrate the values and behavior enshrined in the Norms and Conduct and Ethical Standards for public officials and employees (RA 6713), obtained

the highest mean score of 3.75 (SD=0.53), described as Very Often and interpreted as Consistently Demonstrates. This means that teachers within the locale are well informed of the expected attitude and behavior from the teachers based on professional and ethical standards. The key elements included in these standards emphasize that public officials should maintain physical, mental and moral fitness, demonstrate full commitment and devotion to duty, refrain from engaging in political, religious or partisan interests, behave with honor and dignity and continually improve one's competence through professional development.

Fernandes (2023) pointed out that maintaining a professional demeanor and upholding the highest standards of conduct is crucial for teachers to serve as effective role models for their students and the community. However, Gumahad (2023), in his study on teachers' compliance with RA6713, perceived that some teachers may prioritize benefits and privileges over their duties which negatively impact their professionalism and adherence to ethical standards.

On the other hand, maintain a professional image: being trustworthy, regularity of attendance and punctuality, good grooming and communication obtained the lowest , with a mean score of 3.61 (SD=0.57), described as Very Often and interpreted as Consistently Demonstrates. Being punctual demonstrates respect for clients, colleagues, superiors and the whole school community. In the locale, the office of the ASDS served an instruction to closely monitor the attendance and punctuality of the teachers. This is done by authorizing the school heads to report the frequency of teachers' tardiness and absences. This action was caused by the alarming number of teachers who were found to have incurred frequent tardiness and absences. In a study by Johnsons (2023), she opined that punctuality sets the tone for a productive and organized working environment. Additionally, it is the key aspect of professionalism that helps teachers in modeling responsible behavior for their students.

Additionally, professionalism, as described by Kramer (2023), is when a teacher must focus on the critical elements of attitude, behavior and communication. Assumptions that K to 12 teacher candidates will simply become professionals as a result of completing the teacher education program and that professional dispositions will be automatically acquired through field experiences are common in the field of teacher education. One of the things that have historically distinguished professionals is their different professional expertise (Choroszewicz & Adams, 2019). It comes after that preliminary instruction and ongoing professional development.

Table 3 Distribution of Respondents' Level of Core Behavioral Competencies in terms of Results Focus

Indicators	Mean	Standard Deviation	Description
Achieves results with optimal use of time and resources most of the time.	4.15	0.52	Very Often

Avoids rework, mistakes and wastage through effective work methods by placing organizational needs before personal needs.	3.82	0.67	Very Often
Delivers error-free outputs most of the time by conforming to standard operating procedures correctly and consistently. Able to produce very satisfactory quality work in terms of usefulness/acceptability and completeness with no supervision required.	3.95	0 .63	Very Often
Expresses a desire to do better and may express frustration at waste or inefficiency. May focus on new or more precise ways of meeting goals set.	3.92	0.72	Very Often
Makes specific changes in the system or in own work methods to improve performance. Examples may include doing something better, faster, at a lower cost, more efficiently, or improving quality, customer satisfaction, morale, without setting any specific goal.	3.99	0.43	Very Often
Overall	**3.97**	**0.41**	**Very Often**

Legend:

4.50 – 5.00	*Always/Role Model*	*1.50- 2.49*	*Rarely/Inconsistently Demonstrates*
3.50 – 4.49	*Very Often/Consistently Demonstrates*	*1.49 below*	*Never/Hardly Demonstrates*
2.50 – 3.49	*Sometimes/Occasionally Demonstrates*		

Table 3 shows the teacher respondents' level of behavioral display competence in terms of results focus with an overall mean 3.97 (SD=0.41) described as Very Often and interpreted as Consistently Demonstrates. A teacher who possesses this competency makes sure that every student reaches his/her full potential through methodical lesson delivery, constant monitoring and evaluation of students' achievements. In the context of the respondents' locale, timeliness in terms of submission of reports, and the like is being recognized. It has already been a practice that those schools with is being recognized. It has already been a practice that those schools with prompt submissions are given awards and recognition. These reports are coming from dedicated teachers. Hence, respondents are considered competent in terms of being results-focused. In a study by Alyami et al. (2021), they mentioned Filipino Teachers' timeliness to impact student performance. Effective time management by teachers is crucial for ensuring that students receive adequate instruction and support, which in turn enhances their academic achievement.

The indicator achieves results with optimal use of time and resources most of the time got the highest mean of 4.15 (SD=0.52), described as Very Often and interpreted as Consistently Demonstrates. It means that the teachers consistently demonstrate core behavioral competencies in terms of results focus. It suggests that teacher respondents in the locale indeed maximize their time and resources in achieving their goals. For instance, strict implementation of classroom program as well as teachers' individual schedule is closely monitored by district supervisors to ensure contact time with students is maximized. However, as observed, teachers are often overworked-spending additional hours outside paid working hours. This excessive workload takes a toll on their personal lives, well-being and ability to provide quality education.

Additionally, many teachers lack the necessary resources and support to be effective in the classroom. These struggles caused teachers to be exacerbated by their heavy workloads and limited resources. Despite the struggles, teachers are trying their best to find ways to optimize their time and resources by leveraging technology for efficiency. They believe that technology helps them to save time, personalize instructions and foster students' engagement more effectively. Results conform to the article by Cuballa (2023), which says that although teachers are faced with struggles on limited resources and facilities, majority of them are still fueled by their passion to educate young minds.

Conversely, the indicator avoids rework, mistakes and wastage through effective work methods by placing organizational needs before personal needs got the lowest with a mean of 3.82 (SD=0.67), described as Very Often and interpreted as Consistently Demonstrates. Although it is the lowest among the indicators, still it means that the respondents consistently demonstrate the results focus. Results suggest that teachers demonstrate a high ability to compartmentalize their personal problems and emotions. They are able to set aside their own issues and display professional dispositions when interacting with students in the classroom. This compartmentalization skill allows them to prioritize their teaching responsibilities and organizational needs over their personal needs. However, since teachers in the locale are closely monitored in terms of time on tasks, whenever they are required to submit documents, they tend to do it the fastest way they can somehow compromising the correctness of the said document. This confirms the finding of Earp (2022), which was stated in an article that highlights that an overwhelming majority of teachers don't get enough time to prepare for effective teaching practices or high-quality planning of lessons.

Table 4 Distribution of Respondents' Level of Core Behavioral Competencies in terms of Teamwork

Indicators	Mean	Standard Deviation	Description
Willingly does his/her share of responsibility.	4.00	0.44	Very Often
Promotes collaboration and removes barrier to teamwork and goal accomplishment across the organization.	3.80	0.70	Very Often
Applies negotiation principles in arriving at win-win agreements.	4.21	0.62	Very Often
Drives consensus and team ownership of decisions.	4.01	0.74	Very Often
Works constructively and collaboratively with others and across organizations to accomplish organization goals and objectives.	3.81	0.40	Very Often
Overall	***3.97***	**0.39**	**Very Often**

Legend:

4.50 – 5.00	*Always/Role Model*	*1.50- 2.49*	*Rarely/Inconsistently Demonstrates*
3.50 – 4.49	*Very Often/Consistently Demonstrates*	*1.49 below*	*Never/Hardly Demonstrates*
2.50 – 3.49	*Sometimes/Occasionally Demonstrates*		

Table 4 overall shows the respondents' core behavioral competencies in terms of teamwork with an overall mean of 3.97 (SD=0.39), described as Very Often and interpreted as Consistently Demonstrates. This means that teachers in the locale collaborate with each other allowing them to pool their knowledge and find innovative solutions to common challenges. Moreover, the role of teacher collaboration in improving instructional effectiveness is crucial because when teachers work together, they are able to share resources and teaching strategies, engage in collective problem-solving and foster a culture of continuous improvement and shared responsibility.

The results of this study is supported by the study of Polega,et.al (2019) which concluded that almost all of the principals rated teamwork as highly important in the workplace, with only 1.1% attributing low importance to it. Additionally, in the same study, it was highlighted that principals considered teamwork important for school culture and success, student achievement, and teachers' pedagogical practices and personal growth.

The indicator, applies negotiation principles in arriving at win-win agreements obtained the highest a mean score of 4.21 (SD=0.62), described as Very Often and interpreted as Consistently Demonstrates. It means that the respondents consistently demonstrate core behavioral competencies in terms of teamwork. This suggests that majority of the respondents do their best to maintain harmony and peace in the workplace. Moreover, in the locale, this ability to arrive at win-win agreements is further strengthened by the revitalization of the School Learning Action Cell (SLAC) sessions. Although it is focused on students' improvement, it has become an avenue for teachers to bond, reconcile and resolve issues within their small groups, preventing more conflicts within the entire school. Results conformed to the study of Binauhan (2019), which enumerated the benefits of SLAC in enhancing the performance of the teachers. According to her, the benefits include improvement of teachers' practices, enhancement of professional development, increased teacher support and improved teachers' relationship with colleagues.

However, the indicator, promoting collaboration and removing barrier to teamwork and goal accomplishment across the organization, got the lowest mean of 3.80 (SD=0.70), described as Very Often and interpreted as Consistently Demonstrates. This suggests that teachers in the locale are having difficulties in barriers means that teachers have to promote trust and open communication amongst them, align everyone towards a common and shared vision for collaboration and provide structured opportunities for their colleagues to work together. When teachers feel psychologically safe and have a clear sense of purpose, they are more likely to engage in productive teamwork.

The results of this study confirmed the study of Bishnoi (2023) which concluded that teachers are the foundation of our schools' success; they are the greatest resource for each other. Strong schools are built through effective teacher collaboration. The same study emphasized that time constraints and relationship concerns are common barriers to teamwork among teachers. It is essential for schools to allocate sufficient time for teachers to collaborate and share ideas.

Additionally, Bishnoi (2023) suggested in his study that directly training teachers on essential teamwork competencies can help them overcome common barriers. This includes effective communication and active listening, conflict resolution, goal-setting and task coordination, and providing and receiving constructive feedback.

Table 5 Distribution of Respondents' Level of Core Behavioral Competencies in terms of Service Orientation

Indicators	Mean	SD	Description
Can explain and articulate organizational directions, issues and problems.	3.99	0.44	Very Often
Takes personal responsibility for dealing with and/or correcting customer service issues and concerns.	3.97	0.69	Very Often
Initiates activities that promote advocacy for men and women empowerment.	3.79	0.61	Very Often
in updating office vision, mission, mandates and strategies based on DEPED strategies and directions.	3.81	0.73	Very Often
Develops and adopts service improvement program through simplified procedures that will further enhance service delivery.	4.25	0.39	Very Often
Overall	***3.96***	**0.38**	**Very Often**

Legend:

4.50 – 5.00	*Always/Role Model*	*1.50- 2.49*	*Rarely/Inconsistently Demonstrates*
3.50 – 4.49	*Very Often/Consistently Demonstrates*	*1.49 below*	*Never/Hardly Demonstrates*
2.50 – 3.49	*Sometimes/Occasionally Demonstrates*		

Table 5 shows the respondents' core behavioral competencies in terms of service orientation with an overall mean score of 3.96 (SD=0.38), described as Very Often and interpreted as Consistently Demonstrates. This means that teachers exhibit quality in the majority of the assessed areas, as evidenced by the consistently high mean scores and low standard deviations. In the locale of the study, Teachers' Induction Program (TIP) has been conducted prior to the deployment of newly-hired teachers. In this program, they are totally informed of everything that they need to know especially when they are already in the field. More importantly, they aim to prepare teachers and make sure that their commitment is all out before they will be immersed in the real world of teaching and learning. The results of this study confirmed the findings of Agustin (2022) which demonstrates that Filipino teachers exhibit strong pedagogical competence, subject matter knowledge, and dedication to professional development which are also key indicators of service orientation.

The indicator develop and adopt service improvement program through simplified procedures that will further enhance service delivery obtained the highest mean score of 4.25 (SD=0.39), described as Very Often, and interpreted as Consistently Demonstrates. This means that most of the teachers in the locale are into developing schemes that will make service delivery more efficient and effective. In this aspect, the role of educational

technology in helping teachers streamline administrative tasks and focus more on the students is being highlighted. Contextually, the use of electronic class records is one of the examples of schemes that make tasks easier and faster to accomplish. This innovation of the department has made positive impacts in the educational arena and has given the teachers additional time for teacher-student interaction. According to Keshavdas (2023), the ability focus on the essentials and simplify processes will unlock significant benefits across the organization.

On the other hand, the indicator initiate activities that promote advocacy for men and women empowerment, obtained the lowest mean score of 3.79 (SD=0.61), described as Very Often and interpreted as Consistently Demonstrates. Indeed respondents in the locale have limited opportunities in terms of initiating programs to promote men and women empowerment. This may be attributed to the fact that when it comes to empowering teachers, they are taken as one and not based on gender. However, respondents acknowledge that through this, a more inclusive and sustainable approach to gender equality, ultimately leading to greater economic empowerment development for women will be created. This is supported by the study Perines (2020) which focused on designing a teacher training program to raise awareness about gender and social issues in academic settings and society.

Table 6 Distribution of Respondents' Level of Core Behavioral Competencies in terms of Innovation

Indicators	Mean	Standard Deviation	Description
Examines the root cause of problems and suggests effective solutions. Foster new ideas, processes and suggests better ways to do things (cost and/ or operational efficiency).	3.98	0.39	Very Often
Demonstrates an ability to think "beyond the box". Continuously focuses on improving personal productivity to create higher value and results.	3.58	0.67	Very Often
Promotes a creative climate and inspires co-workers to develop original ideas or solutions.	4.42	0.53	Very Often
Translates creative thinking into tangible changes and solutions that improve the work unit and organization.	3.90	0.57	Very Often
Uses ingenious methods to accomplish responsibilities. Demonstrates resourcefulness and the ability to succeed with minimal resources.	3.81	0.39	Very Often
Overall	**3.94**	**0.26**	**Very Often**

Legend:

4.50 – 5.00	*Always/Role Model*	*1.50- 2.49*	*Rarely/Inconsistently Demonstrates*
3.50 – 4.49	*Very Often/Consistently Demonstrates*	*1.49 below*	*Never/Hardly Demonstrates*
2.50 – 3.49	*Sometimes/Occasionally Demonstrates*		

Table 6 presents the respondents' core behavioral competencies in terms of innovation with an overall mean score of 3.94 (SD=0.26), described as Very Often and interpreted as Consistently Demonstrates. This means that respondents extensively demonstrate innovative skills in their teaching job. The locale of the study is a strong advocate for new pedagogies and teaching strategies that are products of action researches and innovations. In fact, SDO-CID annually initiates a research and innovations

congress where teachers are able to share the results of their research endeavors. These activities motivate teachers to conduct more researches so as to address the problems at hand. This is supported by the study of Ortile (2023) where he opined that Filipino teachers have implemented various innovative teaching strategies such as using online game, memes, and social media to engage students and enhance learning outcomes.

Among the indicators, promote a creative climate and inspire co-workers to develop original ideas or solutions, obtained the highest mean of 4.42 (SD=0.53), described as Very Often and interpreted as Consistently Demonstrates. This means that a great number of the teacher respondents are into inspiring their colleagues to authentic and be divergent thinkers. When teachers receive structured opportunities to work together, they are more likely to experiment with new teaching methods, engage in continuous improvement and inspire each other to push the boundaries of their practice. The results of this study are supported by the paper of Froehlich (2021) who emphasized that divergent thinking helps teachers overcome the tendency to work within the confines of fixed mindsets. Hence, it fosters the creativity and problem-solving skills of the teachers.

On the other hand, the indicator, demonstrating an ability to think "beyond the box" and continuously focusing on improving personal productivity to create higher value and results, obtained the lowest mean of 3.58 (SD=.673), described as Very Often and interpreted as Consistently Demonstrates. This suggests that teachers who think outside the box are able to challenge the status quo and traditional paradigms in education. They are not afraid to try alternative approaches that may integrate language with skills, content with language, and old with new methodologies. These teachers recognize that progress often comes from invading other fields and disciplines beyond just education. Thinking outside the box requires teachers to develop confidence in their own decision-making abilities and expertise. It involves taking risks, being creative, and not being limited by the constraints of the institution or profession. Teachers who are bored with the current state of education or need to adjust to imposed changes are often motivated to think outside the box

Conversely, there are respondents who also think traditionally which is alarming because educators are expected to be strong advocates for continuous learning. Results confirmed the study of Bautista (2023) when she said that Filipino teachers have been slow in shifting from traditional to divergent thinking. They struggle to adopt progressive teaching methods, such as student-centered approaches, personalized learning and diverse assessments which are more effective in developing critical thinking.

Table 7 Summary of the Respondents' Level of Core Behavioral Competencies

Variables	Mean	SD	Interpretation
Self-Management	3.69	0.40	Consistently Demonstrates
Professionalism and Ethics	3.67	0.42	Consistently Demonstrates
Results-focus	3.97	0.41	Consistently Demonstrates
	3.97	0.39	

Teamwork			Consistently Demonstrates
Service Orientation	3.96	0.38	Consistently Demonstrates
Innovation	3.94	0.26	Consistently Demonstrates
Overall	**3.78**	**0.38**	**Consistently Demonstrates**

Legend:

4.50 – 5.00	*Always/Role Model*	*1.50- 2.49*	*Rarely/Inconsistently Demonstrates*
3.50 – 4.49	*Very Often/Consistently Demonstrates*	*1.49 below*	*Never/Hardly Demonstrates*
2.50 – 3.49	*Sometimes/Occasionally Demonstrates*		

Table 7 reflects the summary of the respondents' level of core behavioral competencies with an overall mean of 3.78 (SD=0.38), interpreted as Consistently Demonstrates. This means that the teachers with high levels of core behavioral competencies, particularly tend to exhibit stronger teaching performance and more positive work attitudes. Cultivating these behavioral competencies appears to be a key lever for improving overall teacher effectiveness.

As detailed in the table, results focus had the highest mean score of 3.97 (SD=0.41), interpreted as Consistently Demonstrates. Being results-focused is a skill necessary for teachers to thrive in the workplace. Results-focused teachers understand that by prioritizing student mastery, engagement and growth, the desired academic outcomes will follow. They are driven by a commitment to helping each student reach their full potential, maintain a positive, enthusiastic classroom environment that motivates students to take ownership of their learning and reflect regularly on the effectiveness of their teaching seeking out opportunities for professional growth and development.

Moreover, teachers with a strong results focus are able to consistently set and achieve ambitious goals for their students. They are proactive, persistent, and motivated in pursuing their objectives to maximize student learning and performance. These teachers direct their efforts toward accomplishing desired outcomes and are not deterred by obstacles or challenges. This finding is in accordance with the findings reported by Rabotan (2019) who said that a teacher that is results-focused is dedicated to making sure that each student learns as much as they can and realizes their maximum potential. They use a methodical approach to lesson design and delivery, emphasizing the clear explanation of learning objectives, giving students practical chances and feedback, and routinely assessing their techniques to raise student accomplishment.

Furthermore, teamwork also is the highest–rated variable with a mean score of 3.97 (SD=0.39), interpreted as Consistently Demonstrates. Highly competent teachers who work in a team are able to foster a sense of shared responsibility and accountability among their colleagues. They encourage open communication, mutual trust, and a commitment to the team's collective success. Effective teamwork allows teachers to leverage each other's strengths, improve problem-solving, and enhance overall productivity. Teachers who demonstrate strong teamwork abilities can collaborate effectively with colleagues, communicate openly, and contribute positively to the school community. They establish professional learning communities to work together towards shared goals.

Teamwork is an essential strategy for teachers to tackle complex challenges. By sharing their knowledge and perspectives, teachers can better identify early warning signs of student-related problems and intervene more effectively. In the interview conducted by the researcher, the respondents emphasized that relationship with colleagues is crucial to the well-being of teachers and it has a huge impact on how teachers manage their jobs. This result is in conformity with the study of Cruszos (2022) which stated that teachers consistently showed satisfactory level of competencies in areas such as self-management, teamwork and service orientation.

Furthermore, it can also be seen in the table that professionalism and ethics had the lowest mean score of 3.67 (SD=0.42), interpreted as Consistently Demonstrate .In the locale, although there are already a lot of seasoned teachers already, still there is a need for them to be reminded as to the level of professionalism and ethics that they need to display. Consequently, in response, the division office has been doing its best to educate and encourage the teaching personnel to be informed and as much as possible, find the initiative to review the standard by revisiting the legal bases such as the DepEd orders.

Professionalism and strong ethical standards are considered essential for teachers to be effective in their roles. They serve as the foundation for all other teaching competencies. When teachers demonstrate integrity, respect, and service to others, they reinforce these values in their students. When teachers model these qualities, it promotes equality, non-discrimination, and a spirit of teamwork among all staff. Thus, it is crucial to maintain a high ethical standards helps preserve the reputation and integrity of the teaching profession and the school as a whole.

In a study by Keshmiri et al. (2023), it was clearly stated that professionalism and ethics are important in the teaching profession because teachers are expected to adhere to professional ethics which include commitment to students'' success, maintaining ethical standards, and being role models for their students and colleagues. Moreover, according to the same author, teachers should engage in continuous professional development to improve their skills and maintain their professional standards.

Research Question 2. What is the respondents' level of job satisfaction in terms of work and workplace, supervisor and management, benefits and rewards, recognition, communication and coworker relationship?

Teachers are essential to the success of the education system, so it is vital that they are satisfied with their working conditions in order to perform well and deliver quality education to students. Job satisfaction is closely related to teacher retention, as well as the overall well-being of teachers and their students, school cohesion, and the status of the teaching profession.

Table 8 Distribution of Teachers' Level of Job Satisfaction in terms of Work and Workplace

Indicators	Mean	SD	Description
Doing my work is pleasurable.	4.24	0.72	Agree
Working conditions in my school are comfortable.	4.25	0.68	Agree
Teaching provides me the chance to develop new methods by being part of trainings, webinars, meetings and outreach activities.	4.24	0.74	Agree
The information, tools and resources I need to do my job effectively, have been provided for me.	4.19	0.73	Agree
What is expected of me at work was discussed to me prior to every given task.	4.32	0.72	Agree
Making decisions to solve problems for my clients is encouraged in my workplace	4.22	0.70	Agree
I know how to measure the quality of my work	4.27	0.70	Agree
My workplace is safe and secured.	4.31	0.74	Agree
I would not consider leaving my job for another with greater opportunities for advancement.	4.21	0.77	Agree
My job has high value to the community.	4.40	0.68	Agree
Overall	**4.26**	**0.72**	Agree

Legend:

4.50 – 5.00	Strongly Agree/Very Satisfied	1.50 - 2.49	Disagree/Dissatisfied
3.50 – 4.49	Agree/Satisfied	1.49 below	Strongly Disagree/ Very Dissatisfied
2.50 – 3.49	Neutral/Undecided		

Table 8 shows the distribution of teachers' level of job satisfaction in terms of work and workplace with an overall mean score of 4.26 (SD=0.72) described as Agree and interpreted as Satisfied. When teachers are satisfied in their work and workplace, they are more emotionally adaptive, motivated and successful in their roles. Satisfied teachers are better able to thrive and deliver quality instruction that helps students succeed academically. Also, teachers who are happy in their work and workplace are most likely to go to work every day feeling motivated eventually being productive for the day.

These results confirmed with the study of Hoque (2023), in which workplace was highlighted as more strongly associated with teacher satisfaction compared to background factors, gender, years of experience, and school characteristics. Gomez (2023) also emphasized the substantial impact of workplace conditions on teacher satisfaction, highlighting factors such as administrative support, leadership, student behavior, school atmosphere, and teacher autonomy as crucial determinants of job contentment.

The indicator, the job has a high value to the community, obtained a highest mean score of 4.40 (SD=0.68), described as Agree and interpreted as Satisfied. In the interview part of this study, a good number of teachers narrated that they are happy with the amount of respect they receive from the community. However, there were also other who said that the amount of respect that teachers receive nowadays is way lesser than that years ago. This agrees with the study Fabella (2022), where she opined that Filipino teachers

face significant challenges in terms of social status, professional image and community respect.

Furthermore, the results of this study abide by Spence (2022) when he said that the value of the teaching job in the community is crucial for their role in the society. This value is demonstrated in the teachers' community development, role modeling, holistic and professional development. Results also relates to the study conducted by SEAMEO Innotech (2021) which found that teachers decided to stay to help students and contribute to society. Their passion lies in teaching, and they are proud that teachers are highly respected in their communities.

However, the indicator The information, tools and resources that teachers need to do their jobs effectively, have been provided for them, got the lowest mean score of 4.19 (SD=0.73), described as Agree and interpreted as Satisfied. This suggests that they are still contented despite the disparity of this indicator's mean compared to the rest of the indicators. When teachers are provided with the right mix of curriculum resources, classroom tools, professional development, and financial support, they are empowered to do their jobs more effectively and efficiently. This ultimately leads to higher teacher satisfaction, retention and student outcomes. However, in the study of Baluyos et al. (2019), it was found out that those Filipino teachers face significant challenges in terms of resources, infrastructures and support systems which can impact their ability to effectively teach and contribute to the education system.

Alibang (2023), opined that Filipino teachers, who play an important role in shaping the brains of the country's future, are frequently at the forefront of these daunting challenges. From low salaries to a shortage of resources, these dedicated instructors face a complex web of obstacles that affect not just their teaching methods but also the quality of education for countless children.

Table 9 Distribution of Teachers' Level of Job Satisfaction in terms of Supervisor and Management

Indicators	Mean	SD	Description
The organization where I am in has the right people and skills to do its work.	4.25	0.67	Agree
The organization practices high standards and ethics.	4.26	0.65	Agree
My superior is competent in doing his/her job.	4.31	0.66	Agree
My superior shows interest in my feelings and acknowledge my concerns.	4.21	0.68	Agree
My superior acknowledges my achievements and contribution in the organization.	4.59	0.65	Strongly Agree
My superior shows empathy whenever I have struggles both personally and professionally.	4.29	0.65	Agree

My superior holds me and colleagues accountable for our performance.	4.30	0.64	Agree
My superior is reliable.	4.32	0.70	Agree
The administration in my school communicates its policies well.	4.28	0.72	Agree
There is access to the management whenever the superior does not listen.	3.38	0.67	Neutral
Overall	**4.22**	**0.67**	**Agree**

Legend:

4.50 – 5.00	Strongly Agree/Very Satisfied	1.50 - 2.49	Disagree/Dissatisfied
3.50 – 4.49	Agree/Satisfied	1.49 below	Strongly Disagree/
2.50 – 3.49	Neutral/Undecided		Very Dissatisfied

Table 9 shows the distribution of teachers' level of job satisfaction in terms of supervisor and management with an overall mean of 4.22 (SD=0.67) described as Agree and interpreted as Satisfied. Teachers who feel supported, empowered and respected by their administrators tend to be more satisfied and engaged in their work. When teachers feel their administrators are competent, fair and supportive, it enhances their job satisfaction, motivation and commitment to the school's mission. This in turn leads to higher teacher retention, instructional quality, and ultimately improved student outcomes. This result is supported by the study of Gomez (2023) which said that Filipino teachers in the public schools agree that they are satisfied with the organization's leadership. Moreover, in the study of Fabella, (2022) he found out that the school administrator's leadership behavior was significantly related to the job satisfaction of teachers.

The indicator, My superior acknowledges my achievements and contribution in the organization obtained the highest mean score of 4.59 (SD=0.65), described as Strongly Agree and interpreted as Very Satisfied. This means that the respondents are pleased with the amount of acknowledgment they receive from their immediate superiors. Principals and administrators play a critical role in boosting teacher job satisfaction through their leadership and recognition practices. In the interview part of this study, respondents honestly answered that they feel that the support from school leaders is very minimal and very hard to get. This implies that there are school administrators who are very hard to please. Results are supported by the study of Bona (2022) when she concluded that teachers value recognition from their superiors as a significant factor in job satisfaction. This includes acknowledgment of their work, achievements and contributions to the school.

Moreover, the indicator, access to the management whenever the superior does not listen got the lowest mean of 3.38 (SD=0.67, described as Neutral and interpreted as Undecided. This means that respondents neither agree nor disagree that they have access to the management. The results suggest that clear communication of roles and access protocols, as well as a culture of shared leadership, could help mitigate any uncertainty. However, what usually happens is that teachers have no direct access to the higher-ups, especially when the school principal is influential. Instead of attending to the problem, teachers are often given an implied concept to just keep quiet and let it go or worse, they are told the statement "wait till you become" as a response to their complaints. This is quite alarming because, according to the study of Fabella (2022), school

administrators' leadership behavior was significantly related to the job satisfaction of teachers. This suggests that effective leadership and supervision can positively impact teacher job satisfaction.

In addition, Spence (2022), said that the value of the teaching job in the community is crucial for their role in society. This value is demonstrated in the teachers' community development, role modeling, and holistic and professional development. Research emphasizes the substantial impact of workplace conditions on teacher satisfaction, highlighting factors such as administrative support, leadership, student behavior, school atmosphere, and teacher autonomy as crucial determinants of job contentment. These findings underscore the importance of creating supportive and positive work environments that foster teacher satisfaction and overall well-being. The research findings of Gomez (2023) revealed that teachers' work environments, particularly role clarity, teamwork, and socio-emotional support, are consistently observed.

Table 10 Distribution of Teachers' Level of Job Satisfaction in terms of Benefits and Rewards

Indicators	Mean	SD	Description
There is fair amount of pay for the work I do.	4.11	0.68	Agree
The benefits I receive are satisfying.	4.16	0.68	Agree
Teaching provides me with financial security.	4.20	0.66	Agree
Rewards are given for those who give exemplary work within the organization.	4.12	0.68	Agree
The benefits and rewards offered by my department are competitive compared to other agencies.	4.11	0.72	Agree
The department values and appreciates my contributions as a teacher in terms of benefits and rewards.	4.17	0.65	Agree
The benefits offered by my department adequately meet my needs and expectations.	4.18	0.64	Agree
I am satisfied with the work-life balance that my benefits and rewards allow you to maintain.	4.18	0.69	Agree
I feel satisfied with the retirement and pension plans offered by my department.	4.51	0.69	Strongly Agree
I am satisfied with the health insurance provided by the department.	4.17	0.70	Agree
Overall	**4.19**	**0.68**	**Agree**

Legend:

4.50 – 5.00	Strongly Agree/Very Satisfied	1.50 - 2.49	Disagree/Dissatisfied
3.50 – 4.49	Agree/Satisfied	1.49 below	Strongly Disagree/ Very Dissatisfied
2.50 – 3.49	Neutral/Undecided		

Table 10 shows the distribution of teachers' level of job satisfaction in terms of Benefits and Rewards with an overall mean of 4.19 (SD=0.68) described as Agree and interpreted as Satisfied. This means that rewards and benefits play a significant role in teacher job satisfaction. When teachers feel that their efforts are recognized and rewarded appropriately, it enhances their overall satisfaction and commitment to the profession. Extrinsic rewards like competitive salaries, performance-based bonuses, and benefits like healthcare and retirement plans are important for attracting and retaining

teachers. These tangible rewards provide financial security and stability. However, intrinsic rewards like seeing student growth, making a difference, and opportunities for professional development tend to have a greater impact on long-term teacher satisfaction and motivation.

This result is in conformity with the study of Baluyos et al. (2019), which said and emphasized that job satisfaction is essential for wok performance and found that teachers were highly satisfied with their pay, which contributed to their overall job satisfaction.

As observed in the results, the indicator I feel satisfied with the retirement and pension plans offered by my department got the highest mean of 4.51 (SD=0.69), described as Strongly Agree and interpreted as Very Satisfied. This means that teachers agreed on this statement are highly fulfilled with the retirement benefits offered by the Department of Education. Most public school teachers in the Philippines participate in defined benefit retirement plans provided by the Government Service Insurance System (GSIS), which bases benefits on years of service and final salary. According to Gumiran (2022), teachers are confident in their retirement plans and the retirement benefits that they are offered within the department of education. However, teachers may face financial challenges in retirement, but with proper education about financial planning and utilization of available retirement benefits, they can achieve financial stability and enjoy their retirement.

Additionally, the indicator there is fair amount of pay for the work they do got the lowest mean of 4.11 (SD=0.68) described as Agree and interpreted as Satisfied. This means that the respondents get and receive equitable compensation relative to the effort, skill and time invested in their work. According to Rokeman (2023), when teachers receive benefits and rewards tailored to their individual needs and performance, it can enhance their overall job satisfaction and motivation to excel in their roles.

The indicator, the benefits and rewards offered by the department are competitive compared to other agencies, got the same lowest mean of 4.11 (SD=0.72), described as Agree and interpreted as Satisfied. This means that many teachers feel they are underpaid and under compensated for the amount of work they do. For instance, teachers often work far more hours than they are paid for, with some working 70+ hours per week, similar to investment bankers, but at much lower pay rates. There is a growing wage gap between teachers and other college-educated professionals, with teachers now making 17% less on average. Teachers often have to take on additional part-time jobs to make ends meet, which can lead to burnout and lower commitment to teaching. These results are supported by the study of Viray (2022), which indicates that many teachers firmly disagree with the notion that they are fairly paid, citing factors like long work hours, growing wage gaps, and inadequate compensation structures. This dissatisfaction with pay levels is a major source of frustration and a key driver of teacher shortages and turnover.

Table 11Distribution of Teachers' Level of Job Satisfaction in terms of Recognition

Indicators	Mean	SD	Description
The work I do is appreciated.	4.59	0.73	Strongly Agree
My evaluation provides me with meaningful information about my performance.	4.31	0.72	Agree
The department values and acknowledges professional growth and development.	4.53	0.68	Strongly Agree
The feedback and praise I receive from my colleagues and superiors are satisfying.	4.33	0.68	Agree
The opportunities for public recognition, such as awards or honors, provided by our department are satisfying.	4.52	0.68	Strongly Agree
The department provides adequate opportunities for me to showcase my skills and expertise.	4.27	0.70	Agree
The level of support and encouragement I receive from the department in terms of recognition is satisfying.	4.32	0.68	Agree
I receive fair amount of recognition for the work I do.	4.32	0.69	Agree
The department promotes a culture of recognition and appreciation among its staff members	4.39	0.75	Agree
I am satisfied with the overall recognition and appreciation I receive for my work as a teacher.	4.69	0.64	Strongly Agree
Overall	**4.43**	**0.70**	**Agree**

Legend:

4.50 – 5.00	Strongly Agree/Very Satisfied	1.50 - 2.49	Disagree/Dissatisfied
3.50 – 4.49	Agree/Satisfied	1.49 below	Strongly Disagree/ Very Dissatisfied
2.50 – 3.49	Neutral/Undecided		

Table 11 shows the distribution of teachers' level of job satisfaction in terms of Recognition with an overall mean score of 4.43 (SD=0.70),described as Agree and interpreted as Satisfied. This means that the respondents have positive responses regarding this aspect. In the interview, a good number of respondents revealed that they are satisfied with their teaching job in terms of responsibility, advancement and recognition for a job well done. When teachers feel their efforts are valued and recognized, it boosts their self-esteem, renews their confidence in their teaching abilities, and validates their ideas and expertise. This is related to the study of Movsessian (2019) which illustrated recognition programs can boost a teacher's morale and validate their perceptions among students, parents, and colleagues. It can also renew confidence in teaching and give teachers a sense of pride and satisfaction in their work.

In the same table, the indicator I am satisfied with the overall recognition and appreciation I receive for my work as a teacher got a mean of 4.69 (SD=0.64), described as Strongly Agree and interpreted as Very Satisfied. Also, it means that the respondents are highly satisfied in this aspect. In the locale of this study, teachers who are performing extraordinarily in whatever aspect of their teaching jobs are being rewarded and recognized during the Gabi ng Parangal which is a division-wide recognition program. Results confirmed the study of Andrews (2021), which indicated the significance of recognition in boosting teacher morale, motivation and satisfaction. Moreover, teachers responded in the interview part that they are satisfied with the recognition they receive for

a job well done and that recognition can have a profound impact on teachers, making them feel valued and appreciated.

However, the indicator, The department provides adequate opportunities for me to showcase my skills and expertise, obtained the lowest mean score of 4.27 (SD=0.70), described as Agree and interpreted as Satisfied. This indicator is about the limited opportunities offered to teachers for them to showcase their skills. In the locale of the study, there are indeed very limited avenues for teachers to showcase their skills especially in schools with many teachers. In large schools, it is very difficult to ensure that you will be chosen to represent the institution in contests or even train or coach students to join contests. Likewise, in a large school, it is difficult for teachers to have their voices heard and receive personalized feedback on their progress. In addition, the overcrowding of facilities and resources in larger schools can also constrain teachers' ability to utilize specialized spaces like ICT labs for enrichment. This result is similar to the study of Garcia (2019) which highlighted how limited opportunities for collaboration, influence over curriculum and professional development can hinder teachers' ability to share their expertise and shape their own growth.

Furthermore, recognition plays a crucial role in boosting employee morale, increasing loyalty, and fostering a sense of connection to the organization. When employees feel valued and appreciated for their contributions, they are more likely to be engaged, motivated, and committed to their work, leading to higher levels of job satisfaction and performance. Movsessian (2019) also illustrated recognition programs can boost a teacher's morale and validate their perceptions among students, parents, and colleagues. It can also renew confidence in teaching and give teachers a sense of pride and satisfaction in their work.

Table 12 Distribution of Teachers' Level of Job Satisfaction in terms of Communication

Indicators	Mean	SD	Description
The level of communication is good within the organization.	3.32	0.65	Neutral
As it plans for the future, my department asks for my ideas.	4.27	0.68	Agree
I have opportunity to give input on decisions affecting my work.	4.27	0.69	Agree
I know how my department measures its success.	4.28	0.65	Agree
The department values and prioritizes effective communication as an essential aspect of teaching and learning.	4.29	0.65	Agree
I am satisfied with the effectiveness of communication tools and technologies used in our organization.	4.27	0.65	Agree
The organization encourages open and transparent communication among all stakeholders.	4.52	0.62	Strongly Agree
I am satisfied with the frequency and quality of communication between me and my students' parents or guardians.	4.29	0.65	Agree
My department provides adequate channels for me to express our opinions and concern.	4.20	0.68	Agree
I often receive timely and relevant information from our department regarding important updates or changes.	4.27	0.66	Agree

Overall	**4.20**	**0.66**	**Agree**

Legend:

4.50 – 5.00	Strongly Agree/Very Satisfied	1.50 - 2.49	Disagree/Dissatisfied
3.50 – 4.49	Agree/Satisfied	1.49 below	Strongly Disagree/
2.50 – 3.49	Neutral/Undecided		Very Dissatisfied

Table 12 shows the distribution of teachers' level of job satisfaction in terms of Communication with an overall mean of 4.20 (SD=0.66) described as Agree and interpreted as Satisfied. This means that the respondents acknowledged the importance of open communication within the organization in order to achieve teachers' satisfaction. Open and effective communication is widely recognized as critical for the success of educational institutions and the satisfaction of teachers. When communication channels are clear and transparent, it enables teachers to better understand the school's vision, goals, and expectations.

Moreover, open communication fosters a sense of trust, collaboration, and shared ownership over the school's direction. Teacher respondents also recognize that open, transparent, and collaborative communication is essential for creating a positive, productive work environment where they can thrive. Strong communication enables teachers to be more effective, engaged, and committed to their schools. This confirmed the results of the study of Nadeem (2020) which reiterated that effective communication within the school organization can lead to a healthy environment and healthy relations between principals and teachers.

It is clearly evident that the indicator The organization encourages open and transparent communication among all stakeholders obtained the highest mean score of 4.52 (SD=0.62), described as Strongly Agree and interpreted as Satisfied. This means that in terms of being open and transparent in communicating with all stakeholders, the respondents agree and are satisfied with how it is done. This can be related to the strengthening of a School-Based Management system that allows all stakeholders to get involved in the whereabouts of the school. The results of this study conformed with the study of Chiloane (2023). He opined that regular and open communication fosters a culture of accountability by keeping stakeholders informed of progress, achievements, and challenges, promoting a sense of responsibility among team members and stakeholders.

Moreover, the indicator the level of communication is good within the organization described as neutral got the lowest mean of 3.32 (SD=0.65), described as Neutral and interpreted as Undecided. Contextually, there are workplaces that have factions between the members of the teaching staff which might be one of the factors of a not-so-good level of communication within the organization. Accordingly, these factions have become common already in organizations due to individual differences. Divisions or factions among teachers can undermine positive conditions. When teachers are not aligned or working together effectively, it can lead to frustration, resentment, and a dysfunctional work environment.

Indeed, disunity and lack of collaboration among teachers can have significant downsides for schools. Effective leadership and professional supports are keys to promoting a cohesive, productive teaching staff. These results related with the study of Kheswa (2020), which emphasized that when there is a lack of effective communication, it contributes to a deterioration of the culture of learning and teaching because educators feel deprived of opportunities to voice their opinions and concerns. This leads to low morale, conflicts, and job dissatisfaction among teachers.

Similarly, miscommunication is preventing the appropriate flow of information across departments, forcing teachers to repeat their work due to misinformation and work unpaid overtime. As a result, instructors wind up undertaking jobs unrelated to their profession; some of them end up doing more work than others, thus battling with the long working hours connected with this circumstance, and are left in states of loss, hurting their trust in the leadership team (Tannous, 2021).

Table 13 Distribution of Teachers' Level of Job Satisfaction in terms of Coworker Relationship

Indicators	Mean	SD	Description
There is an open, honest and respectful communication between co-workers.	4.07	0.69	Agree
Teachers in my school collaborate, share ideas, and support each other's work and projects.	4.04	0.62	Agree
There is effective teamwork and cooperation for a common goal in our school.	4.15	0.70	Agree
I ensure a mutual trust and confidence in each other's abilities and intentions.	4.03	0.66	Agree
There is respect for each other's opinions, contributions and boundaries.	4.10	0.65	Agree
There is understanding and empathy towards colleagues' perspectives, feelings, and challenges.	4.10	0.61	Agree
I help addressing conflicts, disagreements and find mutually acceptable solutions.	4.10	0.62	Agree
I acknowledge and appreciate and appreciate each other's efforts and contributions.	4.15	0.69	Agree
There are positive and friendly interactions, both in professional and informal settings in our school.	4.14	0.70	Agree
I offer and receive support during challenging times, both personally and professionally	4.21	0.66	Agree
Overall	**4.11**	**0.66**	**Agree**

Legend:

4.50 – 5.00	Strongly Agree/Very Satisfied	1.50 - 2.49	Disagree/Dissatisfied
3.50 – 4.49	Agree/Satisfied	1.49 below	Strongly Disagree/ Very Dissatisfied
2.50 – 3.49	Neutral/Undecided		

Table 1 shows the distribution of teachers' level of job satisfaction in terms of Coworker Relationship with an overall mean of 4.11 (SD=.66), described as Agree

and interpreted as Satisfied. This means that the respondents are usually contented and happy with the level of their relationship with their colleagues. Teachers who experience these positive collegial relationships are more likely to feel engaged, motivated, and able to cope with stress. It reduces feelings of isolation and burnout. Collaborative practices like peer mentoring, joint lesson planning, and sharing best practices allow teachers to learn from and support each other, further boosting satisfaction. This is supported by the study of Ares (2022) on the relationship between colleagues and job satisfaction among Filipino teachers, where she found that teachers who have a high level of relationship with colleagues are more likely to be satisfied with their jobs.

As seen in the table, the indicator I offer and receive support during challenging times, both personally and professionally, got the highest mean of 4.21 (SD=0.66), described as Agree and interpreted as Satisfied. This means that respondents agree and that they are content with how they give and receive support from their colleagues. In the interview portion, the researcher found out that teachers' relationship and support with their colleagues influence their job satisfaction levels. This support is a resource for teachers and has a positive influence on their performance. This result is supported by the study of Buonomo (2022). In his study, he concluded that teachers' perceived stress is affected by frequent cooperative activities with colleagues, which can lead to more giving and receiving of support at the workplace.

However, the indicator, I ensure a mutual trust and confidence in each other's abilities and intentions, got the lowest mean of 4.03 (SD=0.66), described as Agree and interpreted as Satisfied. This means that respondents somehow agree to have trust and confidence with their colleagues and that they are satisfied with how they interact with their coworkers on this aspect. Open and transparent communication is essential for building trust between teachers. They need to feel comfortable sharing ideas, concerns, and feedback without fear of judgment. Acknowledging each other's strengths, celebrating successes, and providing constructive feedback help teachers develop confidence in their colleagues' abilities.

Further, teachers need to believe their colleagues have the best interests of students and the school at heart. Demonstrating a shared commitment to the school's mission and values is key. Also, avoiding gossip, undermining behaviors, and protecting each other's reputations nurtures an environment of mutual trust and respect. Research suggests that teachers trust each other more than they trust experts. Within the school, transparent decision-making processes and equitable distribution of workloads can reassure teachers that the school is operating with fairness and integrity. Results confirmed the study of Childress (2019) which said that teachers trust for each other is attributed to the fact that teachers have no choice but to rely on each other due to the lack of support from schools and districts in providing necessary curriculum resources.

Table 14 Summary of Teachers' Level of Job Satisfaction

Variables	Mean	SD	Interpretation
Work and Workplace	4.26	0.72	Satisfied
Supervisor and Management	4.22	0.67	Satisfied
Benefits and Rewards	4.19	0.68	Satisfied
Recognition	4.43	0.70	Satisfied
Communication	4.20	0.66	Satisfied
Co-worker Relationship	4.11	0.66	Satisfied
Overall	**4.24**	**0.68**	**Satisfied**

Legend:

4.50 – 5.00	Strongly Agree/Very Satisfied	1.50 - 2.49	Disagree/Dissatisfied
3.50 – 4.49	Agree/Satisfied	1.49 below	Strongly Disagree/
2.50 – 3.49	Neutral/Undecided		Very Dissatisfied

Table 14 displays the summary of teachers' level of job satisfaction with an overall mean of 4.24 (SD=0.68), interpreted as Satisfied. Improving overall teacher job satisfaction has been shown to lead to better student outcomes, higher teacher retention rates, and a more positive school environment. It is a key priority for education systems globally. Ensuring high levels of overall job satisfaction among teachers is essential for attracting, developing and retaining talented educators who can deliver quality instruction and support student achievement. Addressing the key drivers of teacher satisfaction should be a top priority. Results contradicted the survey conducted by Merrimack College and the EdWeek Research Center (2022) ,revealed that only 12% of teachers reported feeling very satisfied with their jobs, marking a significant decline from previous years. Factors contributing to this dissatisfaction include overwork, low pay, lack of respect, and challenging working conditions, leading to a sense of disillusionment among teachers.

Meanwhile, the highest-rated aspect of job satisfaction is recognition with a mean score of 4. 43 (SD=0.70), interpreted as Satisfied .This means that there is show of recognition in schools. It includes providing positive feedback on their teaching performance, celebrating teachers' successes and milestones publicly, nominating teachers for awards and honors, empowering teachers to take on leadership roles and fostering a culture of appreciation and respect in the school community. In addition, the respondents opined in the interview that they receive high level of respect and recognition from the general public which boosts their self-esteem thus leading to positive results in terms of teaching and learning.

In a study by Hodges (2024), results show that recognition needs to be individualized and authentic. Ideally, administrators should create what we call a "recognition-rich environment" with praise coming from all directions not just during teachers' day. In addition, consistent recognition for doing good work has a direct influence on the key performance measures that we use to evaluate our schools.

Teachers who receive regular recognition and praise are more productive, engaged at work, and more likely to stay with their school.

On the contrary, the lowest-rated variable of job satisfaction is coworker relationship with a mean score of 4.11 (SD=0.66), interpreted as Satisfied. In this aspect, there is a need to increase this level given the importance of having good relationship among teachers in an institution. By consistently practicing relationship-building behaviors, teachers can strengthen their bonds with coworkers, enhance their overall job satisfaction, and create a more positive, collaborative school environment. These behaviors include fostering open and clear communication, building trust and respect, developing collaborative problem-solving skills, cultivating a spirit of camaraderie and kindness and seeking opportunities to be helpful and forgiving. Strong coworker relationships are a key foundation for teacher well-being and effectiveness. As mentioned in the study of Candra (2023), relationship with colleagues improve mental health by reducing depression, increase job satisfaction essential for encouraging retention, and increase engagement and teamwork.

Research Question 3. Is there a significant relationship between the teachers' perceived level of core behavioral competency and their job satisfaction?

This research explores the significant relationship between the level of core behavioral competencies and teachers' job satisfaction. Developing core behavioral competencies like results focus, teamwork, and service orientation leads to better job performance and outcomes. When teachers consistently demonstrate these competencies, they are able to set and achieve ambitious goals, collaborate effectively with colleagues, and provide high-quality support to students. By analyzing the impact of these competencies on job satisfaction, the study seeks to determine how effectively these competencies can help in improving the level of fulfillment of the teachers while they are doing their jobs, leading to better retention and lower turnover.

Table 15 Results of the Test on Relationship between the Core Behavioral Competencies and Teachers' Job Satisfaction

Core Behavioral Competencies	**Teachers' Job Satisfaction**						
	Work and Workplace	Supervisor and Management	Benefits and Rewards	Recognition	Communication	Co-worker Relationship	Overall
	r-value p-value	r-value p-value	r-value p-value	r-value p-value	r-value p-value	r-value p-value	r-value p-value
Self-Management	0.375**	0.259**	0.426**	0.232**	0.324**	0.067	0.281**
	0.002	0.040	0.008	0.003	0.005	0.135	0.032
	S	S	S	S	S	NS	S

Professionalism and Ethics	0.490**	0.238**	0.169	0.316**	0.112	0.422**	0.291
	0.024	0.031	0.121	0.025	0.789	0.028	0.169
	S	S	NS	S	NS	S	NS
	0.070	0.380**	0.142	0.122**	0.374**	0.036	0.254
Results Focus	0.118	0.041	0.351	0.001	0.037	0.421	0.167
	NS	S	NS	S	S	NS	NS
Teamwork	0.229**	0.002	0.037	0.306**	0.237**	0.461**	0.212
	0.022	0.971	0.404	0.040	0.012	0.023	0.245
	S	NS	NS	S	S	S	NS
Service Orientation	0.269**	0.396**	0.330**	0.403**	0.102	0.059	0.260
	0.020	0.030	0.007	0.040	0.971	0.184	0.209
	S	S	S	S	NS	NS	NS
Innovation	0.110	0.019	0.030	0.312**	0.014	0.141	0.104
	0.827	0.678	0.494	0.009	0.750	0.355	0.519
	NS	NS	NS	S	NS	NS	NS
Overall	0.257	0.216	0.189	0.281	0.194	0.198	0.234
	0.169	0.299	0.230	0.020	0.427	0.191	
	NS	NS	NS	S	NS	NS	0.224 NS

Legend: S- Significant NS-Not Significant

r-values	Description
0.00-.09	No Linear Relationship (NLR)
0.50-0.69	Moderately Positive Relationship (MPR)
1.00	Perfect Linear Relationship (PLR)

r-values	Description
0.10-0.49	Weak Positive Relationship (WPR)
0.70-0.99	Strong Positive Relationship (SPR)

Table 15 shows the results of the test of relationships among the variables of core behavioral competencies, which revealed that self-management has a significant relationship with job satisfaction. Despite the fact that it has a weak positive relationship with an r-value of 0.281, such is enough to display significance as seen in

its p-value which is .032($p<.05$). This result suggests that this relationship is relevant and meaningful. Self-management skills could potentially enable teachers to better navigate their workload, collaborate effectively, and take advantage of growth opportunities, eventually leading to job satisfaction. This is supported by the results of the study conducted by Raebum (2023) which details the positive significant relationship between self-management and job satisfaction among their employees. The study also highlighted that self-management indicators such as adaptability, initiative and achievement orientation were strongly correlated with job satisfaction.

In self-management, only coworker relationship is not statistically associated with an r-value of .067 (p=.135). It is possible that self-management is more closely linked to individual performance and productivity rather than the relational aspects of the workplace. Strong self-management may enable teachers to be effective but not necessarily drive stronger coworker bonds. Professionalism and Ethics, on the other hand, is associated with work and workplace (r=.490; p=.024), supervisor and management (r=.238;p=.031), recognition (r=.316; p=.025) and coworker relationship (r=.422; p=.028). Additionally, Results-focus is statistically correlated with superior and management (r=.380; p=.041), recognition (r=.122; p=.001) and communication (r=.374; p=.037). Teamwork is also linked with work and workplace (r=.229;p=.022), recognition (r=.306;p=.040), communication (r=.237; p=.012), and co-worker relationship (r=.461; p=.023). In terms of service orientation, it has a significant positive relationship with work and workplace (r=.269; p=.020), superior and management (r=.396; p=.030), benefits and rewards (r=.330; p=.007), and recognition (r=.407; p=.080). Finally for innovation, it only has an interconnection with recognition with an r-value of .312 and p-value of .009.

Further, these findings have important implications for teacher retention. They highlight the need to develop the core behavioral competencies of the teachers to ensure that they are fulfilled in their jobs. Feeling empowered, supported by colleagues, and making a positive impact on students all contribute to higher job satisfaction. This in turn leads to better retention and lower turnover.

The r-values of the variables such as recognition and the variables of core behavioral competencies indicate a positive correlation suggesting that recognizing teachers' efforts can help in improving core behavioral competencies. The r-value which is 0.281 (p=0.02) indicates that this correlation is statistically significant, which means that the probability that this result is due to chance is nearly zero. Therefore, the data intensely propose that in general, the level of core behavioral competencies of teachers is associated with job satisfaction level.

The result confirms the same relationship established by previous researchers (Rataj, 2022) on the positive relationship between core behavioral competencies and teachers' job satisfaction. Additionally, Baluyos (2019) suggests that behavioral competencies are strong predictors of job satisfaction. Employees who possess certain behavioral competencies are more likely to be satisfied with their jobs. Hence, in order to ensure that the job satisfaction of the teachers is high, their core behavioral competencies should be considered.

In conclusion, the data from Table 15 provide valuable insights into the relationship between core behavioral competencies and the variables of teachers' job satisfaction. The significant correlations observed in the self-management and job satisfaction variables such as work and workplace, supervisor and management, benefits and rewards, recognition and communication indicate that these aspects of teachers' job satisfaction are strongly influenced the way teachers manage themselves. Specifically, professionalism and ethics positively impact educators' satisfaction in terms of work and workplace, supervisor and management, recognition and co-worker relationships. It is also noticeable that core behavioral competencies have a positive influence on job satisfaction in terms of recognition. These findings suggest that investing in targeted development initiatives on behavioral competencies can lead to tangible improvements in these areas, ultimately enhancing the overall quality of job satisfaction. However, the lack of significant correlations in the innovation component underscores the need for further investigation focused on this area.

Research Question 4. Based on the findings of the study, what Teacher Competency Development Plan can be designed?

Enhancing teachers' core behavioral competencies is critical for improving job performance, satisfaction, school culture, and student outcomes. It requires a multi-pronged approach of training, support, and creating an environment that enables teachers to thrive. Prioritizing teacher competencies should be a key focus for school leaders and districts. To guarantee fulfillment and satisfaction, effective competency development program with combined techniques and activities is needed. In the end, this program supports the development of a culture of a strong school culture and better student outcomes.

A THREE-YEAR TEACHER COMPETENCY DEVELOPMENT PLAN ON CORE BEHAVIORAL SKILLS AND JOB SATISFACTION

Introduction

A three-year teacher competency development plan focusing on core behavioral competencies and job satisfaction is crucial for teacher retention. This plan offers structured and sustained opportunities for teachers to enhance their behavioral skills to achieve job fulfillment. Through targeted core competency development and job satisfaction programs, faculty members can refine their skills in professionalism and, ethics and co-worker relationships.

Throughout this three-year plan, it is crucial to secure support from school administrators, allocate sufficient resources for professional development, continuously monitor progress and adjust the plan as needed and celebrate successes and share best practices across the school community. By grounding the plan's content in the latest education research, providing engaging learning opportunities, and implementing feedback loops for continuous improvement, the plan can effectively address the diverse needs of teachers and enhance their job satisfaction levels. Ultimately, investing in the development of core competencies of educators and prioritizing their well-being and fulfillment through a

comprehensive faculty development plan can foster a culture of innovation, collaboration, and lifelong learning within educational institution.

Rationale

The Teacher Competency Development Plan is crafted in order to address the issues of teacher retention due to job dissatisfaction. Understanding the factors that contribute to teachers' job satisfaction, the plan aims to elevate and advance the teachers' skills and competencies in professionalism and ethics and co-worker relationships.

General Objectives

This teacher competency development plan enables the teachers to:

1. equipped with the knowledge, skills, and dispositions that display professionalism and ethics;
2. develop the ability to cultivate collaborative, supportive relationships with colleagues; and
3. cultivate a positive, supportive work environment that empowers teachers, promotes their well-being, and fosters job satisfaction and retention.

Table 16. Matrix of Development Plan

Year 1: Assess and Develop Self-Awareness							
Areas of Concern	**Specific Objectives**	**Strategies/ Activities**	**Time Frame**	**Person/s Involved**	**Source of Fund**	**Estimated Budget**	**Expected Outcome**
Professionalism and Ethics	*To maintain a professional image: being trustworthy, regularity of attendance and punctuality, good grooming and communication.	*Evaluation of current professional image using a measuring instrument. *Gathering feedback from trusted colleagues and mentors about your strengths and	Throughout the academic year.	School head, teachers, administrator and resource speakers	MOOE PTA Fund	₱20,000.00	*Improved professional image; *Updated wardrobe for good grooming; and *Mastery in active listening and being polite in asking clarifying questions.

	*To make personal sacrifices to meet the organization's needs. *To act with a sense of urgency and responsibility	weaknesses. *Develop the sense of urgency among team members by effectively communicating the importance of strategic goals and involving them in the planning process.					*Communicate the strategic vision and its benefits to the team, ensuring that everyone understands the importance of their roles in achieving the goals.
Co-Worker Relationship	*To establish a culture of open communication and trust. *To foster initial connections among co-workers	*Organize monthly team-building activities to encourage interaction and collaboration among colleagues. *Conduct workshops focused on effective communication skills including active listening and constructiv	Throughout the academic year.	School head, teachers, administrator and resource speakers	MOOE PTA Fund	₱20,000.00	Program proposal for Team Building Activities that are regularly scheduled Activity Matrix for workshops focused on effective communication and giving of feedback.

		e feedback. *Implement Peer Recognition Program					
Year 2: Skill Enhancement							
Professionalism and Ethics	*Enhance Skills in ethical decision-making and conflict resolution *Promote a culture of professionalism within the organization.	*Participate in advanced training focusing on ethical decision-making and conflict resolution strategies. *Establish a Mentorship Program *Peer review sessions	Throughout the academic year.	School head, teachers, administrator and resource speakers	MOOE PTA Fund	₱30,000.00	*Establishment of a mentorship program where experienced professionals guide the newer ones in navigating ethical challenges.
Co-worker relationships	To promote collaboration and removes barrier to teamwork and goal accomplishment across the organization. Develop teachers' skills in	Improve teachers' teamwork and collaboration. Provide training on active listening, giving and receiving feedback,	Throughout the academic year.	School head, teachers, administrator and resource speakers	MOOE PTA Fund	₱30,000.00	Establishment of trust and open communication among teachers through regular team-building activities. Implementation of a system for teachers to provide

	effective communication, conflict resolution, and teamwork	and having difficult conversations Facilitate team-building exercises and collaborative planning sessions					constructive feedback to each other and share best practices. Enhanced collective problem-solving and shared ownership of school initiatives
Year 3: Integration and Sustainability							
Professionalism and Ethics	*Integrate ethical practices into everyday operations. *Sustain a commitment to professionalism and ethics.	*Conduct Policy Review to update organizational policies. *Encourage continuous education *Implement recognition programs that reward employees who exemplify ethical behavior and profession	Throughout the academic year.	School head, teachers, administrator and resource speakers	MOOE PTA Fund	₱30,000.00	*Implementation of an Updating Session focusing on present policies in the organization. *Conduct of Recognition programs for teachers.

		alism in their work.					
Co-worker Relationships	*Integrate relationship-building practices into daily operations. *Create a supportive and inclusive workplace culture.	*Reinforce continuous learning opportunities. *Establish Teacher Resource Groups as platform for teachers to share their interests. *Conduct an annual relationship assessment	Throughout the academic year.	School head, teachers, administrator and resource speakers	MOOE PTA Fund	₱20,000.00	*Establishment Teacher Resource Group *Crafted Program Matrix for the conduct of annual relationship assessment and recognition.

DISCUSSION

Research question 1 highlights the respondents' core behavioral competencies in terms of self-management, professionalism and ethics, results-focus, teamwork, service orientation and innovation. The results reveal that the respondents consistently demonstrate their self-management skills in their teaching jobs specifically in setting personal goals and directions, needs and development. Also, a noteworthy commitment to teaching is evident, with the majority of teachers demonstrating the values and behavior enshrined in the Norms and Conduct and Ethical Standards for public officials and employees (R.A.6713). Moreover, the teaching workforce is found to achieve results with optimal use of time and resources most of the time. Furthermore, in terms of teamwork, the teachers were found to have applied negotiation principles in arriving at win-win agreements, ensuring peace and harmony in the workplace. Also, teachers develop and adopt service improvement programs through simplified procedures that will further enhance service delivery as part of their service orientation. Finally, the majority of teachers express positive responses in promoting a creative climate and inspiring co-workers to develop original ideas or solutions.

Generally, research question 2 outlines the findings on teachers' job satisfaction in areas such as work and workplace, supervisor and management, benefits and rewards, recognition, communication and co-worker relationship. Teachers are contented in their work and workplace, with mean scores ranging from 4.19 to 4.40, all categorized as "Satisfied." In supervisor and management, they feel satisfied in their superior who acknowledges their achievements and contribution in the organization. In benefits and rewards, they feel satisfied with the retirement and pension plans offered by the department. Teachers are also satisfied with the overall recognition and appreciation they receive for their work as a teacher. In communication, teachers are highly satisfied when the organization encourages open and transparent communication among all of its stakeholders. Finally, in terms of co-worker relationships, they are satisfied whenever they offer and receive support during challenging times, both personally and professionally.

Further, in research question 3, the significant relationship between core behavioral competencies and teachers' job satisfaction is tested at 0.01 level. The results highlight that a significant and weak positive relationship exists between core behavioral competencies and teachers' job satisfaction, with an r-value of .281 and a p-value of .032. This indicates that as the self-management improves, there is a corresponding improvement in teachers' job satisfaction. The statistically significant p-value suggests that this relationship is highly unlikely to be due to chance. Therefore, the data strongly support the concept that higher core behavioral competencies would yield a better job satisfaction level.

Conclusions

From the findings and discussions outlined, the following conclusions are drawn:

The core behavioral competencies of teachers within the Division of Valencia City demonstrate commendable goal-setting skills, consistently showcasing the values and behavior based on standards, constantly achieving results efficiently, and guaranteeing the use of negotiation principles in whatever circumstances. Moreover, teachers yield to simplifying procedures to enhance service delivery, promote a creative climate and inspire co-workers to develop original ideas or solutions.

The assessment of teachers' job satisfaction reveals a consistent satisfied response across various areas, which could significantly contribute to elevating teacher retention in the field and fostering a culture of working with fulfillment within educational institutions. However, while they excel in some areas, there is a room to improve the satisfaction levels of teachers in other parts by continuously studying the different factors that warrant a higher level of fulfillment.

The significant relationship observed between core behavioral competencies and teachers' job satisfaction emphasizes the vital part of a high level of core competence in enhancing the teacher's level of fulfillment in his/her job. Therefore, investing in strategies

to reinforce the development of these core behavioral competencies can be contribute in promoting a joyful, contented and fulfilled teaching force whose influence transcends not only inside the classroom but to the whole community.

Recommendations

Based on the relevant findings and conclusions drawn, this study proposed the following recommendations:

1. The Department of Education may implement programs to revisit the standards of professionalism and ethics. Additionally, they could plan support mechanisms and schemes to focus on requiring aspiring teachers to demonstrate proficiency in the professional standards before earning certification as well as providing mentoring and induction support for new teachers to help them develop as professionals.
2. The teachers could grab opportunities to enhance coworker relationships such as fostering open and clear communication, building trust and respect, cultivate a sense of camaraderie and kindness and seek opportunities to be a mentor to a colleague. These could be achieved through active participation in team building activates and other collaborative endeavors.
3. The Division of Valencia may facilitate a supportive environment not only for teachers' professional growth but also for teachers' well-being. They may initiate development programs that aim to develop core behavioral skills to promote job fulfillment and eventually address issues on teacher retention.
4. The schools in the Division of Valencia City may opt to adopt the teacher competency development plan designed in this study in order to ensure that teachers are satisfied across areas of their teaching job. They may use this comprehensive approach to develop the core behavioral competencies that are essential for their job satisfaction, effectiveness, and the overall success of the school.

Compliance with Ethical Standards

Before starting the study, the researcher submitted the manuscript for ethics review and earned clearance from the office of the Graduate Studies spearheaded by the research coordinator. After which a permit letter to conduct the study signed by the dean was given to the researcher. The proposal was then submitted to the Office of the Schools Division of Valencia City for approval. It was important to emphasize that selected participants and those who chose to participate for any reason participated voluntarily, without any coercion or intimidation. Respondents reserve the right to refrain from answering any questions if they feel uncomfortable.

All respondents received an information letter explaining the purpose, procedures, risks, and benefits of the study and providing the details necessary to make an informed decision to participate. These communications explicitly stated that all information

collected during the study was treated strictly anonymously and no individual names be mentioned. Additionally, respondents were asked to sign a consent form confirming their voluntary participation.

After the study was completed, all respondents had access to the study results. All completed questionnaires were stored securely and access to the data was restricted to researchers and their advisors only. It was very important to emphasize that no physical, emotional, or mental harm can caused to the participants throughout the research process.

The researcher worked with integrity, which included accurately reporting data and results, avoiding fabrication or falsification, and being transparent about methods and findings.

Acknowledgments

Heartfelt gratitude is extended to the following individuals and institutions who have contributed to the development and successful completion of the research proposal.

Dr. Braziel L. Ongcachuy, the Dean of the School of Graduate and Professional Studies, for her unswerving responsiveness and unceasing encouragement;

Dr. Gina F. Labitad, the dissertation adviser, for her consistent support, invaluable suggestions, and steadfast professional guidance and motivation especially during those times when the researcher is on the verge of giving up already. Her dedication to guiding the researcher was the driving force that kept her on track;

Dr. Gerlinda G. Corpuz, together with the rest of the panel members, for their intensive evaluation, constructive opinions, and insightful suggestions which contributed to the formation of a relevant research endeavor;

The School of Graduate and Professional Studies staff, with a special mention to Mr. Verge Samson, is recognized for their ongoing support and assistance; and

To God Almighty for providing everything needed for the success of this endeavor.

REFERENCES

Agustin, R.C. (2022). The teachers' orientation towards philosophies of education and teachers' competence. Retrieved from: https://www.academia.edu/55933345/the_teachers_orientation_towards_philosophies_of_education_and_teachers'_competence

Alibang, E. (2023, November). Dealing the challenges in Philippine education: A teacher's perspective. Medium.

https://medium.com/@elenitafalibang/dealing-thechallenges in-philippine-education-a-teachers-perspective-a96800d2db7c
Alyami, A., Abdulwahed, A., Azhar, A., Binsaddik, A., & Bafaraj, S. M. (2021). Impact of time-management on the student's academic performance: A cross-sectional study. Creative Education, 12(03), 471–485. https://doi.org/10.4236/ce.2021.123033
Andrews, H. (2021). Supporting quality teachers with recognition. Australian Journal of Teacher Education, 36(12), 59-70.
Ares, L. (2022). Relationship with colleagues towards job satisfaction of teachers teaching Filipino. International Journal of Science and Research, 7(42), 1729-1733
Baluyos, G. R., Rivera, H. L., & Baluyos, E. L. (2019). Teachers' job satisfaction and work performance. Open Journal of Social Sciences, 07(08), 206–221. https://doi.org/10.4236/jss.2019.78015
Bautista, M.C.(2023). The learning crisis in Philippine education: An overview. Philippine Institute of Development Studies, 7(3), 1-22
Binauhan, R. (2019). Learning action cell implementation in the public elementary schools in the division of Cavite. International Journal of Advanced Research and Publication, 3(11), 27-33.
Bieg, S. (2022). Teachers' enthusiasm and humor and its lagged relatioships with students' enjoyment and boredom- A latent trait-state-approach. European Association for research on Learning and Instruction, vol.81
Bishnoi, A.S. (2023, September). The importance of teamwork in schools. LinkedIn. https://www.linkedin.com/pulse/importance-teamwork-schools-anoop-singh-bishnoi
Bona, J. (2022). Job satisfaction among public school teachers, dba college of business and management, Surigao del Sur State University. Science
Buonomo I, Pansini M, Cervai S, Benevene P. (2022). Compassionate work environments and their role in teachers' life satisfaction: The contribution of perceived collective school performance and burnout. International Journal of Environmental Research in Public Health,19(21), 14206. doi: 10.3390/ijerph192114206.
Candra, A., Sudiro, A., & Susilowati, C. (2023). The relationship between work professionalism and job satisfaction toward employee performance in mediating of organizational climate. International Journal of Research in Business and Social Science, 12(2), 177–186. https://doi.org/10.20525/ijrbs.v12i2.2380
Childress, S. (2019, December). Teachers trust each other more than they trust experts. Thomas D. Fordham Institute.https://fordhaminstitute.org/national/commentary/teachers- trust- each-other-more-they-trust-experts
Chiloane, T. (2023, November). Effective communication with stakeholdersensures business success. communication-stakeholders-ensures-business-chiloane

Choroszewicz, M., & Adams, T. L. (2019). Gender and age in the professions: Intersectionality, meta-work, and social change. Professions and Professionalism, 9(2). https://doi.org/10.7577/pp.3432

Cruszos, R. B. (2022). The core behavioral competencies, work attitudes and teaching performance of senior high school teachers: Input for an intervention scheme. Zenodo (CERN European Organization for Nuclear Research). https://doi.org/10.5281/zenodo.7463277

Cuballa, M.T. (2023, July). Filipino teachers: Their struggles and hope. https://main.vibalgroup.com/blogs/whats-new-in- vibal/filipino-teachers-their-struggles-and-hope. International (Lahore), 32(2), 215-219.

Dahl, K. K. B. (2020). Movements in professional identification: achieving professional identity and becoming a teacher in Danish And Kenyan teacher education. A Journal of Comparative and International Education, 50(1), 123– 140.

Earp, J. (2022, February). Teacher time pressures impacting effective classroom practice. https://www.teachermagazine.

Fabella, F. E. T., So, K. F., Ybut, G. P., & Joven, J. a. A. (2022). Job satisfaction of selected Filipino teachers working in Philippine public schools and in U.S. public schools: A comparative study. Zenodo (CERN European Organization for Nuclear Research). https://doi.org/10.5281/zenodo.7790596

Fernandes, S., Araújo, A. M., Miguel, I., & Abelha, M. (2023). Teacher Professional development in Higher Education: The impact of pedagogical training perceived by teachers. Education Sciences, 13(3), 309. https://doi.org/10.3390/educsci13030309

Froehlich, M. (2021, November). What can divergent thinking do for you (The Teacher)? https://www.mandyfroehlich.com/post/what-can-divergent-thinking-do-for-you-the-teacher

Garcia, E. (2019, July). Teachers need better professional development opportunities, more support. Economic Policy Institute. https://www.epi.org/blog/teachers-need-better-professional-development-opportunities-more-support-from-the-system/

Gomez, J.A. (2023). Work environment and job satisfaction of teachers. International Journal of Research Publications, 126(1), 32-48. DOI: 10.47119/IJRP1001261620224971

Gumahad, M. (2023). Teachers' compliance of republic act 6713 and their performance level: Basis for faculty enhancement program. International Journal of Multidisciplinary Studies, 1(1), 1-22.

Gumiran, I. (2022). Life of Filipino educators after retirement: A Reflective Phenomenological Study.https://www.researchgate.net/publication/361745852_LIFE_OF_FILIPINO_EDUCATORS_AFTER_RETIREMENT_A_REFLECTIVE_PHENOMENOLOGICAL_STUDY#fullTextFileContent

Hodges, T. (2023). Why appreciating teachers is more important than you think.. https://news.gallup.com/opinion/gallup/210041/why-appreciating-teachers-important-think.aspx

Hoque, K. E., Wang, X., Qi, Y., & Norzan, N. (2023). The factors associated with teachers' job satisfaction and their impacts on students' achievement: a review

(2010–2021). Humanities and Social Sciences Communications, 10(1). https://doi.org/10.1057/s41599-023-01645-7
Johnsons, D. (2023, August). Punctuality is a virtue. Character Core Magazine by Strata Leadership, https://rev0.org/articles/post/punctuality-is-a-virtue
Keshavdas M. (2020, April). How to simplify the product deliver process. https://www.fleetroot.com/blog/how-to-simplify-the-product-delivery- process
Keshmiri, F., & Hosseinpour, A. (2022). Interprofessional professionalism as a motivating force in interprofessional collaboration. Journal of medical ethics and history of medicine, 15, 8. https://doi.org/10.18502/jmehm.v15i8.11050
Kheswa, J. (2020). Exploring the impact of ineffective communication on educators' teaching performance at primary schools. International Journal of Educational Sciences, 11(03). https://doi.org/10.31901/24566322.2019/11.03.12
Kramer, R. S., & Tree, J. J. (2023). Investigating people's metacognitive insight into their own face abilities. Quarterly Journal of Experimental Psychology, 3(10). https://doi.org/10.1177/17470218231218662
Malipot, M. (2022, September). Hertbreaking: Group says more Filipino teachers apply for work abroad. Manila Bulletin. http//mb.com.ph/2022/09/30
Merrimack College and the EdWeek Research Center (2022). A profession in crisis: Findings from a national teacher survey. https://www.edweek.org/research-center/reports/teaching-profession-in-crisis-national-teacher-survey
Mohd Rokeman, N. R., Che Kob, C. G. and Che Sobry, H. (2023). The role of reward in teachers' job satisfaction towards job performance: A literature review. Malaysian Journal of Social Sciences and Humanities 8(11), 25-91. doi: 10.47405/mjssh.v8i11.2591.
Movsessian, J. (2019). The need for teacher recognition and its impact on school culture. International Journal of Business and Management, 5(2), 159-180.
Nadeem, M. (2020). Exploring the impact of ineffective formal communication between teachers and students: A case study of mustaqbal University and Jubail University College, Kingdom of Saudi Arabia. Canadian Center of Science and Education, 19(16), 47-62.
Odindo, C. (2020, February). Goal setting as antecedent of teachers' performance in public secondary schools. https://www.researchgate.net/publication/347385651_Goal_Setting_as_anAntecedent_of_Teachers_Performance_in_Public_Secondary_Schools
Ortile, F. (2023). Innovation of senior high school science teachers. American Journal of humanities and Social Sciences Research, 7(5), 29-33.
Ozkan, U. (2022). Teachers' job satisfaction:multilevel analyses of teacher, school and principal effect. Forum for International Research in Education, vol.7,pp 1-23
Perines, H. (2020). Educational research training in teacher training program: The views of future teachers. International Education Studies, 14(1), 913-920
Polega, M. (2019). Principals and teamwork among teachers: An Exploratory Study. International Journal of Educational Management, 8(4), 38-44. DOI: 10-26843/ae19828632v12n2019p12a32
Rabotan P. (2019). Fostering teacher teamwork: Strategies and challenges for school heads a study of community secondary schools in Nyamagana- Mwanza,

Tanzania. Asian Journal of Education and Social Studies, 50(4), 212–226. https://doi.org/10.9734/ajess/2024/v50i41324
Raebum, D. (2023). Risk actuated public interest disclosure practices of nurses working in mental health pertaining to confidential information of patients. Issues in Mental Health Nursing44(6):474-481. doi: 10.1080/01612840.2023.221425
Rataj, M. (2022, August). Behavioral competency: All you need to know. Together. https://www.sloneek.com/blog/behavioral-competency/
SEAMEO INNOTECH (2021). Policy note: Exploring teachers' whys. SEAMEO Regional Center for Educational Innovation and Technology .
Smith, T.E. (2022). Self-management interventions for reducing challenging behaviors: Campbell Systematic Reviews, 3(12), 1-19.
Soriano, E. (2019). Profile and performance level of core behavioral competencies and skills of Dipintin High School teachers. Ascendens Asia Journal of Multidisciplinary Reseacrh Abstracts, 3(2m).
Spence, C. (2022, September). Why every teacher should be a part of a community. Cambridge. https://www.cambridge.org/elt/blog/2022/04/22/every-teacher-teaching-community/
Tannous, A. (2021). Impact of communication on teachers' satisfaction and prodcutivity: Case of private schools in Dubai. Asian Journal of Humanities and Social Studies, 2(32), 1-27.
Troeger, M. (2021). Teacher job satisfaction among k-12 public school teachers: A mixed methods study. Digital Commons, 1-35.
Viray, B. (2022). Teacher job satisfaction: the importance of school working conditions and teacher characteristics. Educational Review, 73(1), 71–97. https://doi.org/10.1080/00131911.201

.

APA Citation:

Ambasa, R. W., & Labitad, G. F. (2024). CORE BEHAVIORAL COMPETENCIES AND TEACHERS' JOB SATISFACTION: BASIS FOR TEACHER COMPETENCY DEVELOPMENT PLAN. Ignatian International Journal for Multidisciplinary Research, 2(8), 1216–1261. https://doi.org/10.5281/zenodo.13346977

Corresponding author: *rosalie.ambasa@deped.gov.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

CULTIVATING CLIMATE CHANGE CONSCIOUSNESS: ASSESSING TEACHERS' AWARENESS AND MITIGATION PRACTICES IN ADDRESSING CLIMATE CHANGE

Sherylene S. Reyes, Bryan DC. Gabriel, PhD

Graduate School Department, Bulacan Agricultural State College,
San Ildefonso, Bulacan, Philippines

https://doi.org/10.5281/zenodo.13329221

ABSTRACT

The purpose of this study was to analyze the awareness level of middle school (JHS) and high school (SHS) teachers on climate change and climate change mitigation using descriptive and purposive sampling methods. A 5-point Likert scale was used to collect data. The survey revealed that there are more female than male and more Junior High School Teachers than Senior High School Teachers that are respondents of this study. It showed that respondents are aware on the causes of climate change like greenhouse gases, fossil fuels, and activities that is related to industrial field, but they are not familiar with wind energy and dairy products as contributor to the climate change. The different ways to reduce climate change are walking, cycling, and reducing food waste, while taking the trains instead of flying was not common to the respondents. But as class type is concerned, Junior High School Teachers and Senior High School Teachers does not show a significant difference on the awareness of respondents about climate change. The findings highlight the importance of professional development programs, climate change integration on curriculum, and collaboration activities that will promote climate change education and development of climate change strategies that teachers can be used in their teaching.

Keywords: *Climate change, Awareness, Mitigation, Sequential-explanatory, Earth and life Science*

INTRODUCTION

Climate change has been a big challenge for most of the countries especially for the Philippines. Based on the World Risk Report in 2017, the Philippines place as the third most vulnerable country to climate change. It causes massive problem such as GDP annual losses, continuous changes in rainfall patterns and distribution, droughts, threats to biodiversity and food security, rise of sea level, risks in public heath, and risks on vulnerable groups such as women and indigenous people (NICCDIES, 2024).

Climate change can cause the GDP loss of the Philippines up to 6% by 2100. According to the Asian Development Bank on the economics about climate change, the country's GDP can lose 6% annually if climate change will be disregarded. Aside from the GDP loss, major rainfall patterns and distributions changes can affect the country. On the report of Philippine Atmospheric Geophysical and Astronomical Services (PAGASA) last 2011, the rainfall in the country may decrease in the year 2020 except from Luzon. While in terms of heavy rainfall, the number of days is expected to be much higher with the global warming by the year 2020 and 2050 (NICCDIES, 2024).

On the Executive Brief No. 2018-01, in line with the ecosystem of the Philippines, climate change has a big impact on the grassland and coral reefs. It is estimated that 1 million hectares of grassland can be highly affected by the changes in the future. These grasslands are prone to fires especially during dryness and less rainfall during summer months. 98% of the coral reefs are nearly extinct and may die by 2050, based on the 2016 Low Carbon Monitor Report. This will continue if the global warming trends will not be ended. The fish catch may also be affected that can cause a decrease by almost 50% compared to the levels on the year 2001-2010. It just shows that climate change has a big impact on the ecosystem. Addition to this, food supply is also affected by the climate change. A decrease of 10% for each 1 degree Celsius in growing-season minimum temperature in the dry season.

Based on the Climate Change Commission (2010), the National Framework Strategy on Climate Change for the year 2010-2022 is crafted to ensure and strengthen the adaptation of the natural environment and human communities to the changes in climate. It highlighted the critical aspect of adaptation meant to be translated to all governments. The Philippine Climate Change Scenarios for year 2020 and 2050 is also projected in this framework, the annual mean temperature, annual mean rainfall, and sea level rise are discussed that shows the possible extreme events that might happen.

What are the findings that might help in understanding this climate change? As discussed on the 5th Intergovernmental Panel on Climate Change (IPCC), there are three findings on climate change; "*1.) Human influence on the climate system is clear; 2.)anthropogenic emission of greenhouses are the highest in history; and 3.)recent climate changes have impact on human and natural system".* The Philippines is among the most top country that is affected by the climate change, that aside from the natural causes, human-work activities also contributed to climate change according to Dr. Alcala of Siliman University.

The use of fossil fuels, deforestations, and increase productivity of greenhouse gases such as burning of oil, gas, and coal are all human-made.

To lessen the contribution of the humans in climate change, there are still responses that needs action by individuals and communities such as changes in behavior, actions through the initiatives of local governments, national government agencies through national policies and programs (Alcala, n.d.).

The purpose of this study is to assess the level of awareness and mitigation practices of the Junior High School (JHS) and Senior High School teachers that helps them in relaying this knowledge to their students that might help in contributing to the solution on reducing the human-made cause of climate change.

Research Questions

This study aims to assess the level of awareness and mitigation practices of Junior High School Teachers and Senior High School Teachers on climate change.

Specifically, this sought to answer the following questions:

1. How can the profile of the respondents of the teachers be described in terms of:
    a. Sex; and
    b. Class type?
2. What is the level of awareness among Junior High School and Senior High School Science Teachers regarding climate change?
3. To what extent are Junior High School and Senior High School Science Teachers knowledgeable about various mitigation practices for climate change?
4. Is there a significant difference in the level of awareness regarding climate change when groups are categorized by sex?
5. Is there a significant difference in knowledge on mitigation practices for climate change when groups are categorized by sex?
6. Is there a significant difference in the level of awareness regarding climate change when groups are categorized by class type?
7. Is there a significant difference in knowledge on mitigation practices for climate change when groups are categorized by class type?

METHODOLOGY

The respondents of this study will be coming from the Junior High School and Senior High School level of Partida National High School located at Partida, San Miguel, Bulacan. Purposive sampling method, also known as selective sampling, a non-probability sampling method. This type of sampling method is better for matching sample to the aims and objectives of the research, hence improving the accuracy of the study and the reliability of the data and the results. The use of purposive sampling is one way to select

respondents who are believed to provide appropriate and useful information (Campbell et.al., 2020). Furthermore, based on Crossman (2020), a purposive sampling is a non-probability sample that is selected based on characteristics of a population and the objective of the study. The total respondents of the study are forty-seven (47) teachers that are currently teaching in Partida National High School at Partida, San Miguel, Bulacan.

The data gathering procedure encompasses different steps to ensure that the collection of data will be accurate and reliable. This procedure involved three main stages: the preparation of the questionnaire, the pilot testing, and the administration of the questionnaire. The first procedure involved the reviewing of the original questionnaire to ensure that the content is relevant and clear for the current research study. This should be aligned to the demographic and specific objectives of the research. Afterwards, before the administration of the questionnaire, pilot testing for the adapted questionnaire should be done with small group of participants or ten (10) non-participating individuals who are engaged in the topic of climate change. This step will ensure that unnecessary data will be identified, and adjustments can be made based on the feedback, it will ensure that the questions will effectively measure the intended objectives. Finally, the instrument will be distributed to the target respondents, ensuring proper systematic procedures and ensured the collection of high-quality and dependable data for subsequent analysis and interpretation. The administration of the questionnaire involved several steps that needs to be taken to ensure the validity and reliability of data. The respondents should be informed about the covered topics, purpose of the study, data collection process, and the handling of information. Data security, storage, transfer, and destruction should be discussed to ensure the data will be kept confidential and secure. Finally, the questionnaire can be distributed. This questionnaire should be completed by the respondents. They should be given enough time to complete it, and the researcher must be available in time of queries and clarifications on the questionnaire.

This survey questionnaire will act as instrument for the collection of data. The research instrument that will be utilized is adapted from the study of Ratinen (2021) with the title “Students’ Knowledge of Climate Change, Mitigation and Adaptation in the Context of Constructive Hope”. This questionnaire aims to know the students’ understanding of climate change, their knowledge about mitigation and adaptation strategies, and their whole sense of hope about climate action. The instrument uses two (2) parts; the part one tackled the “climate change knowledge”, and the second part is the “climate change mitigation knowledge. These two parts of the instrument uses a 5-point Likert scale with the alternative answers: Strongly disagree-1, Disagree-2, Neither disagree nor agree- 3, Agree- 4, and Strongly Agree- 5. The first part of the instrument is composed of fourteen (14) questions that tackles the climate change knowledge of the respondents. These questions were validated with the use of Cronbach’s Alpha with a result of 0.86. Second part that talks about the climate change mitigation knowledge is composed of ten (10) questions that uses the same alternative answers. The Cronbach’s alpha for these items is 0.78. Analysis of data will be performed with the use of appropriate statistical tool after gathering the data. With the use of pretest, posttest, and retention test, the researcher will employ statistical analysis to examine the quantitative data. Both descriptive and

inferential statistic will be utilized to check and confirm the hypothesis of the study. To provide a clear summary of data characteristics for the variables such as sex and class type, frequency and percentage will be used to identify and interpret the profile of the respondents. While weighted mean will be used to measure the level of awareness of the teachers in understanding climate change. For the inferential statistics, to analyze the differences between the independent and dependent variables, Independent Sample T-test will be utilized. Using this tool, the differences in implementation practices based on sex and class type will be identified.

RESULTS

This study assesses the level of awareness and mitigation practices of Junior High School Teachers and Senior High School Teachers on climate change. The instrument uses two (2) parts; the part one tackled the “climate change knowledge”, and the second part is the “climate change mitigation knowledge. These two parts of the instrument uses a 5-point likert scale with the alternative answers: Strongly disagree-1, Disagree-2, Neither disagree nor agree- 3, Agree- 4, and Strongly Agree- 5.

Table 2.

Description of Demographic Profile of the Respondents in terms of Sex

Sex	Number of Respondents	Percentage (%)
Female	34	77.27%
Male	10	22.73%
TOTAL	44	100.00%

Table 2 presents the demographic profile of the respondents in terms of sex. It can be seen from the table that majority or 77.27% of the respondents are females and the remaining 10 or 22.73% are males.

Results of the analysis imply that respondents (Junior High School and Senior High School Teachers) are dominated by females.

Table 3.

Description of Demographic Profile of the Respondents in terms of Class Type

Class Type	Number of Respondents	Percentage (%)
Junior High School	35	79.55 %
Senior High School	9	20.45 %
TOTAL	44	100.00%

The data in table 3 indicates that a significant majority of the respondents, 35 out of 44, or 79.55%, are Junior High School teachers. In contrast, only 9 out of 44 respondents, or 20.45%, are Senior High School teachers.

The analysis suggests that the teaching population sampled in this study is heavily skewed towards Junior High School educators. This imbalance may reflect the larger number of Junior High School positions available compared to the Senior High School.

Table 4.

Respondents' Level of Climate Change Awareness

Item Statement Climate change increases because…	Weighted Mean	Interpretation
There is too much greenhouse gas (GHG)	4.68	Strongly Agree
Too much IR radiation stays on the Earth	4.55	Strongly Agree
We use fossil fuels such as oil and coal	4.59	Strongly Agree
Purchased products generate GHGs	4.50	Strongly Agree
Nitrogen oxides are released from fertilizers	4.34	Strongly Agree
Landfills produce methane	4.25	Strongly Agree
There is intensive forest logging	4.66	Strongly Agree
We are using nuclear power	4.05	Agree
We are using wind power	3.32	Neither Agree nor Disagree
There is too much consumption of milk and dairy products	3.41	Agree
The Earth has an ozone hole	4.39	Strongly Agree
Emitted IR radiation is absorbed by GHGs	4.16	Agree
Factories and cars increase temperature	4.59	Strongly Agree
Standard Deviation		0.89
Grand Mean	4.27	Strongly Agree

Legend:
4.21 - 5.00 – Strongly Agree
3.41 - 4.20 - Agree
2.61 - 3.40 – Neither Agree nor Disagree
1.81 - 2.60 – Disagree
1.00 - 1.80 – Strongly Disagree

The highest level of awareness, denoted by "strongly agree," is related to statements such as "There is too much greenhouse gas (GHG)" and "We use fossil fuels such as oil and coal," which had weighted averages of 4.68 and 4.59, respectively. Statements such as *"We are using wind power" and "There is too much consumption of milk and dairy products"* received lower means of 3.32 and 3.41, respectively, indicating that respondents are less aware or convinced of the impact of these issues. The standard deviation of 0.89 represents moderate response variability, while the grand mean of 4.27 indicates that, on average, respondents "strongly agree" with the listed causes' considerable impact on climate change.

The findings show that respondents are well-aware of the key causes of climate change, such as greenhouse gas emissions, fossil fuels, and industrial activities, and they are generally in agreement about their responsibilities. The lack of awareness about wind power and the impact of dairy products suggests that education should be used in this area. Overall, the findings suggest that, while the major climate change issues are well-known, increasing knowledge about lesser-known ones may improve understanding and support for comprehensive climate action.

While validating this data, Agboola and Emmanuel (2016) found that students are familiar with the concepts of climate change. Access to information and personal experiences as well as public markets and education have a profound impact on their thinking. The study also found that there was no gender difference in climate change and sustainable development awareness (t=0.733 > 0.05). The perception of the teachers on climate change differs significantly (t= 0.013).

Table 5.

Respondents' Level of Knowledge about Various Mitigation Practices

Item Statement If the climate is to change as little as possible, we need to…	Weighted Mean	Interpretation
use public transport more	3.66	Agree
walk and bicycle more	4.52	Strongly Agree
avoid food waste	4.52	Strongly Agree
eat local food	4.14	Agree
reducing dairy products	3.75	Agree
favour a vegetarian diet	4.02	Agree
purchase less goods	3.89	Agree
by lowering room temperature	3.82	Agree
travel inland	3.70	Agree
use trains not planes	3.57	Agree
Standard Deviation		0.97
Grand Mean	3.96	Agree

Legend:
4.21 - 5.00 – Strongly Agree
3.41 - 4.20 - Agree
2.61 - 3.40 – Neither Agree nor Disagree
1.81 - 2.60 – Disagree
1.00 - 1.80 – Strongly Disagree

The table shows the weighted means and interpretations for various climate change mitigation practices as perceived by the respondents. The highest levels of agreement,

categorized as "Strongly Agree," are associated with the statements "walk and bicycle more" and "avoid food waste," both receiving a weighted mean of 4.52.

In contrast, the “use of train, nor plane” option received a low mean of 3.57 indicating a low level of agreement. A deviation of 0.97 indicates significant difference in results, while a weighted average of 3.96 indicates an overall “Agree” sentiment and a slight tendency towards reduced dairy products. The results indicate that respondents strongly support and agree on actions such as increasing cycling and avoiding food waste as effective measures to combat climate change. While there is general agreement on several activities, such as consuming local foods and reducing dairy products, low levels of on actions such as using trains instead of flying, it suggests that some measures need to reduce consumption. The survey result strengthens and educate action in reducing climate change.

Abbass et al. (2022), discussed climate change as long-term change in global climate that represents a major problem at different levels of the world. The results showed that participants strongly agreed that activities such as encouraging cycling and preventing food waste are effective measures to combat climate change. While there is general agreement on many measures such as eating local food and reducing dairy products, disagreements on measures such as the use of train instead of flying suggest that some measures reduce emissions may not be prioritized, or even possible. The agricultural sector is particularly affected as climate change threatens the production of food and raw materials, thereby threating global food security. It does not threatens food availability, but also accelerates ecosystem loss by altering ecosystems and pushing and may species beyond their desired temperature.

Table 6.

Test of Significant Difference on Level of Climate Change Awareness of the Respondents based on their Sex

	Mean	t-value	p-value	Decision	Interpretation
Male	4.34	0.94	0.3453	Accept H_o	Not Significant
Female	4.25				

Legend: <0.05 = significant

The figure compares climate change awareness scores between male and female respondents. The average score for men is 4.34 and for women in 4.25, p value is 0.3453. considering that the p-value exceeds the normal significance level of 0.05, the null hypothesis is accepted. This shows that there is no significant difference between male and female participants in terms of climate change perception. The results mean that gender does not play a significant role in the perception of climate change among participants. As the non-significant p-value indicates, both male and female participants show the same level of awareness. These finding suggest that climate change

perceptions are evenly distributed in this sample and that some other factors may plan an important role in determining the level of campaigns.

In contrast, according to World Health Organization (WHO), (2014), women and men have different roles, behaviors, and attitudes towards addressing climate change. Surveys demonstrate that in many nations, men utilize more energy. Women typically make more domestic purchasing decisions, such as food, water, and energy, than men, especially for private transportation. Gender inequalities exist when it comes to the health and safety hazards associated with emerging technology for reducing greenhouse gases. Such data could aid in more targeted more effective efforts to implement healthy and environmentally sustainable policies.

Table 7.

Test of Significant Difference on Level of Knowledge on Mitigation Practices for Climate Change of the Respondents based on their Sex

	Mean	t-value	p-value	Decision	Interpretation
Male	4.01	0.78	0.4355	Accept H_o	Not Significant
Female	3.94				

Legend: <0.05 = significant

The data compares the mean scores for knowledge of climate change mitigation practices between male and female respondents. The mean score for males is 4.01, while for females it is 3.94. The t-value is 0.78 with a p-value of 0.4355. Since the p-value is higher than the typical significance level of 0.05, the null hypothesis is accepted. This indicates that there is no significant difference in the level of knowledge about climate change mitigation practices between male and female respondents.

The results imply that sex does not have a significant effect on the level of knowledge regarding climate change mitigation practices among respondents. Both male and female respondents have similar levels of knowledge, as demonstrated by the non-significant p-value. This finding suggests that the understanding of mitigation practices is consistent across genders in this sample, and other factor may need to be explored to identify variations in knowledge levels.

McCright (2010), used 8 years of Gallup data on climate change awareness and concern in the US general public, this study puts theoretical claims regarding gender differences in scientific knowledge and environmental concern to the test. Contrary to expectations from scientific literacy research, women convey a higher-rated scientific understanding of climate change than men do. According to much existing sociology and science research, women underestimate their understanding of ecological change more than men do. Furthermore, women are slightly more concerned about climate change than men, and

this gender gap is not explained by differences in important values and beliefs or by the social roles that men and women play in society.

Table 8.

Test of Significant Difference on Level of Climate Change Awareness of the Respondents based on their Class Type

	Mean	t-value	p-value	Decision	Interpretation
Junior High School	4.26	-0.31	0.7566	Accept H_o	Not Significant
Senior High School	4.30				

Legend: <0.05 = significant

This table shows the statistical comparison of climate change awareness scores among junior and senior high school level participants. The average score for high school teachers is 4.26, while senior high school teachers rate is slightly higher at 4.30. the p-value is 0.1. Considering that the 31st value exceeds the normal level of 0.05 with a p-value of 0.7566, the null hypothesis is accepted. This shows that there is no significant difference in the level of attitude towards climate change according to class level.

The results mean that type class (junior high school vs. senior high school) does not significantly change the level of climate change awareness among the participants. As the non-significant p-value indicates, both groups show the same level of awareness. These findings suggest that climate change awareness is heterogeneous phenomenon and other variables may be important in determining the differences in awareness.

Table 9.

Test of Significant Difference on Level of Knowledge on Mitigation Practices for Climate Change of the Respondents based on their Class Type

	Mean	t-value	p-value	Decision	Interpretation
Junior High School	3.86	-4.33	0.001	Reject H_o	Significant
Senior High School	4.38				

Legend: <0.05 = significant

The data compares the average knowledge scores of respondents on climate change mitigation with high school. The average score for junior high school respondents is 3.86, while the average score for senior high school respondents is higher at 4.38. the t-value is 4.33 with a p-value of 0.001. Since the p-value is below the normal level of 0.05, the null hypothesis is rejected. This shows that there are significant differences in the level of knowledge about mitigation to climate change based on class type.

The mean of the class type (junior high school vs. senior high school) has a significant effect on the level of knowledge about climate change. As indicated by the significant p-value, senior high school have higher knowledge that junior high school respondents. This study shows that junior high school respondents may be more exposed to reciprocity education and suggests the need to revise and develop information programs for high school teachers to increase understanding in educational institutions.

According to the results of the online poll (Likert scale), youngsters have low confidence in how well their education has prepared them for climate change and mitigation efforts. However, the majority (88%) believe that their activities and lifestyle choices can help reduce CC. Knowledge of the relative efficacy of GGE-reducing actions was generally poor (Wilcoxon signed rank tests and open-ended responses), with recycling overestimated and having one fewer child underestimated, implying that youth lack the necessary knowledge to maximize CC mitigation through personal choices. Our findings have implications for high school curricula, community college education, and policy in general (Pickering et al., 2020)

Conclusions

Based on the findings, the researcher had drawn the following conclusions:

1. The most numbers of the Junior High School Teachers and Senior High School Teachers are female, while the least number of teachers from JHS and SHS level and male.
2. Junior High School Teachers has the greatest number of respondents compared to the number of Senior High School Teachers.
3. Majority of the respondents shows a high level of awareness about the major contributors to climate change such as the greenhouse gases, fossil fuels, and industrial activities. Though there are low levels of awareness on the benefits and impact of wind power and dairy consumption.
4. The study found that walking and bicycling, and avoiding food wastes are the most effective mitigation practices that are most used by the respondents. General level of usage on eating local food and reducing dairy products as mitigation practices. While there is a low level of prioritization on using trains instead of planes.
5. There were no significant correlations between the level of climate change awareness among the male and female respondents which significantly means that both sex exhibit similar levels of awareness on climate change.
6. The study shows that there were no significant different on the level of knowledge on climate change and their mitigation practices. Both sex shows that there is a similar level of knowledge on climate change, and mitigation practices understanding is consistent on both male and female.
7. The class type of the respondents has no significant influence on the level of climate change awareness. It shows that there is a uniform awareness of climate change across different class types.
8. There is a significant correlation between the level of knowledge regarding climate change and the respondent's mitigation practices. Senior High School teachers'

respondents have a higher level of knowledge compared to Junior High School teachers.

Recommendations

Based on the conclusions, the researcher had drawn the following recommendations:

1. Teachers from Junior and Senior High School should enhance their professional development. Workshops and seminar should be organized to develop and enhance teaching practices, resources, and strategies.
2. Integrate comprehensive climate change education in the current curriculum. This should include information about benefits of renewable energy, such as wind power at environmental impacts of dietary choices.
3. Awareness campaign should be organized to share knowledge and understand the broader impacts of climate change.
4. Community involvement should be incorporated to provide real-world context and support to the teachers, students, and community. This might help the wider community to address climate change.

Compliance with Ethical Standards

The assent forms should be distributed to treat the data with high confidentiality and utmost consideration of the Data Privacy Act of 2012 and DepEd Regional Memorandum No. 228, s. 2020 entitled "*Policy Guidelines on the Adherence to Ethical Research Principles and Responsibilities in Studies involving Teaching, Teaching Related, Non-Teaching Personnel and Learners".*

Acknowledgments

The researcher would like to that Almighty God for His enduring grace, guidance, and protection that He has bestowed upon conducting this research.
The researcher would like to express the sincerest gratitude to their principal, Joel G. Cayetano, PhD for her continuous support in the research, for his patience, motivation and immense knowledge. His guidance helped me throughout their research and writing. To their parent, who have continually supported them to accomplish this student, for their guidance, encouragement, and inspiration, a warmest greetings of gratitude.
Also, thanking her fellow classmates and friends, Mr. Carlo Rico B. Reyes, Ms. Arabelle R. Concepcion, Mr. George DC. Francisco, for stimulating discussions, for the sleepless nights and rants that they had helped the researchers to beat the deadlines, and for the encouragement.
The researcher would like to express her appreciation to the professor, Bryan DC. Gabriel, PhD for his trust, advice, support, patience and guidance for the start until this day.

REFERENCES

Abbass, K., Qasim, M. Z., Song, H., Murshed, M., Mahmood, H., & Younis, I. (2022). A review of the global climate change impacts, adaptation, and sustainable mitigation measures. Environmental Science and Pollution Research, 29(28), 42539–42559. https://doi.org/10.1007/s11356-022-19718-6

Agboola, O. S., & Emmanuel, M. (2016). Awareness of Climate Change and Sustainable Development among Undergraduates from two Selected Universities in Oyo State, Nigeria. World Journal of Education, 6(3). https://doi.org/10.5430/wje.v6n3p70

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. Journal of Research in Nursing, 25(8), 652–661. https://doi.org/10.1177/1744987120927206

Climate Change Impacts. (n.d.). NICCDIES. https://niccdies.climate.gov.ph/climate-change impacts. https://niccdies.climate.gov.ph/climate-change-impact

Climate Change and the Philippines. (2018). Executive Brief No. 2018-01, V. 32. https://climate.gov.ph/files/CC_Executive-Brief_V32.compressed.pdf

Crossman, A. (2020, March 19). Understanding Purposive Sampling. ThoughtCo. https://www.thoughtco.com/purposive-sampling-3026727

McCright, A. (n.d.). The Effects of Gender on Climate Change Knowledge and Concern in the American Public. research gate.publication. https://www.researchgate.net/publication/226317996_The_Effects_of_Gender_on_Climate_Change_Knowledge_and_Concern_in_the_American_Public

National Framework Strategy on Climate Change 2010-2022. (2010). https://climate.gov.ph/files/NFSCC.pdf

Pickering, G. J., Schoen, K., Botta, M., & Fazio, X. (2020). Exploration of youth knowledge and perceptions of individual-level climate mitigation action. Environmental Research Letters, 15(10), 104080. https://doi.org/10.1088/1748-9326/abb492

Ratinen, I. (2020, November 30). Students' knowledge of climate change, mitigation and adaptation in the context of constructive hope. Education Sciences. https://eric.ed.gov/?id=EJ1290242

APA Citation:

Reyes, S. S., & Gabriel, B. D. (2024). CULTIVATING CLIMATE CHANGE CONSCIOUSNESS: ASSESSING TEACHERS' AWARENESS AND MITIGATION PRACTICES IN ADDRESSING CLIMATE CHANGE. Ignatian International Journal for Multidisciplinary Research, 2(8), 918–930. https://doi.org/10.5281/zenodo.13329221

Corresponding author: *sherylene.reyes@deped.gov.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

DESIGN, DEVELOPMENT, VALIDATION AND ASSESSMENT OF PROPOSED COMPETENCY-BASED CURRICULUM FOR BUTTERFLY PRODUCTION LEVEL II

Laurito J. Morales, EdD, Liza Marie M. Pacia, PhD

Marinduque State University, Tanza, Boac, Marinduque, Philippines

https://doi.org/10.5281/zenodo.13346458

ABSTRACT

Curriculum development is a comprehensive process undertaken by educators and institutions to craft effective learning experiences for students. It begins with a thorough needs assessment to identify educational goals and address specific needs within the community or academic setting. This study delves into the design, development, validation, and assessment of a competency-based curriculum for Butterfly Production Level II. Employing a mixed-methods design, it identifies key competencies in butterfly biology, breeding, farming, harvesting, product handling and handcrafting butterfly deadstock. The curriculum design emphasizes planning, sustainability, and practical skills. Validation results indicate the curriculum meets or exceeds competency standards with high compliance and validity. Testing affirms the course's effectiveness, lauded for its well-structured design and impact on participants. However, a significant difference in opinions regarding assessment and evaluation suggests an area for potential refinement. The study concludes by underscoring the curriculum's importance, aligning with industry standards and participant needs. The identified gap in perceptions around assessment provides a crucial opportunity for improvement. Overall, this research offers valuable insights for advancing Butterfly Production Level II training programs, ensuring their relevance and impact in the dynamic realm of butterfly production.

Keywords: *Butterfly, Butterfly Farming, Butterfly Production, Competency-based Curriculum*

INTRODUCTION

In the ever-changing landscape of education and skill development, the demand for proficient professionals transcends borders. Globalization highlights the necessity for a curriculum that not only imparts knowledge but also nurtures practical skills and adaptability (Clotilda, 2022). Competency-based curricula (CBC) have emerged to strategically align education with the skills sought in both local and international job markets, tailoring educational and skills training to meet the specific needs of learners, industries, and the broader socio-economic context (Catacutan et al., 2023).

Adopting competency-based approaches at the national level yields significant advantages. Recent research underscores that countries embracing these curricula experience increased workforce productivity and enhanced economic competitiveness. For example, Al Mamun et al. (2023) found that such curricula foster innovation and adaptability, while Wang et al. (2022) reported improved employee engagement and performance. Moreover, competency-based education addresses critical challenges like skills gaps and talent acquisition, as highlighted by OECD (2021), and offers sector-specific applications and benefits, as demonstrated by Zhang et al. (2022). These findings underscore the transformative potential of competency-based education on a global scale.

In the Philippines, where the economy is shifting towards knowledge-intensive industries, a Competency-based Curriculum plays a crucial role in equipping individuals with the skills demanded by the local job market. As part of ASEAN, the Philippines requires a curriculum that aligns with regional standards while addressing unique national challenges. Recent studies emphasize the importance of industry collaboration in curriculum development in the Philippines, showing that partnerships between educational institutions and industries enhance the relevance of training programs (Mallilin et al., 2021). Efforts to integrate entrepreneurship and innovation within the curriculum reflect the evolving needs of the Philippine economy (Quesea & Elisa, 2020). The adoption of outcome-based education models and continuous feedback mechanisms represents recent developments aimed at ensuring the relevance and effectiveness of competency-based curricula (Catacutan et al., 2023).

A pivotal government agency overseeing competency-based curriculum development is the Technical Education and Skills Development Authority (TESDA). Since its inception in 1994, TESDA has been instrumental in formulating policies, developing competency standards, accrediting institutions and programs, and certifying individuals in various occupations. Through collaborations with industries and initiatives like scholarship programs, TESDA ensures the quality and relevance of technical vocational education and training (TVET) in the Philippines (TESDA, n.d.). TESDA's efforts are aimed at bridging the gap between education and industry, ensuring that graduates possess the competencies necessary for success in the workforce. By overseeing accreditation, certification, and industry engagement, TESDA plays a crucial role in enhancing technical education and skills training nationwide. Its multifaceted

functions contribute significantly to the development and improvement of technical education in the Philippines, particularly in sectors like butterfly breeding and production in provinces such as Marinduque.

In Marinduque, butterfly breeding and production have a rich history dating back to the industry's inception in 1965. Recognizing its potential, local stakeholders, including TESDA-Marinduque, aim to develop a Competency-based Curriculum for Level/NCII certification in butterfly breeding and production. This initiative not only aligns with the province's historical significance in the butterfly industry but also addresses current local, national, and global demands. By integrating local knowledge and practices, collaborating with industry leaders, and leveraging existing educational frameworks, TESDA-Marinduque seeks to elevate the province's status as the "Butterfly Capital" of the Philippines through a robust and globally competitive training program.

TESDA's Role in Technical Education

TESDA, established by Republic Act 7796 in 1994, is the main agency overseeing technical education and skills development in the Philippines (UNESCO, n.d.). Its mission is to create a skilled, globally competitive workforce through various programs, ranging from short courses to diplomas, in fields like automotive, IT, healthcare, and agriculture (TESDA Website, 2024a; TESDA Website, 2024b). TESDA emphasizes accessibility and inclusivity, offering scholarships and special programs for marginalized communities. It collaborates with industries to ensure its programs meet market needs, using a Dual Training System (DTS) that combines theoretical and practical training. Competency-Based Training (CBT) is a key feature, providing assessments and National Certificates that recognize skills and enhance employability. TESDA’s efforts significantly contribute to national economic development by fostering a skilled workforce (TESDA Website, 2024a; TESDA Website, 2024b).

Competency-Based Curriculum (CBC)

Competency-based learning, highlighted by Neendoor (2023), focuses on students demonstrating specific skills, knowledge, and attitudes. This approach allows students to progress at their own pace, ensuring they meet industry standards. Suk (2023) emphasizes multifaceted learning outcomes in CBC. Historical roots of CBC date back to the 1960s, with educational pioneers like Benjamin Bloom and Robert Mager challenging traditional subject-centered curricula (Nikolov et al., 2014). CBC prioritizes quality over quantity in education and integrates learning activities with competencies, promoting holistic development (Ghezir et al., 2021). Sturgis (2011) and Levine and Patrick (2019) underscore the role of CBC in focusing on student mastery, relevant assessments, and the development of transferable skills. The Aurora Institute outlines seven essential components of CBC, adaptable to evolving workforce demands (New Zealand Skills Consulting Group Limited, 2021). Recent studies show CBC's positive impact on workforce productivity and economic competitiveness (Al Mamun et al., 2023; Wang et al., 2022; OECD, 2021; Zhang et al., 2022; Williams, 2022).

TESDA and CBC

TESDA integrates CBC in its programs to align with its mission of developing a skilled workforce (TESDA, 2017). It emphasizes accessibility through various training centers and partnerships, and inclusivity through scholarships and special programs like the Training for Work Scholarship Program (TWSP) and Special Training for Employment Program (STEP). The Dual Training System and CBT approach enhance practical skills and provide certification, contributing to economic development. TESDA's strategic plans aim to involve various sectors in enhancing human resources (TESDA Website, 2024c).

Curriculum Design for Butterfly Production

The study also focuses on creating a competency-based curriculum for butterfly farming, breeding, and production. It aims to outline the necessary skills and knowledge for this field, ensuring the curriculum meets industry standards and includes appropriate training materials and assessment tools.

Historical Development of Butterfly Industry in Marinduque

The butterfly industry in Marinduque has historical roots dating back to post-Renaissance Europe. Key developments include the rise of butterfly farming in Europe, butterfly gardening, and the establishment of agencies for rearing butterflies (Boppré & Vane-Wright, 2012). Marinduque's butterfly industry began in the 1960s with the efforts of Romeo Lumawig and the Layron family. They transitioned from collecting specimens to breeding and exporting butterflies, significantly contributing to the local economy (Labay, 2005). Collaborations with international entomologists and traders helped establish Marinduque as a significant player in the butterfly trade. The industry's evolution included the development of new breeding techniques and the establishment of government guidelines and support. Today, the butterfly industry in Marinduque continues to thrive, with the involvement of new generations and ongoing research and development efforts.

Understanding the historical development of an industry is crucial for designing effective training curricula. According to Smith and Jones (2020), historical context provides insight into the industry's evolution, origins, and early challenges, which are essential for curriculum developers to grasp. For instance, in the Marinduque butterfly industry, tracing its development from a hobby to a sustainable livelihood offers valuable insights (Garcia et al., 2018). These insights help in designing training programs that resonate with the industry's historical context, ensuring relevance and depth. By analyzing historical trends and patterns, such as the role of families like the Layrons in industry growth (Dela Cruz, 2017), curriculum developers can predict future developments and tailor programs accordingly. Learning from historical challenges and successes guides the curriculum towards addressing current industry issues and fostering resilience in learners (Bautista, 2019). Moreover, understanding cultural and regional influences ensures that the curriculum is inclusive and effective. This historical perspective not only aligns training programs with industry standards and expectations

but also engages learners by connecting theoretical knowledge with practical, historical narratives (Magno, 2020). Thus, integrating historical development into curriculum design prepares learners for the complexities and opportunities within specific fields.

This highlights TESDA's role in advancing technical education, the principles of competency-based learning, TESDA's integration of CBC, the development of a curriculum for butterfly production, and the historical development of Marinduque's butterfly industry.

Butterfly Farming

Rogers (2013) introduces butterfly farming as a practical endeavor accessible to enthusiasts with minimal investment, emphasizing hands-on involvement and gradual growth. The article covers essential aspects such as butterfly lifecycle stages, environmental requirements for successful farming, and practical considerations for starting and expanding operations. Key points include the importance of understanding butterfly species, providing suitable host plants, and developing a robust business plan for sustainability. Rogers also stresses compliance with legal regulations and the logistical considerations of shipping butterflies. Overall, the article advocates for informed planning and dedication to foster a thriving butterfly farming enterprise.

Matthew (2006), on the other hand, explores butterfly farming in Kerala, India, focusing on its integration with biodiversity conservation and sustainable practices. His study emphasizes site suitability, ecological landscaping, and the daily operational routines critical for maintaining butterfly health and reproduction. Matthew highlights environmental conditions like temperature, humidity, and food plant availability crucial for various butterfly species. He discusses the lifecycle stages from oviposition to adult feeding, underscoring the importance of habitat development and dietary diversity. The article concludes with insights on breeding practices, including artificial diets and ethical considerations for maintaining butterfly populations in captivity.

Butterfly farming involves a meticulous approach to breeding and rearing butterflies, encompassing several key components for success. Beginning with the selection of healthy breeding stock ensures a strong foundation, while providing optimal conditions such as controlled environments with suitable temperatures, humidity levels, and food sources supports reproductive success across successive generations. Managing resources and implementing measures against predators and pathogens are crucial to maintaining butterfly health and preventing population decline. Continuous monitoring and adaptation of breeding practices help sustain population resilience amid environmental changes, while balancing population size with genetic diversity ensures long-term viability. Challenges such as managing predators and pathogens, avoiding inbreeding, and balancing supply with sustainability underscore the complexity of butterfly farming. Educational initiatives, exemplified by programs like those developed by Trujillo (2012) and Driscoll (2020), integrate butterfly biology, ecology, and conservation into curricula, preparing individuals through competency-based approaches that combine scientific knowledge, technical skills, and practical applications. Ultimately, butterfly

farming not only offers economic opportunities but also contributes to biodiversity conservation and fosters environmental education, highlighting its multifaceted role in sustainable agriculture and conservation efforts.

Butterfly farming encompasses a multifaceted approach integrating scientific knowledge, technical skills, and creative strategies. Fundamental to this practice is a comprehensive understanding of butterflies' life cycles and ecological parameters, spanning from egg to larva, pupa, and adult stages (Labay & Sapungan, 2018; Williams, 2015; Rogers, 2013; Matthew, 2006; Boppré & Vane-Wright, 2012). Conservation strategies are pivotal, requiring farmers to balance farming practices with preserving butterfly habitats and biodiversity. Taxonomic and genetic insights play critical roles in selecting appropriate breeding stock and understanding environmental responses and breeding outcomes (Williams, 2015; Boppré & Vane-Wright, 2012). Successful farming involves meticulous attention to larvae and adult behavior, ensuring the quality and longevity of butterfly products through careful post-handling care (Association for Butterflies, n.d.; Trujillo, 2012). Handcrafting of butterfly products adds aesthetic value, aligning with market trends and consumer preferences (Driscoll, 2020). A holistic approach, incorporating business planning, marketing, education, and conservation, is essential for sustainable butterfly farming, contributing to economic gains and environmental conservation.

Contextual Learning Matrix (CLM) in the Curriculum Development Process

The Contextual Learning Matrix (CLM) is a crucial tool in the curriculum development process, as mandated by the Training Regulations framework (TESDA, 2014). It serves as an analytical aid for curriculum developers, trainers, assessors, administrators, and supervisors involved in Technical Vocational Education and Training (TVET). The CLM must align with published Competency Standards or Training Regulations (TR) and involves industry experts to ensure comprehensive coverage. Its development includes selecting specific units of competency, identifying relevant content and learning activities, and integrating essential elements not covered by performance criteria. This structured approach ensures that competency-based learning resources and institutional assessments are effectively designed and aligned with industry needs, facilitating both educational quality and workforce readiness.

Competency Standards

Competencies are essential qualities and skills required for effective job performance. These encompass information, skills, talents, experience, and behaviors crucial for individual task success. Assessments and training enhance these competencies (Klomim & Kuayngern, 2023). In Germany, competence is defined as the ability and willingness to apply knowledge, skills, personal, social, and methodical capabilities and to behave thoughtfully and responsibly. The BIBB (2014) categorizes competence into "professional competence" and "personal competence," each further divided into subcategories such as "knowledge" and "skills" in professional competence and "social competence" and "independence" in personal competence. The German

training law, also known as "national curricula," in some countries, sets the standards for each occupation. It outlines the occupation's designation, training duration (typically two to three years), essential skills and knowledge, framework training curriculum, and test criteria. Businesses can also add extra subjects to the training, providing apprentices with additional credentials.

In the Philippines, national training regulations (TR) are established by the TESDA Board and consist of competency standards, training standards, and evaluation procedures. These TRs are the foundation for developing curricula, evaluating competency, and delivering TVET programs. Competency standards define middle-level skilled workers' abilities and qualifications, categorized into competency units and qualifications associated with key industry sectors.

The European Qualifications Framework (EQF) is a standardized reference framework across Europe, promoting the transparency and comprehension of qualifications obtained through diverse education and training systems. The EQF's main objectives are to facilitate lifelong learning and promote citizen mobility between countries and industries. It comprises eight reference levels defined by learning outcomes, focusing on knowledge, skills, and competence (Nicolov et al., 2014). In this context, learning outcomes capture what a learner knows, understands, and can do after completing a learning process, emphasizing results over methods. Learning outcomes encompass theoretical knowledge, practical and technical abilities, and crucial social competencies, including practical collaboration skills.

To ensure a common understanding, key terminology within the European Qualification Framework is defined: "Qualification" refers to the formal outcome of an assessment and validation process. "Learning Outcomes" describes what an individual knows, comprehends, and can execute. "Knowledge" pertains to facts, principles, theories, and practices. "Skills" represent the ability to apply knowledge. "Competence" involves the application of knowledge, skills, personal, social, and methodological skills, emphasizing responsibility and independence. These frameworks and definitions are vital for creating efficient educational and training systems that equip individuals with the skills and knowledge they need for their careers. They also contribute to standardizing and recognizing qualifications on both national and international levels. These frameworks support education and training system harmonization, enhance transparency, facilitate lifelong learning, and bolster employability in a rapidly evolving global labor market, ultimately creating a more flexible and adaptable workforce.

Overall, developing a Competency-based Curriculum for butterfly breeding and production in Marinduque reflects a strategic alignment with both economic opportunities and environmental conservation imperatives. This initiative aims to empower local communities, enhance industry standards, and position Marinduque as a leader in sustainable butterfly farming practices nationally and internationally.

Research Questions

Due to the research studies conducted and the training programs for butterfly production provided by Marinduque State College to the communities of the province, and most importantly, in response to the strong request from the provincial governor to implement it province-wide, as well as the residents of Marinduque advocating for its establishment as a regular industry, TESDA-Marinduque was tasked with developing it into a Level/NC II training program.

Thus, this study was about developing a Competency-based Curriculum for Butterfly Production Level II Course in Marinduque as a collaborative effort that involved local expertise, national standards (TESDA), and potential global recognition. By considering the historical significance of Marinduque's butterfly industry, aligning with national competency standards, and incorporating global best practices, the curriculum could empower local butterfly breeders and contribute to the industry's sustainable development in the province.

Integrating a competency-based curriculum within TESDA's framework ensured that the training program was designed, developed, validated, and tested to be relevant and responsive to the demands of the job market. As such, this study had the following research questions:

1. What core competencies should be included in designing the Butterfly Production Level II Course's competency-based curriculum based on the following aspects?

    1.1 Basics of Butterfly Biology, Ecology, and Related Legal Issues
    1.2 Butterfly Larval and Nectar Food Plants
    1.3 Butterfly Breeding and Farming Techniques
    1.4 Harvesting and Safe Handling of Butterfly Products
    1.5 Handcrafting of Butterfly Deadstock

2. How is the Competency-based Curriculum for Butterfly Production Level II Course validated regarding the following standards?
    2.1 Compliance with Competency Standard
    2.2 TESDA Competency-Based Curriculum Exemplar
3. How is the Competency-based Curriculum for Butterfly Production Level II Course tested in terms of the following?
    3.1 Effectiveness of Nominal Duration
    3.2 Effectiveness of Learning Activities
    3.3 Effectiveness of Assessment and Evaluation
4. Is there a significant difference in the testing results made between the trainers and trainees in terms of the following?
    4.1 Effectiveness of Nominal Duration
    4.1 Effectiveness of Learning Activities
    4.2 Effectiveness of Assessment and Evaluation

5. What other suggestions and recommendations from the trainers and trainees could be sought to improve the Competency-based Curriculum further?

METHODOLOGY

This study employed a mixed-method research design, specifically adopting an exploratory-sequential approach for developing, validating, and testing a Competency-Based Curriculum (CBC) for Butterfly Production Level II. The exploratory phase involved literature review and stakeholder consultations to identify key competencies and industry standards. Subsequently, the sequential phase employed both quantitative and qualitative methods to collect and analyze data systematically. Quantitative measures included performance assessments using a 5-point Likert scale questionnaire, while qualitative methods involved in-depth interviews and focus group discussions. The research was conducted in Marinduque province, focusing on municipalities central to the butterfly farming industry. Participants included TVET trainers, butterfly breeders, technical experts, and trainees, selected from TESDA-administered and accredited institutions. Ethical considerations ensured participant confidentiality and voluntary consent. Statistical tools such as frequency distribution, measures of central tendency, and thematic analysis were applied to analyze data comprehensively. This rigorous approach aimed to develop a curriculum aligned with industry needs and educational standards, contributing to the enhancement of butterfly breeding practices in the region.

RESULTS

Results for Research Question 1

The Needed Competencies for Butterfly Production

Producing butterflies involves breeding and caring for them for study, teaching, entertainment, and conservation. Key competencies include understanding butterfly biology, life cycles, and traits, as well as their ecological roles as pollinators and environmental indicators. Adhering to legal requirements ensures ethical practices. Practical skills in husbandry and educational abilities are essential for day-to-day care and public awareness. These competencies ensure responsible butterfly production, contributing to scientific knowledge, environmental health, and conservation efforts.

Table 1

Basics of Butterfly Biology, Ecology, and Related Legal Issues

Needed CORE Competencies	Mean Rating	Interpretation
Understanding the classification, geographical distribution, and population trends of butterflies.	**4.25**	Highly Recommended for Inclusion

Gaining insights into the taxonomy of butterflies.	**4.00**	Strongly Recommended for Inclusion
Acquiring ecological knowledge related to butterflies.	**4.75**	Highly Recommended for Inclusion
Learning about the specific butterflies you intend to breed and market.	**4.75**	Highly Recommended for Inclusion
Obtaining the necessary permits for shipping butterflies.	**4.75**	Highly Recommended for Inclusion
Dealing with butterflies and environment.	**5.00**	Highly Recommended for Inclusion
Selecting healthy butterflies for breeding purposes.	**4.75**	Highly Recommended for Inclusion
Maintaining a balance between population size and genetic diversity in butterfly breeding.	**4.50**	Highly Recommended for Inclusion
Understanding the basic biological principles of butterflies.	**4.50**	Highly Recommended for Inclusion
Learning about the life cycle stages of butterflies.	**5.00**	Highly Recommended for Inclusion
Studying the natural habitats of butterflies.	**5.00**	Highly Recommended for Inclusion
Exploring the adaptations of butterflies to their environments.	**5.00**	Highly Recommended for Inclusion
Exploring biodiversity.	**4.25**	Highly Recommended for Inclusion
Examining the anatomical structure of butterflies.	**4.75**	Highly Recommended for Inclusion
Understanding the role of butterflies in pollination and conservation efforts.	**4.75**	Highly Recommended for Inclusion
Total Weighted Mean	**4.67**	Highly Recommended for Inclusion

Legend:

Highly Recommended for Inclusion	***4.21-5.0***	*Slightly Recommended for Inclusion*	***1.81 – 2.60***
Strongly Recommended for Inclusion	***3.41-4.20***	*Not recommended for Inclusion*	***1.01 – 1.80***
Moderately Recommended for Inclusion	***2.61 – 3.40***		

The competencies related to butterfly biology, ecology, and legal issues are highly recommended for inclusion, with a total weighted mean score of 4.67. This indicates a strong consensus on their importance in the curriculum.

The Butterfly Food Plants

Plants that produce nectar and larval food are vital to the breeding and production of butterflies because they offer the food and environment required for the many stages of the butterfly life cycle. Nectar food plants are the blooming plants from which adult butterflies drink nectar, while larval food plants are the host plants that caterpillars eat.

Table 1.1

Butterfly Larval and Nectar Food Plants

Needed CORE Competencies	Mean Rating	Interpretation
Understanding the specific plants that provide larval and nectar food for butterflies and the associated ant species.	**4.75**	Highly Recommended for Inclusion
Exploring the specificity of food plants and their interactions with insects.	**4.75**	Highly Recommended for Inclusion
Gaining knowledge on how to raise specific plants for butterfly nourishment.	**5.00**	Highly Recommended for Inclusion
Ensuring a steady supply of food and nutrients required for butterfly development.	**4.75**	Highly Recommended for Inclusion
Providing essential resources, including plants and nutrients, for butterflies.	**4.50**	Highly Recommended for Inclusion
Farming and propagating host plants to support butterfly populations.	**4.75**	Highly Recommended for Inclusion
Total Weighted Mean	**4.75**	Highly Recommended for Inclusion

Legend:

Highly Recommended for Inclusion	***4.21-5.0***	*Slightly Recommended for Inclusion*	***1.81 – 2.60***
Strongly Recommended for Inclusion	***3.41-4.20***	*Not recommended for Inclusion*	***1.01 – 1.80***
Moderately Recommended for Inclusion	***2.61 – 3.40***		

The competencies focused on butterfly larval and nectar food plants are highly recommended, with a total weighted mean score of 4.75, highlighting their crucial role in the curriculum.

The Breeding Techniques in Butterfly Production

Butterfly breeding and cultivation entail raising butterflies in captivity for diverse purposes, including education, conservation, research, or entertainment. The process encompasses choosing an appropriate species, creating a suitable environment, tending to the eggs, caterpillars, pupae, and adults, and eventually selling or releasing the butterflies.

Table 1.2

Butterfly Rearing, Breeding and Farming Techniques

Needed CORE Competencies	Mean Rating	Interpretation
Learning about local farmers' techniques for farming and breeding.	**5.00**	Highly Recommended for Inclusion
Understanding the chemical interactions between butterflies, plants, and parasites.	**4.75**	Highly Recommended for Inclusion
Acquiring techniques for rearing and breeding butterflies.	**4.75**	Highly Recommended for Inclusion
Gaining genetic insights through butterfly breeding.	**4.75**	Highly Recommended for Inclusion
Managing indoor spaces for rearing, room, and storage.	**4.50**	Highly Recommended for Inclusion
Utilizing a greenhouse or enclosed outdoor growing area.	**4.75**	Highly Recommended for Inclusion
Evaluating site suitability for butterfly farming, considering ecological factors, landscaping, and infrastructure.	**5.00**	Highly Recommended for Inclusion
Understanding the butterfly breeding process.	**5.00**	Highly Recommended for Inclusion
Learning about oviposition, larval rearing, pupation, and adult feeding.	**4.75**	Highly Recommended for Inclusion
Maintaining a controlled environment for successive generations of butterflies.	**4.75**	Highly Recommended for Inclusion
Protecting butterflies against predators and pathogens.	**5.00**	Highly Recommended for Inclusion
Raising butterfly larvae effectively.	**5.00**	Highly Recommended for Inclusion
Managing infestations and diseases in butterfly populations.	**5.00**	Highly Recommended for Inclusion
Gaining hands-on experience in growing butterflies.	**5.00**	Highly Recommended for Inclusion
Total Weighted Mean	**4.86**	**Highly Recommended for Inclusion**

Competencies related to butterfly rearing, breeding, and farming techniques are highly recommended, with a total weighted mean score of 4.86, indicating their critical importance in the curriculum.

Harvesting Operations and Handling Techniques

Harvesting and handling are crucial aspects of butterfly breeding, impacting the butterflies' quality, quantity, and survival. Harvesting involves; collecting pupae from rearing containers, inspecting them for damage or disease, sorting them by species and size, and packing them carefully for emergence, storage, or shipment.

Handling techniques include gently removing live butterflies from emergence cages, checking for defects or injuries, and transferring them to suitable containers. Careful handling is essential, as well as avoiding contact with wings or antennae and using soft materials like tissue paper. Proper harvesting and handling are vital for butterflies' health, appearance, and longevity. Carelessness can lead to stress, injury, or death, reducing their value, while proper practices enhance their quality and attractiveness.

Table 1.3

Harvesting, and Safe Handling of Butterfly Products

Needed CORE Competencies	Mean Rating	Interpretation
Understanding the predation and parasitism affecting butterflies.	**5.00**	Highly Recommended for Inclusion
Managing indoor spaces for rearing butterflies, including room setup and proper storage.	**5.00**	Highly Recommended for Inclusion
Addressing the operational and logistic aspects of butterfly farming.	**5.00**	Highly Recommended for Inclusion
Implementing post-harvest care for butterfly products.	**4.75**	Highly Recommended for Inclusion
Providing proper care for the pupae and larvae life stages of butterflies.	**4.50**	Highly Recommended for Inclusion
Total Weighted Mean	**4.85**	**Highly Recommended for Inclusion**

The competencies for harvesting and handling butterfly products are highly recommended, with a total weighted mean score of 4.85, underscoring their significance in the curriculum.

Butterfly Products

Butterfly products encompass a range of beautiful and colorful items inspired by or featuring butterflies. These include butterfly-themed home decor items like pillows, throws, wall stickers, and framed butterflies. Additionally, accessories such as hair clips, jewelry, and key chains are adorned with butterfly motifs. For those looking to add a touch of nature to cakes, butterfly cake decorations like toppers, stickers, and cardboard inserts are available. Another creative avenue is engaging in butterfly handicrafts, which may involve activities like butterfly farming, crossbreeding, and handcrafting. These products are popular among nature enthusiasts, collectors, and hobbyists. Moreover, they serve as delightful additions to special occasions like weddings, birthdays, and parties, adding a touch of natural beauty to the celebrations.

Table 1.4

Handcrafting of Butterfly Dead stock

Needed CORE Competencies	Mean Rating	Interpretation
· Handcrafting of Dead stock into Novelty Items for Gifts and Decorations	**4.50**	Highly Recommended for Inclusion
· Handcrafting & Creative Expression	**4.50**	Highly Recommended for Inclusion
Total Weighted Mean	**4.50**	**Highly Recommended for Inclusion**

Legend:

Highly Recommended for Inclusion	***4.21-5.0***	*Slightly Recommended for Inclusion*	***1.81 – 2.60***
Strongly Recommended for Inclusion	***3.41-4.20***	*Not recommended for Inclusion*	***1.01 – 1.80***
Moderately Recommended for Inclusion	***2.61 – 3.40***		

Competencies related to the handcrafting of butterfly dead stock are highly recommended, with a total weighted mean score of 4.50, emphasizing the value of creative skills in the curriculum.

Result for Research Question 2

Table 2.

Compliance of CBC for Butterfly Production Level II as to Competency Standard

Compliance of the Butterfly Production Level II Curriculum **Competency Standard**	Mean	Interpretation
1. Is the Course Title /Description sufficient to describe the Qualification intended to be achieved by the learners?	**4.50**	Highly Valid
2. Are all the units of competencies listed in the TR/ CS have corresponding modules?	**4.50**	Highly Valid
3. Are the modules arranged in a logical sequence for an effective training delivery of the course?	**4.75**	Highly Valid
4. Is the Course Title relevant to the job title used in the company/industry related to this qualification?	**4.50**	Highly Valid
5. Is the Training Duration of the Course sufficient to achieve all the competencies of this qualification?	**4.50**	Highly Valid
6. Are the Trainee Entry Requirements of the Course appropriate without conflict with existing rules/regulations?	**5.00**	Highly Valid
7. Are the resources (e.g. tools, equipment, materials) sufficient for the effective implementation of the Course?	**5.00**	Highly Valid
8. Is the identified training modality appropriate for the course? / Does the modality allow for flexible learning?	**5.00**	Highly Valid
9. Are the Trainer's Qualifications sufficient for an effective implementation of the course?	**5.00**	Highly Valid
Total Weighted Mean	**4.75**	**Highly Valid**

Legend:	*Highly Valid*	***4.21-5.0***	*Slightly Valid*	***1.81 – 2.60***
	Strongly Valid	***3.41-4.20***	*Not Valid*	***1.01 – 1.80***
	Moderately Valid	***2.61 – 3.40***		

The Butterfly Production Level II Curriculum shows a strong alignment with the competency standards, achieving an overall mean score of 4.75, indicating "Highly Valid." Each evaluated criterion received high marks, demonstrating the curriculum's thoroughness and effectiveness in various aspects such as course title relevance, logical module arrangement, sufficient training duration, appropriate trainee entry requirements, and adequate resources and trainer qualifications.

Table 2.1

Compliance of CBC for Butterfly Production Level II as to CBC Exemplar

Compliance of the Butterfly Production Level II Curriculum **CBC Exemplar**	**Mean**	**Interpretation**
1. Are the Module Title/s stated in an action statement and related to the unit of Competency/ies specified in the Training Regulation/Competency Standard?	**5.00**	Highly Valid
2. Does the Module description clearly define the knowledge and skills requirements and the coverage of the module?	**5.00**	Highly Valid
3. Is the Module structured corresponding to a single unit of competency?	**5.00**	Highly Valid
4. Are the Modules containing Learning Outcomes (LO) ranging from 2-6?	**5.00**	Highly Valid
5. Are the titles of the Learning Outcomes (LOs) written in an action statement? (begins with a verb followed by the object of the action)	**5.00**	Highly Valid
6. Do the Learning Outcomes cover the (cognitive, psychomotor, and affective domains) that are observable and measurable performance, resulting in part/whole product, or services that are relevant to the workplace?	**5.00**	Highly Valid
7. Are the Assessment Criteria for each Learning Outcome sufficient to ensure that the learners achieve the required knowledge, skills, and attitude?	**5.00**	Highly Valid
8. Are the Knowledge components (contents) sufficient to address the Assessment Criteria of each Learning Outcome?	**5.00**	Highly Valid
9. Are the Knowledge components (contents) containing information sufficient to perform the activities competently?	**5.00**	Highly Valid
10. Does the Knowledge components (contents) contain information related to energy/materials/environmental conservation?	**5.00**	Highly Valid
11. Do the Knowledge components (contents) include concepts/ideas related to science/numeracy/relevant technology and engineering processes?	**5.00**	Highly Valid
12. Does the Contents address overall the required knowledge of the unit of competency?	**5.00**	Highly Valid
13. Are the resources (condition) consistent/sufficient to support the activities in each Learning Outcome?	**5.00**	Highly Valid
14. Do the Teaching strategies (methodologies) provide opportunities for the active participation of learners in the learning process?	**5.00**	Highly Valid
15. Are the Teaching strategies (methodologies/pedagogy) providing opportunities for learners to develop STEM skills; (critical thinking/problem solving/innovation/collaboration/system thinking/computational thinking/decision making/ethical thinking), applicable to the learning process?	**5.00**	Highly Valid

Table 2.1 *(Continuation)*

Compliance of the Butterfly Production Level II Curriculum	Mean	Interpretation
16. Are the Teaching strategies (methodologies) appropriate to the learning activities/process?	**5.00**	Highly Valid
17. Are the Teaching strategies (methodologies) sufficient to support mastery of three domains (knowledge, skills, and attitude)?	**5.00**	Highly Valid
18. Are the Assessment strategies (methodologies) appropriate for the activities?	**5.00**	Highly Valid
19. Are the Assessment strategies (methodologies) consistent with the principles of collecting evidence?	**5.00**	Highly Valid
20. Is the Contextual Learning Matrix (CLM) available for the course?	**5.00**	Highly Valid
21. Is the Contextual Learning Matrix (CLM) complete for all modules of core competencies of the course?	**5.00**	Highly Valid
22. Is the Curriculum Plan about the STEM approach available for the course?	**5.00**	Highly Valid
23. Does the Curriculum Plan address all modules of core competencies of the course?	**5.00**	Highly Valid
Total Weighted Mean	**5.00**	**Highly Valid**

The Butterfly Production Level II Curriculum's compliance with CBC Exemplars is exemplary, achieving a perfect overall mean score of 5.00, indicating "Highly Valid." All evaluated aspects, from module titles and descriptions to teaching strategies and assessment methodologies, received perfect scores. This comprehensive evaluation highlights the curriculum's robustness and effectiveness in delivering a well-rounded, competency-based education.

Effectiveness of Butterfly Production Level II

When how well a program works is assessed, understanding its impact on those it is meant for is a journey taken. This involves looking at how it is designed and implemented and whether it achieves its goals. Evaluating a program is not just about measuring it – it is about realizing how it can positively change individuals, communities, or organizations. We will explore the success indicators, improvements, and broader effects a program can have. We aim to uncover what makes a program effective, recognizing its diverse impact and how it leaves a lasting mark on the people it serves and the larger community it influences.

Result for Research Question 3

Table 3.

Effectiveness of Butterfly Production Level II according to the Trainers and Trainees

Effectiveness of Butterfly Production Level II Course	Trainers		Trainees	
	Mean	Interpretation	Mean	Interpretation
Nominal Duration				
1. Is the program objective clear? (Malinaw ba ang adhikain ng programa o training?)	**5.00**	**Highly Effective**	**4.60**	**Highly Effective**
2. Are the course activities organized? (Maayos ba ang pagkakasunod-sunod ng mga gawain?)	**4.67**	**Highly Effective**	**4.10**	**Strongly Effective**
3. Is the scheduling of activities and time allotment correct? (Tama ba ang inilaang oras sa bawat gawain?)	**4.33**	**Highly Effective**	**4.00**	**Strongly Effective**
4. Were the program objectives achieved? (Naisagawa ba ang mga adhikain ng programa?)	**4.67**	**Highly Effective**	**4.50**	**Highly Effective**
5. Does the course content align with the program objectives? (Naayon ba ang nilalaman ng programa sa layunin o adhikain ng programa?)	**4.67**	**Highly Effective**	**4.40**	**Highly Effective**
Learning Activities				
6. Is the sequencing of the course contents appropriate? (Maayos ba ang pagkasunod-sunod ng mga gawain?)	**4.67**	**Highly Effective**	**4.20**	**Strongly Effective**
7. Is there sufficient information provided? (Sapat ba ang mga ibinigay na impormasyon?)	**4.33**	**Highly Effective**	**4.70**	**Highly Effective**
8. Is the course content relevant to the needs? (Magkatugma ba ang ibinigay na mga gawain?)	**4.67**	**Highly Effective**	**4.50**	**Highly Effective**
9. Is the selected method effective? (Mabisa ba ang paraan ng pagtuturo?)	**4.67**	**Highly Effective**	**4.30**	**Highly Effective**
10. Are the activities appropriate to the course? (Naayon ba sa programa ang aktibidades?)	**4.67**	**Highly Effective**	**4.50**	**Highly Effective**

Table 3 *(Continuation)*

Effectiveness of Butterfly Production Level II Course	Trainers		Trainees	
	Mean	Interpretation	Mean	Interpretation
Assessment and Evaluation				
11. Are the provided supplies and materials adequate? (Sapat ba ang mga gamit at supplies?)	**5.00**	**Highly Effective**	**3.80**	**Strongly Effective**
12. Are the course activities appropriate to the program? (Naayon ba sa programa ang aktibidades?)	**5.00**	**Highly Effective**	**4.10**	**Strongly Effective**
13. Are the supplies and materials provided in a timely manner? (Sapat ba ang mga gamit at supplies na ibinigay sa tamang oras?)	**5.00**	**Highly Effective**	**3.50**	**Strongly Effective**
14. Is the physical layout of the venue appropriate to the program's needs? (Naayon ba sa pangangailangan ng programa ang lugar na pinagdausan?)	**5.00**	**Highly Effective**	**4.20**	**Strongly Effective**
15. What is your assessment of the overall impact of the program? (Ano ang masasabi mo sa kabuuan ng programa?)	**5.00**	**Highly Effective**	**4.30**	**Highly Effective**
Total Weighted Mean	**4.76**	**Highly Effective**	**4.25**	**Highly Effective**

The Butterfly Production Level II Course is deemed "Highly Effective" by both trainers (mean score: 4.76) and trainees (mean score: 4.25). Trainers and trainees both recognize the clarity and achievement of program objectives and the alignment of course content with these objectives. Both groups also rate the relevance and effectiveness of the course content, teaching methods, and activities highly.

However, trainees report slightly lower effectiveness regarding the organization and scheduling of activities compared to trainers. Additionally, a notable discrepancy exists in the ratings for the adequacy and timely provision of supplies and materials, with trainers rating this aspect much higher than trainees. This suggests that while trainers find the materials and layout adequate, trainees experience issues that could be addressed to improve their overall satisfaction. The physical layout of the venue and the overall impact of the program are highly rated by both groups, indicating the course's overall success. To enhance effectiveness, attention should be given to improving material provision and refining activity scheduling.

Malik and Singh (2022) discuss the significance of clear program objectives and their alignment with course content in enhancing training effectiveness. Their research

highlights the role of organized course activities and appropriate scheduling in achieving training goals (Journal of Vocational Education, 30, 56(3), 289-304).

Fernandez (2021**)** emphasizes the importance of timely provision of materials and effective teaching methods in maximizing training impact. The study suggests that discrepancies in material adequacy can significantly affect trainees' perceptions and overall program success (International Journal of Training and Development, 25, 14(2), 98-110).

Nguyen and Le (2023) highlight the role of physical venue layout and overall program impact in determining the success of vocational training programs. Their findings underscore the need for alignment between program needs and venue suitability (Vocational Education Review, 40, 12(4), 221-235).

Result for Research Question 4

Table 4.

Effectiveness of Nominal Duration, Learning Activities and Assessment and Evaluation of Butterfly Production Level II as perceived by Trainers and Trainees

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Effectiveness of Butterfly Production Level II as to Nominal Duration	Equal variances assumed	1.589	.234	-.723	11	.242	.485	-.30667	.42433	-1.24061	.62728
	Equal variances not assumed			-.948	5.729	.191	.382	-.30667	.32359	-1.10764	.49430
Effectiveness of Butterfly Production Level II as to Learning Activities	Equal variances assumed	.178	.681	-.195	11	.424	.849	-.08000	.40946	-.98122	.82122
	Equal variances not assumed			-.218	3.976	.419	.838	-.08000	.36661	-1.10028	.94028
Effectiveness of Butterfly Production Level II as to Assessment Evaluation	Equal variances assumed	6.602	.026	-2.065	11	.032	.063	-.86000	.41652	-1.77676	.05676
	Equal variances not assumed			-3.888	9.000	.002	.004	-.86000	.22121	-1.36041	-.35959

The analysis in Table 4 indicates that there is no significant difference in ratings between trainers and trainees for Nominal Duration and Learning Activities, with p-values of 0.485 and 0.849, respectively. This suggests that both groups have similar perceptions regarding these aspects. However, for Assessment and Evaluation, a significant difference is observed (p = 0.004), with trainees rating it lower than trainers. This discrepancy suggests that trainees may have concerns about the adequacy and timeliness of supplies and materials.

Result for Research Question 5

Table 5.

Suggestions and Recommendations of Butterfly Production Level II trainers and trainees

AREAS FOR IMPROVEMENT	Suggestions and Recommendations
Challenges or Shortcomings of the Current Curriculum	- Some contents are redundant, particularly in Potting media in UC 1 and UC2.
Competencies Needing Emphasis or Improvement	- Plan and prepare to raise butterfly species, UC 6, considering modern technologies in the production process. - Complete and validate contents of Competency-based Learning Materials (CBLM) for all UCs.
Additional Resources, Tools, or Technologies	- Consider the integration of resin technology. - Include specific books, documentary videos, and compilation of files relevant to production up to handcrafts.
Refining or Expanding Assessment Methods	- Suggests the inclusion of project-based assessment.
Supporting Trainers in Adapting to Industry Changes	- Proposes industry immersion and provision of necessary teaching materials like laptops, projectors, printers, and speakers.
Enhancing Overall Quality of the Curriculum	- Recommends making butterfly product curation an elective subject.
Challenges Encountered in Following the Curriculum	- Difficulty in caring for caterpillars and deciding whether a caterpillar or pupa is viable, as well as identifying various butterfly species and their diets.
Competencies Needing More Focus or Improvement	- Stresses the importance of learning about rejected pupas, efficient food production for butterfly care, spread dry butterfly techniques, feeding butterflies, and butterfly farming.
Lacking Learning Materials or Resources in the Curriculum	- Highlights a perceived shortage of essential materials, such as copies of learning modules, lacking 'sigpaw,' and insufficient seeds for growing food for the butterflies.
Making the Curriculum More Engaging and Interactive	- Recommends making the curriculum accessible to every barangay, extending study hours, and ensuring clarity in decision-making.
Changes or Additions to Assessment Methods	- Suggests using butterfly care tools as a basis for assessment, including grafting/budding for “bila-bila” food, and inspecting the number of eggs during specific months.

Enhancing Learning Experience with the Curriculum	- Advocates for modernizing training in creating souvenir items.

DISCUSSION

Competency Evaluation

The evaluation of the Butterfly Production Level II Curriculum highlights several key areas of strength and areas needing improvement. High ratings were given for competencies related to butterfly classification, distribution, population trends, and taxonomy, underscoring their importance in the curriculum (Labay & Sapungan, 2018). Essential competencies include understanding environmental factors, selecting healthy butterflies for breeding, and comprehending biological principles, all of which are crucial for effective butterfly production (Rogers, 2013).

The significance of butterfly larval and nectar food plants was also emphasized, with high ratings for competencies such as understanding plant specificity and raising plants to support butterfly nourishment (Driscoll, 2020; Boppré & Vane-Wright, 2012). Competencies related to butterfly rearing, breeding, and farming techniques were equally well-regarded, highlighting the need for comprehensive training in these areas (Trujillo, 2018; Association for Butterflies, n.d.). Effective management of rearing environments, pest control, and hands-on experience were deemed essential components of the curriculum.

The curriculum's focus on harvesting and handling butterfly products, as well as the handcrafting of butterfly dead stock, was also positively received (Matthew, 2006; Williams, 2015). The integration of creative skills and practical techniques for product handling is a critical element in enhancing the curriculum's effectiveness.

Compliance with Competency Standards

The curriculum's overall validation is high, with an average mean score of 4.75, indicating strong alignment with competency standards (Table 2). The course title, description, and module sequencing all received high scores, reflecting effective curriculum organization and relevance to industry standards. The training duration and entry requirements were rated favorably, indicating that they are appropriate for achieving the curriculum's objectives.

The curriculum's compliance with CBC Exemplars was particularly outstanding, with perfect scores for all evaluated aspects. This includes action-oriented module titles, well-defined Learning Outcomes (LOs), comprehensive assessment criteria, and effective teaching strategies (Table 2.1). The integration of a STEM approach and a complete Contextual Learning Matrix further supports the curriculum's strength.

Effectiveness of Program Delivery

The evaluation of the Butterfly Production Level II course reveals a generally positive reception from both trainers and trainees. Both groups agreed on the clarity and alignment of the program's objectives and content, although trainees rated these aspects slightly lower (Malik & Singh, 2022). Trainers rated the organization and scheduling of activities highly, but trainees reported some challenges, indicating areas where improvements could be made (Fernandez, 2021). Both trainers and trainees found the learning activities and methods effective, consistent with the importance of well-structured activities (Nguyen & Le, 2023). However, while trainers rated the assessment and evaluation aspects highly, trainees expressed concerns about material adequacy and timeliness, highlighting a need for improvement in this area (Fernandez, 2021). The venue and overall impact of the program were rated positively by both groups, suggesting that the learning environment effectively supports the program's objectives (Nguyen & Le, 2023). Key areas for improvement include enhancing material provision and refining scheduling to boost trainee satisfaction and overall program effectiveness.

In terms of curriculum challenges and recommendations, redundancies in content, particularly in Potting Media, need to be addressed to avoid inefficiencies and confusion. Emphasizing modern technologies and completing Competency-Based Learning Materials (CBLM) for all Units of Competency (UCs) will help keep the curriculum current and comprehensive (Darling-Hammond & Bransford, 2015). Adding resources such as resin technology, books, and videos will enrich the educational experience and provide essential tools for success. Incorporating project-based assessments aligns with best practices in competency-based education, offering a more thorough evaluation of learners' skills (Guskey, 2015). Supporting trainers with industry immersion and necessary teaching materials, like laptops and projectors, will aid in adapting to evolving industry standards (Guskey, 2015). Improving the curriculum’s quality can also be achieved by making butterfly product curation an elective and modernizing training methods. Addressing practical application difficulties, such as caterpillar care and stage identification, will enhance hands-on training. Finally, increasing curriculum accessibility, extending study hours, and clarifying decision-making processes will boost engagement and effectiveness.

Findings

Needed Core Competencies

Most competencies related to the basics of butterfly biology, ecology, and legal issues are strongly recommended for inclusion in the curriculum. Skills involving butterfly larval and nectar food plants are also highly recommended. Additionally, competencies in butterfly breeding and farming have strong support for inclusion. The skills in harvesting and safely handling butterfly products are endorsed, as are the handcrafting skills of butterfly dead stock.

Effectiveness of the Butterfly Production Level II Course

The course is deemed highly effective by trainers, showcasing a well-structured and impactful design that meets participant needs and program objectives. Trainees also perceive the course as well-structured, aligned with objectives, and impactful, affirming its effectiveness as a training experience. The evaluation shows no significant differences between trainers and trainees regarding Nominal Duration and Learning Activities, although there is a significant difference in their opinions on Assessment and Evaluation.

Differences in Perception

Independent Samples Test results indicate no significant differences between trainers and trainees regarding Nominal Duration and Learning Activities, suggesting agreement on these aspects. However, a significant difference was found in the Assessment and Evaluation domain, where trainees rated it lower, pointing to concerns about the adequacy and timeliness of resources provided.

Suggestions for Improvement

To improve the Butterfly Production Level II, several key areas need to be addressed. Curriculum Content should be updated to eliminate redundancies, particularly in Potting Media, and should be streamlined to focus on modern technologies and complete Competency-Based Learning Materials (CBLM). Resources and Tools should be enhanced by integrating resin technology and providing additional learning resources and tools. Assessment Methods can be improved by incorporating project-based assessments and utilizing practical tools for evaluation. Support for Trainers should include industry immersion opportunities and the provision of essential teaching materials, such as laptops and projectors. Finally, to enhance overall quality, making butterfly product curation an elective subject and modernizing training methods will help increase engagement and relevance.

Challenges Identified

Practical challenges include difficulties in caring for caterpillars, identifying viable stages, and addressing perceived shortages of essential materials. Recommendations for more engaging and interactive methods are provided, such as making the curriculum accessible to more locations and extending study hours.

Conclusions

The Butterfly Production Level II course demonstrates overall effectiveness, receiving high ratings across most aspects from both trainers and trainees. Despite this positive evaluation, there are areas requiring attention to further enhance the program's effectiveness. Key improvements include addressing issues related to material provision and timeliness, refining activity scheduling, and resolving curriculum redundancies.

These enhancements are essential for better meeting stakeholder needs and ensuring the program's continued success and sustainability.

The study also underscores the importance of aligning perceptions between trainers and trainees, particularly in the areas of Assessment and Evaluation. By integrating modern technologies, improving curriculum content, and refining assessment methods, the course can achieve greater relevance and effectiveness. Implementing these recommendations will address discrepancies and contribute significantly to the overall improvement and impact of the Butterfly Production Level II course.

Recommendations

To enhance the effectiveness of the Butterfly Production Level II course, several key areas require attention. First, the curriculum should be streamlined to eliminate redundancies and incorporate modern technologies. It's essential to ensure that Competency-Based Learning Materials (CBLM) are complete and validated for all Units of Competency (UC). Enhancing resources and tools is also crucial; integrating advanced technologies like resin technology and providing additional learning resources such as books, documentary videos, and relevant files will support this goal.

Assessment methods should be refined by introducing project-based assessments, which offer a more comprehensive evaluation of learners' practical skills. Practical tools related to butterfly care should be utilized in these assessments to ensure relevance and effectiveness. Supporting trainers is equally important; facilitating industry immersion and providing necessary teaching materials like laptops, projectors, and other equipment will significantly enhance their teaching capabilities.

To improve curriculum engagement, consider extending study hours and ensuring clarity in decision-making processes. Making butterfly product curation an elective subject could also increase engagement. Addressing practical challenges is essential by providing additional training and resources for caterpillar care and stage identification, ensuring the availability of essential materials, and incorporating feedback from trainers and trainees. Implementing these recommendations will address the identified challenges, enhance the curriculum's effectiveness, and better meet the needs of both trainers and trainees.

Compliance with Ethical Standards

The undersigned is conducting research entitled "Design, Development, Validation and Testing of Proposed Competency-based Curriculum for Butterfly Production Level II Course." As part of this study, researchers are expanding our investigation to explore the effectiveness and impact of Competency-based Curriculum in Butterfly Production Level II within the Technical and Vocational Education and Training (TVET) context.

The research aims to understand the experiences and perspectives of TVET trainers, butterfly breeders, technical experts, and trainees involved in the program to enhance butterfly industry. Your participation in this extended study is entirely voluntary, and you retain the right to withdraw at any time without any consequence. The information collected will be used exclusively for research purposes and will be handled with the utmost confidentiality. Strict measures will be implemented to ensure the privacy of participants.

If you have any concerns or questions about the extended data collection process, please feel free to contact the researcher at lautzojam@gmail.com or 09687191434. I sincerely appreciate your time and consideration in participating in our research, and your invaluable contribution is crucial to the success of our efforts.

Acknowledgments

I wish to acknowledge the divine guidance and grace that have been a constant presence throughout this research journey. To God above all, I am profoundly grateful for the wisdom, strength, and inspiration bestowed upon me during the course of this study. Your unwavering support has been my source of comfort and resilience.

I extend my heartfelt gratitude to the following individuals and institutions for their invaluable contributions to the completion of this research:

Marinduque State College: I am grateful for the resources and facilities provided by Marinduque State College, which greatly facilitated the research process.

Dr. Liza Marie M. Pacia: My research adviser, whose guidance, expertise, and unwavering support have been instrumental in shaping and refining this study. Your mentorship has been a source of inspiration throughout the research process.

Research Panel: Prof. Panchito M. Labay, Dr. Diosdado P. Zulueta, Dr. Leodegario M. Jalos Jr., Dr. Joy S. Montejo. The insightful feedback and constructive criticisms from the research panel significantly enhanced the quality and depth of this study.

TESDA Provincial Office-Marinduque, PD. Zoraida V. Amper, PhD.: The support and cooperation from the TESDA Provincial Office, under the leadership of PD. Zoraida V. Amper, were crucial in the successful execution of this research.

Provincial Training Center-Marinduque, PTC Boys, Torrijos Poblacion School of Arts and Trade, Buyabod School of Arts and Trades, and other TESDA Accredited Institutions: I extend my appreciation to these institutions for their collaboration and willingness to share their expertise, which significantly contributed to the depth and comprehensiveness of this study.

Technical Working Group (TWG) of Butterfly Production, Butterfly Breeders, and Experts: My sincere thanks to the members of the Technical Working Group, Butterfly Breeders, and Experts for their valuable insights and contributions to the research on butterfly production.

Trainers and Trainees of Butterfly Production: The cooperation and enthusiasm of the trainers and trainees in the field of butterfly production were crucial in gathering practical insights and real-world perspectives.

Colleagues and Peers: I am grateful to my colleagues and peers for their constructive feedback and stimulating discussions during various stages of the research.

Your input was instrumental in refining the ideas and shaping the overall direction of the study.

My Family: Finally, I want to express my deepest appreciation to my family for their unwavering support and understanding. Your encouragement and patience sustained me throughout the challenging moments of this research journey.

I extend my heartfelt thanks to all the individuals and institutions mentioned earlier, recognizing that their roles and contributions are a reflection of the blessings and opportunities provided by the divine. Each of you has left an indelible mark on this project, and I am truly thankful for the collaborative spirit that made this research possible.

REFERENCES

Al Mamun, A., Rahman, M., & Hoque, M. (2023). Competency-based curricula and their impact on workforce productivity. International Journal of Education and Development, 48(2), 75-89.

Bautista, M. (2019). Learning from historical challenges and successes in curriculum development. Educational Research Journal, 25(3), 45-62.

Boppré, M., & Vane-Wright, R. I. (2012). Butterflies: Ecology and evolution taking flight. Biodiversity and Conservation, 21(4), 855-873.

Catacutan, M. C., Santos, A. B., & De Guzman, J. P. (2023). Competency-based curricula in the Philippines: Innovations and challenges. Journal of Philippine Education Research, 15(1), 23-40.

Clotilda, S. (2022). Globalization and education: The evolving demands for skilled professionals. Journal of International Education, 14(3), 112-125.

Dela Cruz, C. R. (2017). The role of local families in the development of the butterfly industry in Marinduque. Philippine Social Sciences Review, 69(2), 154-172.

Driscoll, M. (2020). Handcrafting butterfly products: A sustainable approach. Journal of Sustainable Crafts, 9(3), 32-48.

Federal Institute for Vocational Education and Training (BIBB). (2014). Professional competence, personal competence, and the national curricula: Standards in German vocational education and training. BIBB Publications.

Fernandez, A. B. (2021). Developing a Competency-Based Curriculum in Technical Education. Educational Press.

Garcia, A. M., Reyes, J. L., & Villanueva, R. T. (2018). Tracing the roots: The butterfly industry in Marinduque and its economic impact. Philippine Journal of Economics, 55(4), 76-89.

Ghezir, R. M., Molina, P., & Serrano, M. (2021). Competency-based learning and student outcomes in higher education. Educational Research and Reviews, 16(5), 210-225.

Guskey, T. R. (2015). On Your Mark: Challenging the Conventions of Grading and Reporting. Corwin Press.

Labay, R. C. (2005). Marinduque: The butterfly capital of the Philippines. Philippine Journal of Entomology, 19(1), 45-52.

Labay, R. C., & Sapungan, E. (2018). Butterfly breeding practices in the Philippines: A guide for enthusiasts. Journal of Philippine Agriculture and Biodiversity, 22(2), 65-79.
Levine, E., & Patrick, S. (2019). Competency-based education: A holistic approach to student learning. Educational Leadership Review, 28(1), 15-30.
Mallilin, C. M., Peralta, A. B., & Sanchez, L. V. (2021). Industry-academia partnerships in curriculum development in the Philippines. Journal of Education and Industry, 10(3), 110-125.
Matthew, S. (2006). Butterfly farming in Kerala: Integrating conservation with sustainable practices. Indian Journal of Environmental Studies, 12(2), 94-102.
Neendoor, S. (2023). Competency-based learning: A student-centered approach. Journal of Educational Innovation, 18(2), 89-104.
New Zealand Skills Consulting Group Limited. (2021). Essential components of competency-based education. Journal of Vocational Education Research, 19(3), 123-138.
Nguyen, T., & Lee, J. (2023). Global Competency Standards: Aligning Education with Industry Needs. International Educational Publishing.
Nikolov, G., Tsankova, M., & Petrov, P. (2014). The European Qualifications Framework: Impact on education and training systems. European Journal of Vocational Education, 27(4), 302-317.
OECD. (2021). Addressing skills gaps through competency-based education. OECD Publishing.
Quesea, J., & Elisa, R. (2020). Entrepreneurship and innovation in the Philippine curriculum. Philippine Journal of Educational Studies, 32(2), 98-115.
Rogers, C. (2013). Butterfly farming: A practical guide for beginners. Journal of Practical Entomology, 14(1), 56-71.
Smith, J. L., & Jones, P. R. (2020). Historical perspectives in industry-driven curriculum design. International Journal of Curriculum Development, 10(1), 48-65.
Sturgis, C. (2011). The role of competency-based learning in modern education. Educational Reform Journal, 7(3), 40-57.
TESDA. (2014). Training Regulations and the Contextual Learning Matrix. TESDA Publications.
TESDA. (2017). Competency-Based Training (CBT) and its applications in TVET programs. TESDA Publications.
TESDA. (n.d.). TESDA's role in technical education and skills development in the Philippines. TESDA Publications.
Trujillo, A. (2012). Educational programs in butterfly farming: A competency-based approach. Journal of Environmental Education, 20(2), 78-90.
UNESCO. (n.d.). The role of TESDA in the Philippines' education system. UNESCO Publications.
Wang, Y., Li, X., & Zhang, W. (2022). Competency-based education and its effects on employee engagement and performance. Journal of Business and Management Studies, 30(3), 142-158.
Williams, S. R. (2022). The future of competency-based education in global workforce development. Global Education Journal, 29(1), 99-113.

Williams, T. (2015). The ecology and conservation of butterflies. Journal of Insect Conservation, 19(4), 339-354.
Zhang, L., Chen, X., & Sun, Y. (2022). Sector-specific benefits of competency-based education. Journal of Vocational Training and Education, 25(3), 133-145.

APA Citation:

Morales, L. J., & Pacia, L. M. M. (2024). DESIGN, DEVELOPMENT, VALIDATION AND ASSESSMENT OF PROPOSED COMPETENCY-BASED CURRICULUM FOR BUTTERFLY PRODUCTION LEVEL II. In Ignatian International Journal for Multidisciplinary Research (Vol. 2, Number 8, pp. 1187–1215). ICCE. https://doi.org/10.5281/zenodo.13346458

Corresponding author: *lautzojam@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

DEVELOPMENT AND ACCEPTABILITY OF HYDROPONIC GARDEN

Maria Virginia S. Hugo, LPT, MAIE

Patul National High School, Santiago City, Isabela, Philippines

https://doi.org/10.5281/zenodo.13311468

ABSTRACT

This research explores the development and acceptability of hydroponic gardens as a viable alternative to traditional soil-based gardening, focusing on both circulating and non-circulating systems. Utilizing locally sourced materials, two hydroponic designs were created: one using PVC pipes and a submersible pump for nutrient circulation, and the other employing polyethylene and styrofoam for a non-circulating setup. Pechay seedlings were cultivated without soil, highlighting hydroponics' adaptability in urban settings with limited space. Evaluation by 20 faculty members, 10 hobbyists, 15 agriculture students, and 5 agriculturists confirmed the designs' functionality, economy, and instructional value. A Likert scale was used to assess the acceptability, showing high approval for both systems. The study concludes that hydroponics is an effective, innovative gardening method, particularly suitable for educational purposes and areas with space constraints. Further research is recommended to enhance the hydroponic designs, with a preference for non-circulating systems in educational settings.

Keywords: *Hydroponics, Circulating systems, Non-circulating systems, Urban gardening, Instructional value*

INTRODUCTION

Agriculture is the backbone of the Philippine economy, playing a critical role in food security, poverty alleviation, and rural development. It contributes significantly to employment-led economic growth through its various linkages and multiplier effects (Balisacan & Fuwa, 2004). However, the agricultural sector faces numerous challenges.

The population of the Philippines has been steadily increasing over the past decades, placing immense pressure on the agricultural resource base and necessitating a substantial increase in food production (Philippine Statistics Authority, 2020).

One of the critical issues facing agriculture in the Philippines is the fluctuation in vegetable prices, commonly referred to as "seasonal" changes, which are influenced by the economics of demand and supply. Inflation, driven by factors such as high oil prices, exacerbates this issue by increasing shipping costs, thereby raising the prices of vegetables over time (Briones & Dela Peña, 2014). Climate change also adversely affects vegetable production, leading to further volatility in prices (Lasco et al., 2016).

Data from the Philippine Statistics Authority (2020) revealed that in August of that year, the average prices of vegetables sold nationwide were 19.2% higher than the average prices from the previous year. This significant increase highlights the urgent need for sustainable and innovative solutions to address food security challenges.

In response to these challenges, the development and adoption of new agricultural technologies are imperative. The greatest challenge is to increase food production while maintaining ecosystem stability and rehabilitating the environment (Foley et al., 2011). The goal is to ensure that everyone is adequately and nutritiously fed without over-exploiting natural resources (Pretty et al., 2010).

The *"Gulayan sa Paaralan"* program, initiated by the Department of Education (DepEd) and aligned with the Department of Agriculture's goals, aims to enhance students' knowledge of the importance of growing plants and vegetables (Department of Education, 2018). This program emphasizes organic gardening technologies and the production of vegetables and fruits rich in proteins, vitamins, and minerals to improve children's nutrition (Francisco, 2017).

However, Patul National High School faces a significant challenge in implementing the *"Gulayan sa Paaralan"* program due to limited gardening space. The once fertile areas of soil on the campus are now covered with concrete, leaving little room for traditional gardening methods. Therefore, there is a pressing need to design and develop a hydroponic garden as a viable alternative.

Hydroponics offers a valuable means of growing fresh vegetables, fruits, and flowers, particularly in urban areas with shrinking land and water resources (Resh, 2012). It is defined as the cultivation of plants in a water and nutrient solution, eliminating the need for soil (Jensen, 1999). This method of soilless agriculture presents a high-tech solution for growing plants efficiently and sustainably.

Hydroponics provides several advantages, including the ability to control nutrient levels precisely, reuse water, and eliminate soil-borne pests and diseases (Savvas & Gruda, 2018). It is also environmentally friendly, as it reduces the release of pollutants into the environment (Barbosa et al., 2015). The potential to grow food in small spaces

and under various environmental conditions makes hydroponics an attractive option for urban farming (Despommier, 2010).

Moreover, hydroponic systems often utilize organic nutrients, aligning with the principles of organic farming (Owen, 2016). Urban farmers increasingly adopt hydroponics to grow food sustainably, recognizing the detrimental effects of excessive chemical fertilizers on soil fertility and groundwater (Foley et al., 2011).

Hydroponic gardening is particularly beneficial for areas with limited space, such as Patul National High School. It offers a reliable method of cultivation that results in high yields and reduces the risk of pests and diseases (Sharma et al., 2018). By integrating hydroponic systems into existing agricultural projects, schools and communities can produce sustainable food and enhance food security (Gruda, 2009).

This study aims to develop a hydroponic garden at Patul National High School to address the lack of soil space for the *"Gulayan sa Paaralan"* program. The research will explore the development and acceptability of hydroponic gardening as a sustainable solution to the challenges faced by schools and similar institutions.

Research Questions

This study aimed to develop and determine the acceptability of a hydroponic garden at Patul National High School, Santiago City, Philippines

Specifically, it sought to answer the following questions:

1. How are hydroponic gardens developed?
2. What is the level of acceptability of the two hydroponic gardens in terms of:
    a. functionality
    b. economy
    c. workability
    d. durability
    e. safety
    f. instructional capability
3. Is there a significant difference in the acceptability of hydroponic gardens as evaluated by:
    a. faculty
    b. hobbyist
    c. students
    d. agriculturist
4. Is there a significant difference in the acceptability of a circulating hydroponic garden and a non-circulating hydroponic garden?

METHODOLOGY

Project Design

The Hydroponic designs presented in this study had undergone steps of development. The project was developed and fabricated out of locally available parts and materials. One design for circulating hydroponics using GI pipes, PVC, and a submersible motor pump. Another design is for non-circulating hydroponics using recyclable materials. Both were used by the students and teachers in propagating *pechay* without the use of soil. The safety and comfort of the user were given emphasis.

A. Design of Circulating Hydroponics

PVC pipes with a 3-inch diameter were used, and a 25-watt submersible pump was connected to the PVC pipes using a rubber hose. The PVC pipes were drilled with ten holes in each pipe, connecting the PVC ends and couplings.

The water container, which had a capacity of 60 liters, was drilled, and the submersible pump was placed inside and connected to the hose. This setup allowed the water to flow up to the six PVC pipes and back into the water container. The water, combined with the SNAP solution, supplied the pechay seedlings with their needed nutrients and minerals.

Figure 1. Circulating Hydroponics with Submersible Motor Pump

B. Design of Non-Circulating Hydroponics

A styrobox of imported grapes and a polyethylene plastic bag (20”x30”, 0.003mm thick) made of clear plastic were used in the non-circulating hydroponics design. Eight holes were made on the lid or cover of the box using a cutter. The plastic bag was used as a liner for the bottom half of the box to hold the nutrient solution. Packaging tape was used to close all the open slits of the lid or cover to prevent the entry of mosquitoes. The styrocup with slits was placed in the hole.

Figure 2. Non-Circulating Hydroponics

Project Development

The following are the materials and procedures in the fabrication of Circulating and Non-Circulating Hydroponics

A. Circulating Hydroponics

The circulating hydroponic used PVC pipes with a diameter of 3 inches, plastic cups (8oz), and 25 watts submersible pump for continuously applying the water with nutrients to the pipes. The use of 3” diameter PVC pipes made water efficiently flow thoroughly and made the pechay roots grow widely in the pipes.

Materials:

Equipment/Materials:

- 6 straight pipes of PVC (3 in diameter)
- 12 PVC ends with a 90* curve

- 15 PVC Coupling
- PVC glue (Solvent)
- Big tub
- Submersible water feature pump (25 TO 3OW)
- 6 feet length of hose pipe
- Galvanized Iron pipe
- Vulcaseal
- Angle Bar
- plastic cups

Procedure:

To assemble the frame for your project, start by cutting the PVC pipes to the required lengths. Once the pipes are cut, glue the parts together securely. Afterward, drill the necessary plant holes into the PVC pipes, ensuring they are evenly spaced and properly aligned. Proceed to assemble the table-type frame by welding the steel parts together for added stability. Once the frame is sturdy, attach the PVC pipes to it. Next, connect the plastic hose to the PVC pipes using vulcaseal to ensure a watertight seal. Finally, paint both the pipes and the steel frame to protect them from the elements and enhance their appearance.

For the water container assembly, begin by drilling holes into the container as needed for the connections. Install the 25-watt submersible motor pump inside the container, making sure it is properly positioned and secured. Connect the water hose from the motor pump to the PVC pipes, ensuring a tight connection to facilitate smooth water flow through the system. With these steps completed, the assembly is ready for use.

B. Non-Circulating Hydroponics

The non-circulating hydroponic garden was made from polyethylene plastics, styrofoam boxes, and styrofoam cups. The use of polyethylene plastics with a thickness of 0.003mm made the project moss-free. The moss can absorb the nutrients from the water and there will be a competition in nutrients between pechay plants and moss.

Equipment /Materials needed:

- Styrofoam Box (boxes of imported grapes)
- Styrofoam cups (8 oz)
- 10 liters of water
- 25 ml of Nutrient Solution (SNAP Solution)
- Polyethylene plastic bag (20” x 30”, 0.003mm thick)

Procedure:

To prepare your growing system, begin by making eight holes on the lid or cover of the box using a cutter. This will allow for the placement of your plants. Next, line the bottom half of the box with a plastic bag to ensure it can hold the nutrient solution without

leaking. Use packaging tape to seal all the open slits on the lid or cover to prevent mosquitoes from entering.

Place the styrofoam cups with slits into the holes you've cut on the lid. Then, position the boxes in a location where they can receive morning sunlight, making sure they are placed under a roof awning or transparent shed to prevent rainwater from entering the system. Arrange the growing boxes linearly on level ground or a bench, with the covers removed.

Fill each box with approximately 10 liters of tap water, and then add 25 ml of the nutrient solution to each box. Carefully place the seedling plugs into the holes on the lid or cover, ensuring that all cups are securely plugged into the holes. Finally, examine the boxes for any leaks and perform necessary troubleshooting to ensure the system is functioning properly.

Establishing the Seedlings

Materials Needed:

- Sowing/Seedling Tray
- Growing Media (Coco coir/peat)
- Pechay seeds
- Nutrient solution (SNAP Solution)

Procedure:

To begin the seedling process for pechay, start by filling a sowing or seedling tray with a layer of growing media, such as coco peat or coir, about an inch thick. Level the media to create an even surface. Scatter the pechay seeds uniformly and thinly across the media to ensure even germination. Water the seeds liberally every day, as you can expect germination to occur within 2 to 5 days.

Once the seeds have germinated, grow the seedlings under the sun for 7 to 14 days. This period allows the seedlings to strengthen and develop before transferring them to individual growing cups. When ready to transplant, dig a hole in the middle of the growing media in each cup and carefully place the pechay seedlings into the holes, ensuring they are securely positioned for optimal growth.

Testing Procedure

After constructing all the major components in their respective places, the project was subjected to a rigid test to determine its functionality.

1. **Durability Test**
   - Breakage of Styrofoam
   - Water capacity
   - Structural design of steel frame

2. **Functionality Test**
   - Pump is functional
   - Safety from electrical shock

Table 1. Cost of Development

Item No.	QTY.		Unit	Specifications	Unit Price	Total Price
1	1		Assy.	Submersible motor pump	800	800
2	6		pc.	PVC Pipe 3”in diameter	150	900
3	4		pc.	G.I. Pipe (1x1 inch)	280	1,120
4	3		pc.	Angle Bar (1x1 inch.)	170	510
5	12		Pcs.	PVC Coupling	10	120
6	15		Pcs.	PVC Ends	15	225
7	1		pc	Solvent	150	150
8	1		set	Nutrient Solution	250	250
9	5		kilos	Coco Coir/Coco Peat	50	250
10	1		set	Po;ythylene 20”x30” plastic	150	150
11	1		Pc.	Water container (60 liters)	280	280
12	5		m.	Rubber hose	35	175
13	1		Pc.	Vulcaseal	180	180
14	1		pc	Pechay seed	70	70
15	1		pc	Packaging Tape	25	25
16	80		Pcs.	Styrocups	1	80
17	60		Pcs.	Plastic Cups 8oz	1	60
	Total Price					**P5,345.00**

The cost of supplies and materials in the development of (1) one unit of non-circulating hydroponics was Php. 125.00 while (1) one unit of Circulating hydroponics cost Php.4,710.00.

The cost of labor was estimated at 35% of the total cost of supplies and materials including the necessary procedures done in the production.

Table 2. Time consumed in the development of Circulating Hydroponics Design

Activities	Man Hours
1. Conceptualization	42 Hrs.
2. Preparation of Tools, Materials, and Parts	48 Hrs.
3. Fabrication of Parts	
3.1. Frame Assembly and PVC Drilling	36 Hrs.
3.2. Submersible Motor Pump System Assembly	5 Hrs.

4. Initial Testing	2 Hrs.
TOTAL	133 Hrs.

Table 3. Time Consumed in the Development of Non-Circulating Hydroponics Design

Activities	Man Hours
1. Conceptualization	4 Hrs.
2. Preparation of Tools, Materials, and Parts	48 Hrs.
3. Fabrication of Parts 3.1 Cutting 3.2. Assembling of plastics and styrocups	 12 Hrs. 5 Hrs.
4. Initial Testing	2 Hrs.
TOTAL	71 Hrs.

Evaluation Procedure

The evaluation was conducted through a survey, using the qualitative analysis method to determine the acceptability of the device. In the process, a survey on the functionality, economy, workability, durability, safety, and instructional applicability of the hydroponics design was solicited based on the format of the evaluation criteria for the hydroponics system. However, the study did not make use of all the criteria. Instead, it only used the ones related to the prototype to be used to keep a more concrete and definite outcome of evaluation. Each criterion is determined by a set of three indicators rated on a scale of 1 to 5 where 1 is the lowest and 5 is the highest.

The evaluation panel was composed of twenty (20) faculty members (Technology and Livelihood Education Teachers); ten (10), hobbyists, fifteen (15) agriculture students, and five (5) Agriculturists. These people were tapped because of their varying levels of expertise and experience in the field of Agriculture.

The results of the testing conducted were shown to the evaluators as evidence of the viability and reliability of hydroponics as a new, economical, and effective tool in gardening.

Demonstration on how the tool was operated was presented to all the members of the panel, thereafter, they were given an evaluation instrument to judge and evaluate the hydroponics system.

Treatment of Data

After the evaluation, the results were tabulated and interpreted. The Likert scale was employed to determine the equivalent descriptive rating of the weighted mean as shown below.

Weighted Mean	Descriptive equivalent
4.51 – 5.00	Highly Acceptable
3.51 – 4.50	Very Acceptable
2.51 – 3.50	Acceptable
1.51 – 2.50	Fairly Acceptable
1.00 – 1.50	Not Acceptable

RESULTS AND DISCUSSION

Project Description

A. Non-Circulating Hydroponics

The developed Non-Circulating hydroponics used Polyethylene plastic bag (20”x30”, 0.003mm thick). Recycled Styrofoam fruit boxes were used as growing or culture pots where the nutrient solution was contained. The bottom part of the box was lined with a polyethylene sheet to prevent the nutrient solution from draining out. The lids of these boxes had prefabricated vents or openings that allowed the passive aeration of the roots.

B. Circulating Hydroponics

It is a hydroponic system where a continuous flow of nutrient solutions runs over the plant's roots. By using a 3” in diameter of PVC pipes the water was able to flow into six pipes vigorously. The system also used a 25-watt submersible pump to make the water with nutrient solution flow up to the rubber hose to the pipes and flow back to the water container.

Harvesting

After 32 days of observations, the growth of pechay in Non-circulating and circulating hydroponics were ready to harvest. In Non-circulating hydroponics harvested about (22) twenty-two kilograms of pechay, while Circulating hydroponics harvested (19) nineteen kilograms of pechay. The harvested pechay after cleaning, measuring, and bundling were sold to teachers, parents, and students. The total amount of the harvested pechay was Php.410.00.

Number of Yields

(Note: Each system contains 60 styrocups with pechay seedlings)

The table shows that the number of yields in non-circulating hydroponics is greater than in circulating hydroponics after 32 days (from germination to transplanting).

Table 4. Number of yields in Circulating and Non-Circulating Gardens after 32 Days

Hydroponics Garden	Number in kilograms
A.Non Circulating Hydrophonics	22 kilograms
B. Circulating Hydrophonics	19 kilograms

Product Evaluation

The Level of Acceptability of Circulating and Non-Circulating Hydroponic Gardens in terms of functionality, economy, workability, durability, safety, and instructional capability is shown in Table 2 below.

Table 5. Level of acceptability of circulating hydroponic garden per criterion

Criteria	Standard Deviation	Mean	Remark
Functionality	0.543	4.75	Highly Acceptable
Economy	0.632	4.60	Highly Acceptable
Workability	0.667	4.63	Highly Acceptable
Durability	0.616	4.68	Highly Acceptable
Safety	0.632	4.60	Highly Acceptable
Instructional Capability	0.362	4.85	Highly Acceptable
Grand Mean	0.575	4.68	Highly Acceptable

Table 5 reflects the level of acceptability of the Circulating Hydroponic Garden according to functionality, economy, workability, durability, safety, and instructional capability. It can be gleaned from the table that the project was rated “Highly Acceptable” by the respondents as to functionality, economy, workability, durability, safety, and instructional capability with means of 4.75, 4.60, 4.63, 4.68, and 4.85, respectively. Overall, the project is highly acceptable with a grand mean of 4.68.

The level of acceptability of circulating hydroponic gardens per criterion was highly acceptable for agriculturists, agriculture students, hobbyists, and Technology and Livelihood Teachers. However, the lowest mean was the economy and safety for circulating hydroponics which was the same as 4.60. Safety refers to the low probability of accident occurrence during operation.

The highest mean was the criteria under the instructional capability which has 4.85 with the same responents. Instructional capability refers to the extent where the project supports the three domains of learning.

Table 6. Level of acceptability of non-circulating hydroponic garden per criterion

Criteria	Standard Deviation	Mean	Remark
Functionality	0.304	4.90	Highly Acceptable
Economy	0.335	4.87	Highly Acceptable
Workability	0.494	4.75	Highly Acceptable
Durability	0.385	4.82	Highly Acceptable
Safety	0.221	4.95	Highly Acceptable
Instructional Capability	0.267	4.93	Highly Acceptable
Grand Mean	0.334	4.87	Highly Acceptable

Table 6 shows the acceptability level of a Non-Circulating Hydroponic Garden in terms of functionality, economy, workability, durability, safety, and instructional capability. The respondents rated the project “Highly Acceptable” according to the criteria whose means are 4.90, 4.87, 4.75, 4.82, 4.95, and 4.93, respectively. The grand mean of 4.87 shows that overall, the project is “Highly Acceptable” among the respondents.

Comparison in the Level of Acceptability of Hydroponic Gardens among Faculty, Hobbyists, Students and Agriculturists

Table 7. Comparison of the level of acceptability of circulating hydroponic garden across varied groups.

	Sum of Squares	df	Mean Square	F	p-value
Between Groups	1.987	3	0.662	3.009	0.043
Within Groups	7.925	36	0.220		
Total	9.913	39			

Table 7 indicates the comparison of the level of general acceptability of non-circulating hydroponic gardens across varied groups. The means of the level of acceptability of the project significantly vary across the four (4) groups (F-test = 3.009, p-value < 0.05). This means that there is a significant difference in the level of acceptability of circulating hydroponic gardens among the varied groups.

Table 8. Multiple comparisons on the level of acceptability of circulating hydroponic gardens across varied groups.

(I) Evaluator	(J) Evaluator	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
					Lower Bound	Upper Bound
Faculty	Hobbyists	-0.23300	0.25699	0.801	-0.9251	0.4591
	Students	-0.31133	0.24229	0.578	-0.9639	0.3412
	Agriculturists	0.23200	0.25699	0.803	-0.4601	0.9241
Hobbyists	Faculty	0.23300	0.25699	0.801	-0.4591	0.9251
	Students	-0.07833	0.19155	0.977	-0.5942	0.4376
	Agriculturists	0.46500	0.20983	0.138	-0.1001	1.0301
Students	Faculty	0.31133	0.24229	0.578	-0.3412	0.9639
	Hobbyists	0.07833	0.19155	0.977	-0.4376	0.5942
	Agriculturists	0.54333*	0.19155	0.036	0.0274	1.0592
Agriculturists	Faculty	-0.23200	0.25699	0.803	-0.9241	0.4601
	Hobbyists	-0.46500	0.20983	0.138	-1.0301	0.1001
	Students	-0.54333*	0.19155	0.036	-1.0592	-0.0274

** The mean difference is significant at the 0.05 level.*

The table above shows multiple comparisons using Tukey HSD on the level of acceptability of circulating hydroponic gardens to determine where the difference lies among varied groups. It can be gleaned from the table that the level of acceptability of the project differed significantly between agriculturists and students as evidenced by a p-value of 0.036 which is less than the 0.05 level of significance. This suggests that agriculturists perceive the circulating hydroponic garden differently than students because of the former's educational background and expertise in Agriculture.

Table 9. Comparison of the level of acceptability of non-circulating hydroponic garden across varied groups.

	Sum of Squares	Df	Mean Square	F	p-value
Between Groups	0.210	3	0.070	1.143	0.345
Within Groups	2.206	36	0.061		
Total	2.416	39			

Table 9 presents the comparison of the level of acceptability of non-circulating hydroponic gardens across varied groups. It can be gleaned from the table that there is

no significant difference in the level of acceptability of the project among the respondents as shown by an F-test value of 1.143, and a p-value (0.345) greater than the 0.05 level of significance. This means that the level of acceptability of non-circulating gardens is the same among varied groups.

Comparison of the Level of Acceptability of Circulating Hydroponic and Non-Circulating Hydroponic Gardens

Table 10. Comparison of the acceptability level of the two hydroponic gardens

T	Df	p-value	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper
2.109	56.944	0.039	0.18750	0.08890	0.00948	0.36552

Table 10 presents the comparison of the General Level of Acceptability of Circulating and Non-Circulating Hydroponic Gardens. With t = 2.109; and a p-value (0.039) less than the 0.05 level of significance, a significant difference in the general acceptability levels of the two projects is established. This means that circulating and non-circulating hydroponic gardens differ significantly in the level of acceptability of the respondents. The circulating hydroponic has a grand mean of 4.68 and the non-circulating hydroponics garnered its grand mean of 4.87 showing that overall, the projects are “Highly Acceptable” among the respondents. With the mean difference of 0.18750, this means that non-circulating hydroponics is more highly acceptable than circulating hydroponics.

Conclusions

In light of the aforementioned findings, the study concludes that circulating and non-circulating hydroponics are highly accepted innovative ways of gardening. The developed hydroponic garden is functional, economical, workable, durable, safe, and has instructional value. It is very suitable in places with very limited area for planting like in highly urbanized areas. Developing a hydroponic garden (circulating and non-circulating) is easy as materials are readily available. Finally, yields or produce from hydroponic gardens are of high quality comparable to those produced from soil (garden).

Recommendations

Based on the above conclusion, the study forwards the following recommendations:

1. Hydroponics can be used as an instructional tool in school for introducing hydroponics gardening to students taking up vegetable production.
2. A hydroponic garden should be made as an alternative to a soil garden where the school has limited space for the *Gulayan sa Paaralan* program.

3. School managers may consider hydroponics as an innovation of gardening for the *Gulayan sa Paaralan* program.
4. Between the two types of hydroponic gardens, non-circulating hydroponics should be preferred for use in school.
5. Researchers can improve the design of circulating hydroponics and non-circulating hydroponics.

Compliance with Ethical Standards

The researcher hereby assures that the study was conducted in strict adherence to research ethical standards, ensuring that participants provided informed consent, had the freedom to withdraw from the study at any time, their anonymity was preserved, their well-being was protected, no conflict of interest influenced the study, plagiarism was rigorously avoided, findings were interpreted without bias, and the results were used exclusively for research purposes.

Acknowledgments

The researcher would like to express her heartfelt gratitude to her esteemed research adviser for her invaluable guidance and support throughout this study. She is deeply thankful to the participants who generously shared their time and insights, making this research possible. She extends also her appreciation to the school heads, colleagues, friends, and family for their unwavering encouragement and understanding. Lastly, she acknowledges the divine guidance of God, without whom this journey would not have been possible.

REFERENCES

Balisacan, A. M., & Fuwa, N. (2004). Growth, Inequality, and Poverty Reduction in the Philippines. Asian Development Bank.

Barbosa, G. L., Gadelha, F. D. A., Kublik, N., Proctor, A., Reichelm, L., Weissinger, E., & Halden, R. U. (2015). Comparison of Land, Water, and Energy Requirements of Lettuce Grown Using Hydroponic vs. Conventional Agricultural Methods. International Journal of Environmental Research and Public Health, 12 (6), 6879-6891. doi:10.3390/ijerph120606879

Briones, R. M., & Dela Peña, B. (2014). Impact of High Oil Prices on the Philippine Economy. Philippine Institute for Development Studies. Retrieved from http://dirp3.pids.gov.ph/ris/dps/pidsdps1401.pdf

Department of Education. (2018). DepEd Order No. 095, s. 2018: Sustaining the Implementation of the Gulayan sa Paaralan Program in Public Elementary and Secondary Schools Nationwide. Retrieved from https://www.deped.gov.ph/

Despommier, D. (2010). The Vertical Farm: Feeding the World in the 21st Century. New York: Thomas Dunne Books.

Foley, J. A., Ramankutty, N., Brauman, K. A., Cassidy, E. S., Gerber, J. S., Johnston, M., ... & Zaks, D. P. M. (2011). Solutions for a cultivated planet. *Nature, 478*(7369), 337-342. doi:10.1038/nature10452

Francisco, H. A. (2017). Enhancing Food Security through Sustainable Development: An Analysis of the Gulayan sa Paaralan Program. Journal of Development and Agricultural Economics, 9 (3), 44-52. doi:10.5897/JDAE2016.0771

Gruda, N. (2009). Do soilless culture systems have an influence on product quality of vegetables? Journal of Applied Botany and Food Quality, 82 (2), 141-147.

Jensen, M. H. (1999). Hydroponics worldwide. Acta Horticulturae, 481, 719-730. doi:10.17660/ActaHortic.1999.481.88

Lasco, R. D., Habito, C. M. D., Delfino, R. J. P., Pulhin, F. B., & Concepcion, R. N. (2016). Climate Change and Forest Ecosystems in the Philippines: Vulnerability, Adaptation and Mitigation. Journal of Environmental Science and Management, 19(2), 77-97.

Owen, C. (2016). Urban Agriculture and Sustainable Food Systems: A Case Study of Hydroponic Farming in New York City. Journal of Sustainable Development, 9 (3), 113-123. doi:10.5539/jsd.v9n3p113

Philippine Statistics Authority. (2020). Census of Population and Housing. Retrieved from https://psa.gov.ph/population-and-housing

Pretty, J., Toulmin, C., & Williams, S. (2010). Sustainable intensification in African agriculture. International Journal of Agricultural Sustainability, 9 (1), 5-24. doi:10.3763/ijas.2010.0583

Resh, H. M. (2012). Hydroponic Food Production: A Definitive Guidebook for the Advanced Home Gardener and the Commercial Hydroponic Grower. CRC Press.

Savvas, D., & Gruda, N. (2018). Application of soilless culture technologies in the modern greenhouse industry—A review. European Journal of Horticultural Science, 83(5), 280-293. doi:10.17660/eJHS.2018/83.5.2

Sharma, N., Acharya, S., Kumar, K., Singh, N., & Chaurasia, O. P. (2018). Hydroponics as an advanced technique for vegetable production: An overview. Journal of Soil and Water Conservation, 17(4), 364-371.

APA Citation:

Hugo, M. V. S. (2024). DEVELOPMENT AND ACCEPTABILITY OF HYDROPONIC GARDEN. Ignatian International Journal for Multidisciplinary Research, 2, 835–850. https://doi.org/10.5281/zenodo.13311468

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

DEVELOPMENT AND VALIDATION OF A SELF-LEARNING MODULE IN ARALING PANLIPUNAN 9

Aiza Salacup-Policay, MAEd [1] and Judith R. Garcia, MAEd [2]

[1] *Manaring Integrated School, City of Ilagan, Isabela, Philippines*
[2] *Philippine Normal University-North Luzon*

https://doi.org/10.5281/zenodo.13285003

ABSTRACT

The study aims to develop and evaluate a self-learning module for *Araling Panlipunan 9* to address persistent challenges in teaching Economics and improve the low National Achievement Test (NAT) scores in this subject. Employing descriptive research methods, the study utilizes examinations and surveys alongside Johnson's Instructional Materials Development Approach as its primary framework. Participants included Grade 10 students from Manaring Integrated School and expert Social Studies teachers from the Schools Division of the City of Ilagan. The findings indicate that: (1) the designed and validated self-learning module effectively enhances students' learning experiences in *Araling Panlipunan 9*; (2) the modules are well-designed, aligned with curriculum objectives, and suitable for the student's educational needs; (3) the modules are validated as reliable and appropriate for the learners' assessed levels, needs, and abilities; (4) students can use the modules easily due to their comprehensible design; and (5) incorporating the self-learning module is an effective method to supplement traditional teaching approaches in *Araling Panlipunan*. Therefore, the developed self-learning module is recommended for classroom use in teaching Economics and as a model for creating comprehensive modules for the remaining quarters of the school year.

Keywords: *Araling Panlipunan 9, Economics, Johnson's Instructional Materials Development Approach, National Achievement Test (NAT), Self-Learning Module*

INTRODUCTION

The “No Filipino Child Left Behind Act of 2008” is directed to safeguard and secure the right of every citizen, especially children, to quality education. The said policy also ensures to advance access to such education. In support of the aforementioned, the state shall craft appropriate frameworks and resources for an effective implementation of educational programs, projects, and services; and encourage local initiative for the enhancement of schools and community-based facilities for learning. The policy mandates that children of compulsory school age would be required to attend school and enjoy the benefit of having the opportunity to be educated. It also ensures that schools and other facilities reflect the values of a community by permitting teachers, learning facilitators, and other personnel to be flexible in satisfying the needs of the learners, as well (Cayanan, 2015).

To determine if the schools are effectively implementing the “No Child Left Behind” policy along with other programs geared towards quality education, annualassessment strategies have been implemented to assess the current learning situations across the country – one is a national standardized examination. The National Achievement Test (NAT) is designed to determine each learner’s academic levels, strengths, and weaknesses in five curricular subject areas at the end of the school year; this is in accordance with the Department of Education Order No. 5 s. 2005 on Students’ Assessments at the National and Division Levels of Basic Education.

The Department of Education (DepEd) reported an average of 47.6 percent in the year 2011 and 54.22 percent in the year 2012 in *Araling Panlipunan*. In Region 02, *Araling Panlipunan* secured an average of 59.6 percent for the School Year 2014-2015 in the National Achievement Test. Based on the results of the 2011 and 2012 NAT; there was an increase of six percent in the learners’ mastery level of key concepts and competencies in *Araling Panlipunan* (Social Studies). The increased percentage shows that there is an improvement in the learners’ knowledge of *Araling Panlipunan.* However, there is still a high discrepancy between the reported NAT results and the government’s target criterion level of 75 percent, as directed by the Guidelines on the Assessment and Rating of Learning Outcomes under the K to 12 Basic Education Curriculum (Macarandan, 2014). Hence, the low performance of learners in *Araling Panlipunan* in the National Achievement Test indicates the need to augment the learners’ mastery level of concepts and competencies in the said subject through improved teaching and enhanced curriculum material development.

Aside from the low average performance in the NAT in *Araling Panlipunan*, there are still common and basic problematic situations cited for the low performance in the subject. One common problem teachers encounter inside the classroom is that students tend to have a low attention span during discussions.

According to Balena (2004), social studies could be uninteresting for students, especially when the teacher does not relate topics and concepts to the trends relevant to the subject. Thus, it could be inferred that integrating current trends in discussing social studies will avoid an academic monotone atmosphere in a classroom setting in the

integrative teaching of Social Studies. Other problems teachers face are a lack of textbooks, deficiency of physical facilities conditions, and lone teaching of knowledge-skill-values. In this situation, there is a need to frame and develop textbooks and other materials relevant to the demands of teaching the subject.

On the other hand, teachers are also encountering time constraints in teaching social studies. Teachers are having problems incorporating broad concepts in Social Studies because the Department of Education reduced the number of meetings to 110 days only (Macarandan, 2014). Furthermore, the emergence of trends in teaching Social Studies that have been discussed presents additional concerns. There are negative relationships between the Social Studies area and students' attitudes,experiences, and perspectives. Admittedly, the negative relationship may be caused by different degrees of difficulties in materials, teacher-student relationships, classroom environments, lack of interest, and not recognizing social studies as a way of learning from the past the things that can be applied in the future.

Social Studies is an important academic component of high school but it is usually taken for granted (Sievers, 2005). Further, Social Studies subjects are not encountered with the most positive experiences by the students in school when compared to other subjects such as English, Mathematics, and Science. To address these concerns involving the instruction of Social Studies or Araling Panlipunan in the Basic Education Curriculum, there is a need to further innovate for solutions in the instruction process because Social Studies is very essential in the holistic development of learners (Edar, 2012; Bechayda, 2007).

Fundamentally, the Social Studies program is based on information, skills, and value perceptions. Therefore, the concepts, skills, and values should be understood and acquired using different strategies of instruction. Delivery modes could be class lectures, note-taking, homework assignments, tests, and quizzes. Class activities may also include role-playing, cooperative groups, discussion, film/video presentation, and experiential activities. With this, numerous methods and approaches could be implemented to augment and aid the teaching of Social Studies. Hence, there is a need to develop instructional materials (Ramos, 2004; Agorilla, 2014).

The *Araling Panlipunan* Curriculum under the K to 12 Basic Education Program recognizes the importance of modular instruction in the teaching-learning process in the 21st century and as supplementary materials to cope with extending time to cover the lessons in schools with more than one session (Macarandan, 2014). Research results confirm the effectiveness of modular instruction and reliability in identifying difficulties and concerns in carrying out the new curriculum. The modules motivated the students to participate actively in the learning process because the activities were interesting and moderately difficult (Macarandan, 2009). One thing more, the use of a modular approach as an innovative way of instruction design provides students with an opportunity to achieve meaningful learning (Edar, 2012). It tends to make the teaching-learning environment more active and attractive to learners in terms of information gathering, independent learning, and problem-solving.

Learning modules meet the educational principle of individualized instruction. Modular learning allows students to progress at their own pace and abilities. Notably, to provide quality education, one should recognize the essential role of instructional materials in purposeful and effective instruction (Naval, 2014).

An educational authority stated that the development of the production of textbooks and other instructional materials based on the student's interests, knowledge, understanding, abilities, needs, and experiences is necessary to achieve the objectives of education. Instructional materials have been effective instruments for providing quality education by meeting the needs of students.

To meet the needs of students, the learner-centered curriculum gives priority to developing self-directing and independent lifelong learners who can apply in real life their understanding of the concepts (Cayanan, 2015) as specified in the desired outcomes of the K to 12 Curriculum competencies in the form of content and performance standards in each learning area.

Economics is an integral component of the K-12 Basic Education Curriculum under the *Araling Panlipu*nan Curriculum which is a subject undertaken by Grade 9 students and is focused on the Philippine Economy. It aims to make students deeply understand the economic stability of the nation, and eventually, learners would be able to transfer these concepts to real life by practicing creativity, demonstrating critical thinking,problem-solving, and wise decision-making.

Generally, learning economics has its incentives (Zaide, 2009). First, it tells us about the material influences in daily life as a family, in the community, and as a nation. Second, knowing economics makes a person better at keeping and making money. Third, through economics, an individual learns about how to be a good businessman and perhapsa good public official someday. Fourth, economics teaches about the issues of agriculture and commerce that affect the lives of individuals and the country in general. Lastly, the knowledge of economics is necessary to be able to manage problems brought by modernization and it also helps people to prepare for their future.

The unpredicted occurrence of COVID-19 (Corona Virus Disease-2019)pandemic put the world into a major health disaster. The safety and protection of the people, including school children, are at risk. To protect everybody, schools, teachers, and students are not allowed to go to school for normal activities- classes, programs, and others to avoid contact that may transfer the deadly virus from one person to another. The government has planned and implemented national strategies to cope with the global pandemic.

In the education sector, the Department of Education of the Philippines through its Learning Continuity Plan (LCP) amidst the pandemic strategized and innovated solutions so that schools would not close and education would go on at all levels. Among the coping strategies arrived at and decided upon are the blended learning approach, distance learning, modular learning approach, virtual learning approaches through online platforms, and other means and resources.

Before the pandemic, it can be said that developing and using modules in the classroom was for intervention and enrichment purposes. Teachers prepare modules to help a student cope and master the least mastered competencies and lessons. Now, with the advent of COVID-19, the use of modules is an official alternative mode of learning underthe blended approach. The learning material should be prepared and produced by observing the design prescribed by the DepEd. In the local context, teachers should prepare the modules according to local needs. Thus, module development is a required task for a teacher who desires his students to learn meaningfully, effectively, and productively.

As a response to the need to augment the learning experiences of learners amid a global pandemic, the researcher is encouraged to plan and design an example of a learning continuity modality learning materials such as learning modules to address the learning needs of the students as prescribed on the Learning Continuity Plan of the DepEd.

The researcher believes this study will contribute to the field of *Araling Panlipunan* specifically in providing supplemental activities and learning experiences aside from the central and general provision of learning modules by the Department. The series of learning modules developed are contextualized for real-life applications. The modules are not foreign but supplement the most essential learning competencies that DepEd providesupon the implementation of such learning delivery modes.

Relative to the perennially pressing need for relevant instructional materials to effect quality instruction, and meet the “No Contact Policy”, and the call for “Bayanihan, Heal as One”- a battle cry for unity and cooperation among Filipinos to fight against the ills brought about by COVID 19 pandemic, the present study is an immediate and practical response of the researcher.

Conceptual Framework

Teachers and experts in education are continuously looking for strategies in teaching and learning that can better help students learn more effectively and productively.

Today, the models of the Whole Child Approach, 21st Century Skills, and Project Based Learning are believed to be among the most effective approaches to assist teachers and students achieve the objectives of education. Likewise, the Modular approach promoting independent learning is also proven to be another effective strategy.

Social Studies is a subject area designed to build productive, civic-minded, critical, and informed individuals. The subject consists of diverse areas such as economics, geography, history, civics, government, culture, law, and religion from Kindergarten to Grade 12 up to tertiary level. Grade levels of students determine the curriculum content systematically arranged from simple to complex. The competency components of the Social Studies curriculum include cognitive thinking processes, analytic skills, continuance of participation, and principles/concepts for students and use as an

application of life within today's society. Social Studies is expected to teach the students (Thiveos & Moroz, 2011 cited in Macarandan, 2014) life and career skills, learning and innovation skills, information, media, and technology for them to succeed in the 21st century (P12 Century Skills).

Economics is a field in the social sciences. It is under the curriculum of *Araling Panlipunan*. The phased implementation of the *Araling Panlipunan* Curriculum for Grades 7-9 in School Year 2014-2015 raised concerns among teachers. With the new setsof competencies, gaps in learning standards came up. An example of the issues is the incoming Grade 9 students who can no longer take the subject World History but will immediately take Economics, among others. The issue was addressed by the issuance of DepEd Order No. 20, s. 2014 stipulating policy guidelines on the implementation of grades 7 to 10 of the K to 12 Basic Education Curriculum and clarifying courses of study in *Araling Panlipunan*. Economics, now with improved and more comprehensive learning competencies, remained to be taught in *Araling Panlipunan*. This eventuality raised new concerns regarding books, textbooks, and other materials to use in teaching Economics effectively. Unfortunately, it was found out by educators that most books were somewhat erroneously written, and reconstructing the books would take an author time to finish. However, educators and teachers are given leeway to develop and produce materials that follow the learning competency guidelines and standards.

The books or materials are under prescribed learning competencies dealing with economic problems and issues in the Philippines, advantages and disadvantages of policies adopted as well as the status of current and alternative economic order from the Philippine Journal of Development in 2007. It is predominantly important to know that economic understanding implored at least a basic understanding of operation (Zevin, 2000) because the economic system is an essential part of everyone's education frombirth to death. The economic forces that control the structure of society influence ourvery existence, hence, it is imperative to make Economics an integral part of the entire social science curriculum. Accordingly, it is imperative for teachers with specialization in a chosen area in Social Studies should be equipped with capabilities to organize, design, and develop curriculum materials appropriate to the individual levels of students (Salandanan, 2009).

Vitasa (2006) Modular instruction is beneficial for several reasons: first, the modules help the individual needs in learning different skills and concepts; second, compared to using textbooks, they are more effective and economical in developing knowledge and skill; third, they introduce learning with minimum teacher direction and supervision; fourth, they ensure satisfactory minimum standards; fifth, modules upgrade the content and enhance competencies in grammar; sixth, they integrate theory and practice and provide resources for distance learning; and seventh, they encourage mastery of learning and lastly, they encouraged a changed role of teachers who become facilitators of learning.

The researcher, a teacher of Araling Panlipunan, is beset with the need to develop instructional materials in Araling Panlipunan to meet the needs for remedial and

enrichment activities to further help the students optimally acquire basic skills in Economics. Indeed, the researcher is inspired to develop teaching modules to produce thedesired learning outcome for the educational success of the students. To carry on the project, the researcher anchored her study on Johnson's Model of 1972.

According to De Guia (2016), Johnson's Model characterizes instructional materials from planning to disseminating and evaluating, hence, a very good approach toward developing learning modules in Araling Panlipunan specifically in Economics. This provided the methods of research and procedures for developing and innovating instructional materials appropriate to the design of the researcher's proposed modules. Johnson's (1972) Instructional Materials Development Approach is composed of a design phase, development phase, and dissemination phase.

In the first phase of Johnson's Model, a survey of existing materials accumulated through the years affirms the claim that the design and use of instructional materials that no new materials are completely new. A survey of existing materials enabled material developers to identify aspects of design and use them to serve as a prototype or model. Then, the survey also leads to a definition and justification of the rationale for designing new material. The writing of th e table of specifications comes next. These specifications detailthe instructional materials developed, the format, and the technical materials that had been identified.

The Development Phase is primarily selecting appropriate materials. The next step is writing of learning materials according to the table of specifications. The developed learning materials were validated and assessed by the experts. In this study, the validation and assessment were performed by her research adviser and teachers of Araling Panlipunan.

Further, formative evaluation is followed by conducting a judgmental review or pilot testing in the form of a controlled tryout of the instructional modules. The formative evaluation for suitability was conducted utilizing judgmental review withrepresentative teachers responding as evaluators or judges. An evaluation tool was adopted from the Department of Education and likewise elicited feedback in the form of comments. Based on the information gathered from the evaluation and try-out, writerscan make necessary revisions to the materials before final production. The final production of the materials should be carried out as instructed in the objectives of the materials, the detailed writing specification, and the proposed format.

Lastly, the Dissemination Phase deals with the acceptance and adoption for use of the new instructional materials. This stage refers to the extensive use of the new instructional materials in the final format. In this stage, the instructional material developer and designer should work closely with the students, teachers, and administrators for further feedback on the effectiveness and functionality of the materials.

The functionality of the instructional materials and teaching guides means that teachers could study and use the guides with ease during their classroom instruction because each teaching guide contained pertinent information and featured strategies

that would tickle the playful and imaginative minds and feelings of students (Cayanan, 2015) to achieve the desired objectives.

Developing a material would facilitate a realistic and concrete view of teaching-learning and help the students gain a better understanding of the concepts being taught (Salandanan, 2009; Macarandan, 2014). Therefore, the use of learning modules in teaching *Araling Panlipunan 9* can be an effective strategy for developing a functional learner equipped with the understanding of concepts and principles linked with real-life situations.

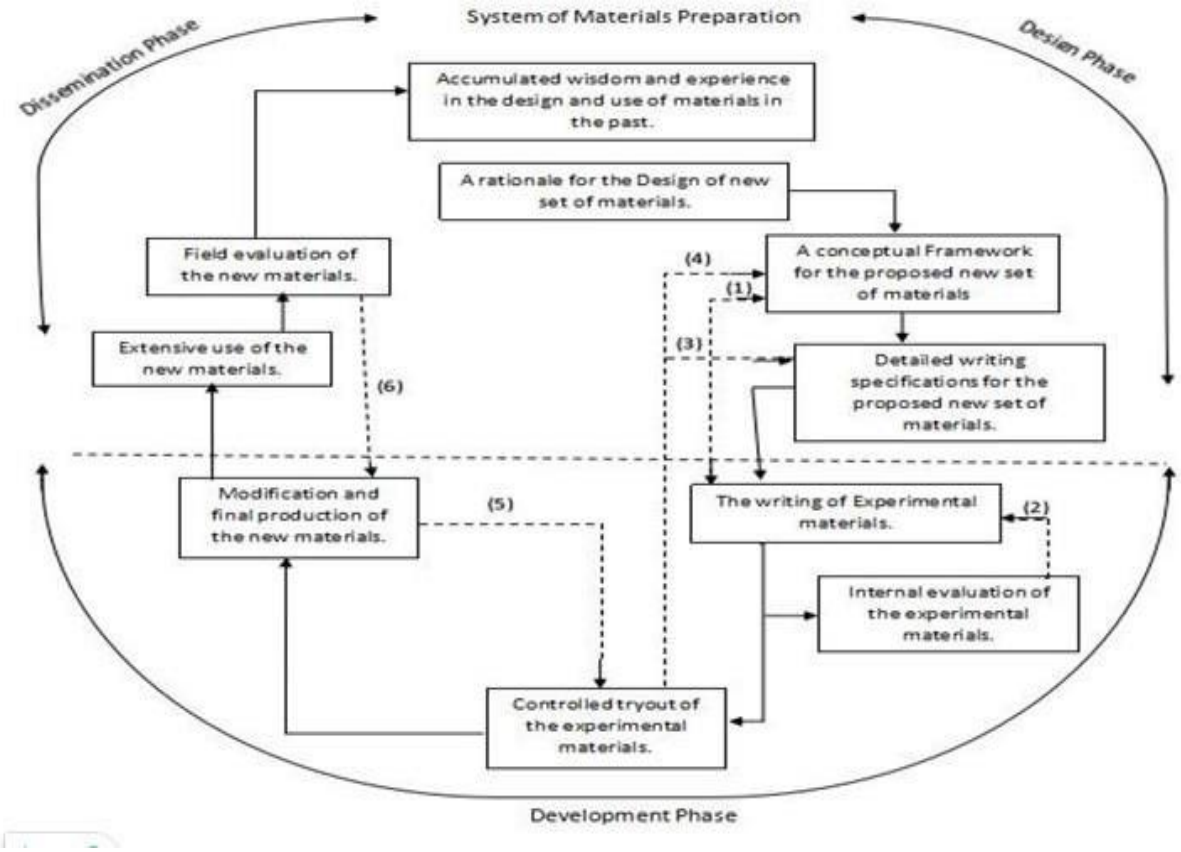


Figure 1. Johnson's Model of Instructional Materials Development

The figure above details Johnson's Model for Instructional Materials Development as one of the main frameworks for the study. This cites the three discussed phases of the model – the design phase, the development phase, and the dissemination phase. The design phase includes activities such as proposing a new set of materials, preparing the table of specifications, and initial writing of the materials. In the development phase, initial evaluation and improvement of the materials are done, while the last phase shows the process of modification, final revision, and extensive use of the materials. Thus, a systematic process and system of preparing and developing materials in a subject area.

The researcher, therefore, developed teaching modules based on Johnson's Model as the main blueprint and framework to produce the desired learning outcome for the educational success of the students. The modules provide the students a unique avenue in the writing process based on the premise of writing in the discipline of Center for Educational Measurement no. 30 s. 2006.

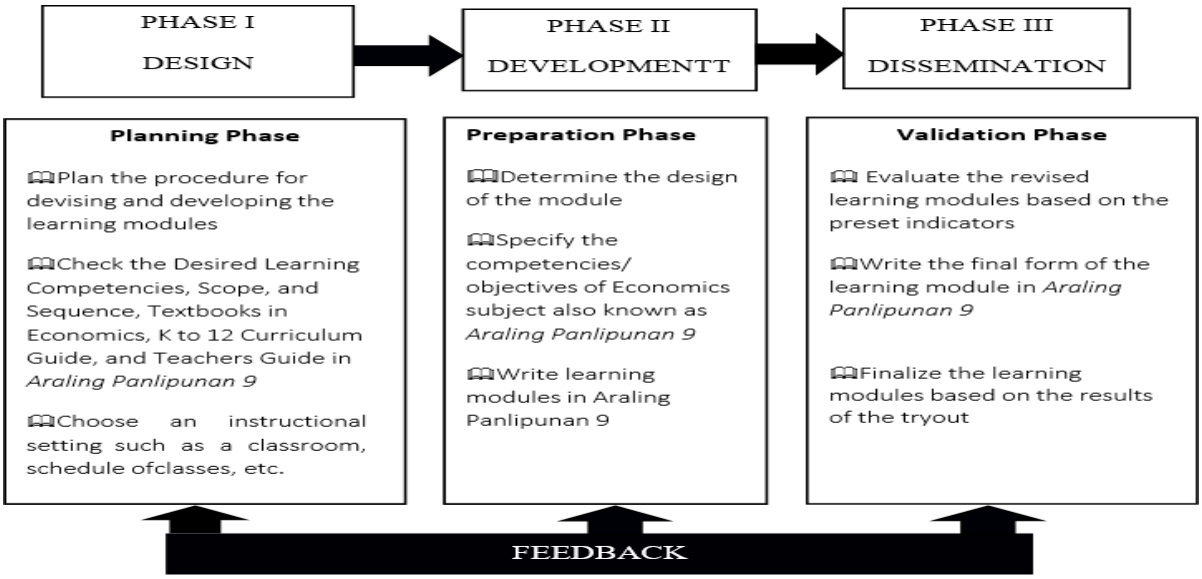


Figure 2. Research Paradigm on the Development and Validation of Learning Materials inTeaching Araling Panlipunan 9

The figure above shows the graphic presentation of the research procedure indicating specific steps undertaken for the first, second, and third phases. As gleaned from the figure, the design establishes the rationale for the study, research focus, andreview of pertinent literature following the review of the conceptual framework.

Research Objectives

This study purported to develop and validate a self-learning module in Araling Panlipunan 9 aligned with the structure of the Enhanced Basic Education K to 12 Curriculum and contribute to the improvement of student performance in the teaching-learning process.

Specifically, this study aimed to:

1. Design a learning module in Araling Panlipunan 9 to be utilized by students in the Grade 10 level.
2. Establish the content validity and reliability of the learning module in terms of face, content, organization, and effectiveness; and
3. Test the effectiveness of the learning modules in teaching Araling Panlipunan 9.

METHODOLOGY

Research Design

The study employed the descriptive method of research. The descriptive type of research is integrative for qualitative and quantitative methods of collecting data. Descriptive surveys as research methods include questionnaires and normative surveys (Gray, 2004). The descriptive type of research was appropriate for gathering information about existing conditions that determine and report the way things are (Emotin, 2003).

Sampling and Participants

The study involved two sections (Aquamarine and Zircon) in the Grade 10 level of Manaring Integrated School. The utilization of the self-learning module was conducted before the implementation of the new curriculum in Araling Panlipunan wherein Grade 10 students take Economics subject which the researcher has been teaching for five years.

In the use of the descriptive method, the self-learning module was subjected to validation using the Expert's Assessment Checklist which was developed based on several theses by Hernandez (1999), Libranda (2004), Salvador (2005), Rivera (2011) and Agorilla (2015). The researcher adopted the criteria set by the writers, which were found to be appropriate. The checklist was used to validate the learning modules based on format and design, content, organization, and presentation. Two (2) teachers of the Schools City Division of Ilagan, and one (1) teacher of the Division of Santiago City were the validators of the learning modules. Of the three, two were Teacher III and one Master Teacher I. Eighteen (18) Araling Panlipunan teachers teaching Araling Panlipunan 9 from the Division of the City of Ilagan and forty-five (45) students from Manaring Integrated School also evaluated the learning module.

The sampling method used was cluster sampling which involves surveying whole clusters of the population selected through a defined random sampling strategy (O'Leary, 2004 cited in Agorilla, 2015). Clusters may include schools, geographic locations, or sections. The clusters are sampled so that individuals within the group can be surveyed or interviewed. It was used as reasonable but relatively diversified groupings which was evident in a statistical population. In this technique, the totalpopulation was divided into two groups, and a simple random sampling of the groups was done. Using the lottery technique, the researcher selected a class from the two sections in the Grade 10 level. The selected classes used the module/instructional materials. The students of the second section (Zircon) were considered for the first pilot testing of the learning modules while the students of the first section were considered for the second pilot testing.

The study was conducted in Manaring Integrated School, a public institution under the Schools Division of the City of Ilagan located specifically at Manaring, City of Ilagan, Isabela. The students came from different barangays of the city including Pasa,

Manaring, Bangag, Capo, Tangcul, San Isidro, San Juan, Rugao, San Andres, San Rodrigo, and Balla.

Instruments

In the gathering and collection of data, the researcher used the following: (1) Experts' Evaluation Checklist of the self-learning Module to gather and collect data on the validation and evaluation of the learning modules in terms of objectives, content, organization, materials and resources, and effectiveness; (2) Pretest and Posttest for each self-learning module to achieve the scores to test the effectiveness of the learning modules; and (3) Students' Evaluation Checklist of the self-learning Module to collect data on students' evaluation on the self-learning module in terms of content and format.

1. Experts' Evaluation Checklist of the Instructional Module

To have a basis for determining the acceptability of the developed instructional modules, the researcher used the Expert's Assessment Checklist which was developed based on Agorilla (2015). Since the Self-Learning Module in Araling Panlipunan 9 was constructed and developed by the researchers, this was validated by theexperts using a standardized assessment checklist. Some modifications to the item format were made to better align them with the purpose of the study. Revisions were validated by the researcher and teacher experts in module writing in AralingPanlipunan.

2. Pretest and Posttest Scores

Pretest and Posttest were used as instruments to achieve the scores that are necessary to test the effectiveness of the self-learning module. In developing the achievement test, the researcher adhered to the standard procedures in developing and validating a test: (a) development of the table of specifications; (b) construction of the test items in congruency with the objectives and content; and (c) testing the validity and reliability of the test.

3. Students' Evaluation Checklist of the Instructional Modules

This instrument is a five-point Likert checklist adapted from the theses of Marasigan (2003) and Torrefranca (2017). Unlike the expert's evaluation form, the checklist for students focused only on the content and format of the developed instructional modules yielding a total of 20 items. The self-learning module content evaluation was composed of the objectives, lessons, scope, competencies, and other essential and relevant elements in the self-learning module. Finally, the evaluation of the self-learning module format centered on the layout of the module, template, font, size, symbols, diagrams, and other relevant technical aspects of the self-learning module.

Data Gathering Procedure

Data collection activities that were undertaken in the study are described as follows:

Material Development and Validation Stages

I. Design Phase

The researcher examined books and related materials in the self-learning module of Araling Panlipunan 9 which are the topics under the fourth quarter. It was suggested by the research panel that the last quarter of the school year was the most efficient for the researcher and the students to conduct and implement the utilization of the self-learning module. The researcher also referred to and checked the desired learning competencies, scope, and sequence prescribed by the DepEd for Grade 10 high school students. The goal of the researcher at this stage was to create a matrix that would show the competencies that must be demonstrated in the self-learning module. Deciding and determining the competencies to be captured in the learning module were accomplished in the second phase.

The content of the self-learning module was guided by t he course description by the DepEd and the prescribed topics under Social Studies. Araling Panlipunan 9 introduces learners to the world of Economics. In this subject, learners are expected to demonstrate the result provided as the basis for determining the coverage of the self-learning module. A table of specifications was prepared to serve as a guide in the preparation of the learning module. The specification includes the module number, the title, and the skills developed in each learning module.

Module No. and Title (Modyul)	Skills/ Competencies(Kasanayan)
Module 1. Konsepto at Palatandaan ng Pambansang Kaunlaran	Matutunan ang tungkol sa konsepto at palatandaan ng pambansang kaunlaran upang maka bahagi sa pagpapabuti ng pamumuhay at masukat ang kaunlaran ng isang bansa.
Module 2. Sektor ng Agrikultura	Matutunan nag kahalagahan ng agrikultura sa pang araw-araw na pamumuhay ng bawat Pilipino upang makibahagi sa matalinong paggamit ng mga likas na yaman at pagsunod sa mga patakarang pang-ekonomiya.
Module 3. Sektor ng Industriya	Matutunan ang papel na ginagampanan ng industriya at ang ugnayan nito sa maayos na pamumuhay ng mga mamamayan upang masiguro ang kapakinabangan sa pagtamo ng kaunlaran.
Module 4. Sektor ng Paglilingkod	Matutunan ang bahaging ginagampanan ng sektor ng industriya sa bansa upang mapabuti ang kakayahan ng mga manggagawang Pilipino at tumaas ang produktibidad.
Module 5. Impormal na Sektor	Matutunan ang kontribusyon ng impormal na sektor sa ekonomiya ng bansa upang mapagtagumpayan ang kahirapan sa buhay.
Module 6. Kalakalang Panlabas	Matutunan ang bahaging ginagampanan ng kalakalang panlabas sa ekonomiya ng ating bansa upang mabigyang linaw ang nagaganap sa pagitan ng Pilipinas at ibang mga bansa sa daigdig.

Figure 3. Talaan ng Inskripsyon

The table of specifications of the self-learning module was considered in the selection of appropriate instructional events. The different learning activities for each self-learning module were identified as well as the role of the teacher and the learner.

To ensure the success of each instructional event, the conditions of learning must be relevant to the expected outcome; hence, the methods of instruction were selected to help the learners achieve the skills.

Identifying Teaching-Learning Strategies, Educational research has proven that teaching strategies that are interactive, multidisciplinary, interdisciplinary, integrated, experiential, varied, and connected to students' daily lives are effective (Rivera, 2012 and Agorilla, 2015) also added that varied and appropriate instructional materials are needed to make instruction more motivating and encouraging.

II. Development Phase

Writing the Self-Learning Module is the major part of the development and validation of the module in Economics. Its writing was anchored on the K to 12 curriculum which was signed into law as Republic Act No. 10533 otherwise known as the Enhanced Basic Education Curriculum on May 15, 2013. The criteria set by the Department of Education Material Council and the UNESCO guidelines in developing instructional materials in terms of the objectives, content, organization, materials and resources, and effectivity in writing of the learning module were carefully considered. Suggestions from the panel members and the advisers during the proposal defense were incorporated into the development of the learning material.

The style adopted for the self-learning module was patterned from the existing English Learning Modules by Soriano (2013) in her thesis “Development and Validation of Self- Self-Instructional Modules in Grammar for Grade 5 Pupils” due to similarities in objectives and purposes.

Writing the first draft of the self-learning module was done using the following components:

A. Overview (Lagom Pananaw). This part of the module outlines what students are about to learn. It gives pieces of information on the different concepts that they encountered throughout the learning tasks.
B. Target (Sapulin). This refers to the objectives that students are expected to know, do,or feel after accomplishing the module.
C. Break In (Tanong Ko, Sagot Mo). This refers to the section that carefully cues the learner on the skills and values to be learned through process questions.
D. Discover (Matuto Ka). This refers to the facts about the lesson to be presented throughsentences or picture analysis.
E. Try This (Kaya Mo Ba ‘To?). This part of the module includes series of initial activities which measure learners’ comprehension and understanding of the lessons and concepts presented.
F. Challenge (Henyo Ka Ba?). It allows the students to do more of the activity to achieve a desired understanding of the concept or skills.
G. Move On (Sagot Pa More). This part of the module is another series of activitiesthat serve as an application of the concepts and lessons for retention.
H. Things to Remember (Pakatandaan). These refer to the concepts that the students needto remember after covering certain parts of the module.
I. Post-Test (Panghuling Gawain). This element is a short summative assessment that willmeasure the students learning based on their scores. Each module consists of 10-item multiple-choice test questions based on the objectives and content of the lesson discussed.
J. References (Sanggunian). The sources of information and relevant data necessary for the series of activities and the discussion.

The objectives for each lesson were taken from the Learning Competencies for Grade 9 Araling Panlipunan. In this stage, the researcher decided to adopt objectives based on the topics included in each module. There were 6 lessons covered by the Self Learning Module. In determining and preparing the instructional activities for each lesson, and in preparing the pre-test and post-test the researcher ensured that the texts were written in clear and appropriate language suitable to the level of the target Grade high school students. The language used in the module is Filipino. This is based on the mandate that Araling Panlipunan or Social Studies in Basic Education must be taught in the Filipino language.

III. Dissemination Phase

This stage highlights the preparation of a self-learning module in terms of face, organization, and content validity. This was undertaken to bring out the prepared self-learning module in terms of face, content validity, and reliability.

Validation by Experts

Content validity is the degree to which a test measures topics and areas that it is intended to measure (Sevilla, 1998). The appropriateness of the learning material to the subjects and congruence to the objectives are determined through the help of the experts.

The self-learning module underwent validation using the Expert's Assessment Checklist. The criteria focused on the clarity, attainability, and measurability of the objectives, specifically in terms of knowledge, processes, understanding, and performance. These criteria align with the focal points of assessment procedures in the K to 12 Curriculum.

For the organization, the criteria include clarity and conciseness of instruction; proper sequencing of the lessons, progression, and depth of knowledge, provisions of adequate questions, and problems, and relevance of the learning module to the objectives. The criteria for the learning module include varied and diverse resources to widen sources for knowledge and to augment learning and students' prior knowledge and skills in using the material.

The effectiveness of the self-learning module focuses on its usefulness in guiding the student, promotion of active learning and practicality of application, and motivation for learning.

The experts used the revised "Experts' Assessment Checklist" (Agorilla, 2015) which is specifically crafted for material evaluation. Experts' ratings were subjected to SPSS Version 19.0 Cronbach Coefficient Alpha and Inter-rater reliability to determine the internal consistency reliability of their responses.

Establishing the Validity of the Self-Learning Module

The development and validation of the self-learning module was anchored on the K to 12 Curriculum in Araling Panlipunan which intends to produce learners who are competent, productive, resourceful, and research-oriented and where teachers are expected to facilitate learning and constantly nurture every learner.

The criteria for establishing the validity of the self-learning module face, organization, reliability, validity, and effectiveness were set by the Department of Educational Material Council.

Assessment by Experts

Three experts were chosen and were asked to rate the individual components of each criterion using a rating scale. The three experts were selected based on their capability as instructional material developers.

One of the experts is a Master Teacher I of the South District, of the City of Ilagan who has been teaching Araling Panlipunan for several years and at the same time a coach of Araling Panlipunan-related academic and non-academic contests at the regional and national levels. He is also noted for delivering his expertise in producing his functional and comprehensive modules that enhance students' knowledge and skill in all aspects of Araling Panlipunan particularly in Economics subject. He is also one of the demonstrators on Strategic Intervention Material (SIM) in the Division of the City of Ilagan, Isabela who motivates teachers to find ways and means to lessen drop-out and failing students in all subject areas.

The second expert is an instructional material developer. She is a faculty member of San Antonio District of the City of Ilagan. She developed lessons using modules to cope with the challenges identified in teaching the subject area.

Finally, the third expert is also an instructional material developer. He had already devised and utilized instructional materials such as modules in teaching Araling Panlipunan which are anchored from the principles of localization and contextualization. He taught for several years and served as the Araling Panlipunan Coordinator and the Supreme Student Government Adviser at the same school. He excels in the field of Social Science.

Validation by the Teachers and Experts

Standard Deviation was used to gauge the evaluation of the experts and teachers on the objectives, content, organization, materials and resources, and effectiveness of the self-learning module as well as the general evaluation of the students on the format and content of the self-learning module. The calculated means were qualitatively describedusing the following guidelines:

Mean Range	*Description (Experts/Teachers)*	*Description (Students)*
1.00-1.49	Needs Improvement	Strongly Disagree
1.50-2.49	Not Satisfactory	Disagree
2.50-3.49	Satisfactory	Moderately Agree
3.50-4.49	Highly Satisfactory	Agree
4.50-5.00	Outstanding	Strongly Agree

The mean rating for each criterion was computed by getting the average of the mean rating of the experts. The grand mean for each criterion were again computed to obtain the mean for each criterion.

For instance, materials were provided to augment the instructional events and skills to be acquired by the learners. It shows that experts fully conceded that the competencies cited in the assessment tool were congruent with the competencies set by the K to 12 Curriculum in Social Studies.

Proofreading, Editing, and Printing of the Self Learning-Module

The instructional materials were subjected to grammar and spelling checks on the computer while encoding. After auto-editing on the computer, the text, graphics, formatting, and layout were carried out for the artistic appearance to make it more student-friendly. The arrangement of various features, elements, and components was checked by the experts to ensure that the learning module is clear, consistent, and correct.

Evaluation of the Materials by the Adviser and Distribution of Evaluation Forms to the Teacher Expert

The developed self-learning module was presented to the thesis adviser for comments and suggestions before the evaluation of experts. Teachers and experts who were subjected to evaluate and validate the learning modules developed in AP for the students were also given evaluation forms and the materials to be evaluated.

Initial Revision of the Self-Learning Module

Comments and suggestions initially given by the adviser were taken and duly noted to revise and modify the learning modules developed for the students in *Araling Panlipunan 9.*

Second Revision of the Self-Learning Module

The self-learning module in *Araling Panlipunan 9* was revised based on theexperts' suggestions and recommendations. Revisions were made to follow the suggestions of the Experts regarding the format of the tasks in the learning module. However, only a few parts were taken down for revision due to the compliments and positive feedback given by the teachers and experts to the modules developed.

Third Revision of the Self-Learning Module

The self-learning module was revised after the pilot testing. The revised module was tested to gather the rating of the performance task outputs from the teachers and individual students were analyzed statistically to determine the inter-rater readability of each performance task output.

Utilization of the Self-Learning Module

The revised self-learning module in Araling Panlipunan was administered to forty-five (45) Grade 10 Aquamarine students of Manaring Integrated School from January 15, 2015 to March 10, 2015. The individual scores of the students from thepretest and posttest from each learning module were subjected to paired sample t-tests to determine the effectiveness of the modules. The ideal p-value obtained from the test should be less than 0.05 to be considered significant and the p-value should be less than 0.01 to be considered highly significant (Valdez, 2014). The last step in the validation of the Learning Module in Araling Panlipunan 9 was problems encountered in the second pilot test and recommendations from the experts, peers, and students were then utilized for further refinement and revision of the materials.

The revised self-learning module in Araling Panlipunan was administered to forty-five (45) Grade 10 Aquamarine students of Manaring Integrated School from January 15, 2015 to March 10, 2015.

In evaluating the developed self-learning module in Araling Panlipunan 9, two sources of information were used by the researcher: (1) feedback from the student- -respondents on the content and format of the instructional modules they used; and (2) results of the comparison of the student-respondents' performance in the pretest administered before the modules were given to them and the posttest conducted after they were done with the modules. Eventually, the instructional modules were finalized based on the inputs from the evaluation stage.

Data Analysis

1. The perception of the students and teacher-evaluators was determined on the effectiveness of the material (in terms of format design, objectives, content, organization, presentation, and usefulness), therefore, frequency and weighted mean statistical tools were used.
2. The Cronbach-Alpha Coefficient was used to determine the internal consistency reliability of the responses from the teachers and experts.
3. The scores taken from the pretest and posttest were treated. To determine if there is significance in the test levels of the students, the T-test for dependent samples was utilized.
4. A Paired Sample t-test was done to compare the ratings indicated by experts and students on the format and content of the modules.

Ethical Considerations

The researcher made sure that before, during, and after the conduct of the study, the following ethical concerns were followed to necessitate safe, anti-fraud, deliberate, and careful undertakings in the study:

1. The researcher, through proper communications, asked permission from the school where she is employed, and other concerned offices to conduct the study.

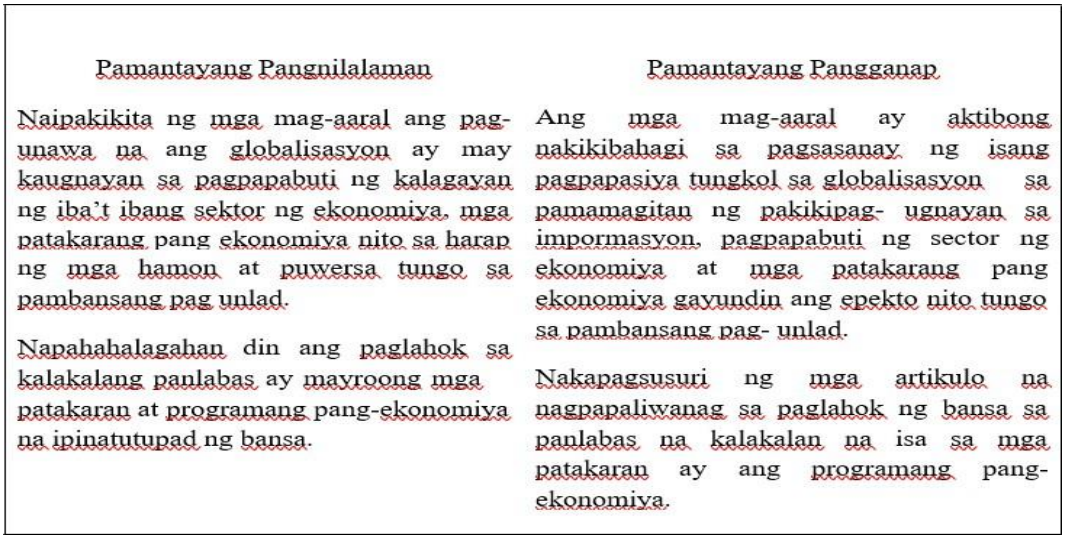
2. The researcher wrote a letter to the respondents and conducted a short orientation on the nature of the study. Data and information gathered were treated with utmost respect and confidentiality.
3. The researcher through a letter of consent sought approval of parents to allow their children to participate in the study.
4. The researcher strictly observed proper citation for authors, books, e-sources or any publications using the 7th Edition of the American Psychological Association (APA).

RESULTS AND DISCUSSION

Development of Self-Learning Module in Araling Panlipunan 9

The self-learning module in Araling Panlipunan 9 was developed by the researcher through the help of her research adviser, suggestions of the experts, and the use of learning materials for K to 12 learners and other resources. After it was developed, the module was used by the Grade 10 students.

The following figures show some parts of the completed self-learning module.



Pamantayang Pangnilalaman

Naipakikita ng mga mag-aaral ang pag-unawa na ang globalisasyon ay may kaugnayan sa pagpapabuti ng kalagayan ng iba't ibang sektor ng ekonomiya, mga patakarang pang ekonomiya nito sa harap ng mga hamon at puwersa tungo sa pambansang pag unlad.

Napahahalagahan din ang paglahok sa kalakalang panlabas ay mayroong mga patakaran at programang pang-ekonomiya na ipinatutupad ng bansa.

Pamantayang Pangganap

Ang mga mag-aaral ay aktibong nakikibahagi sa pagsasanay ng isang pagpapasiya tungkol sa globalisasyon sa pamamagitan ng pakikipag- ugnayan sa impormasyon, pagpapabuti ng sector ng ekonomiya at mga patakarang pang ekonomiya gayundin ang epekto nito tungo sa pambansang pag- unlad.

Nakapagsusuri ng mga artikulo na nagpapaliwanag sa paglahok ng bansa sa panlabas na kalakalan na isa sa mga patakaran ay ang programang pang-ekonomiya.

Figure 4. Pamantayan sa Pagkatuto

Pamantayan sa Pagkatuto (Learning Objectives). The first part of the self-learning module gives a view of the general learning expectations to be developed amongthe learners. These learning expectations include the content objectives on activities and skills to be executed by the learners. These are strategically derived and based it on the three important aspects of learning development–cognitive, affective, and psychomotor learning domains.

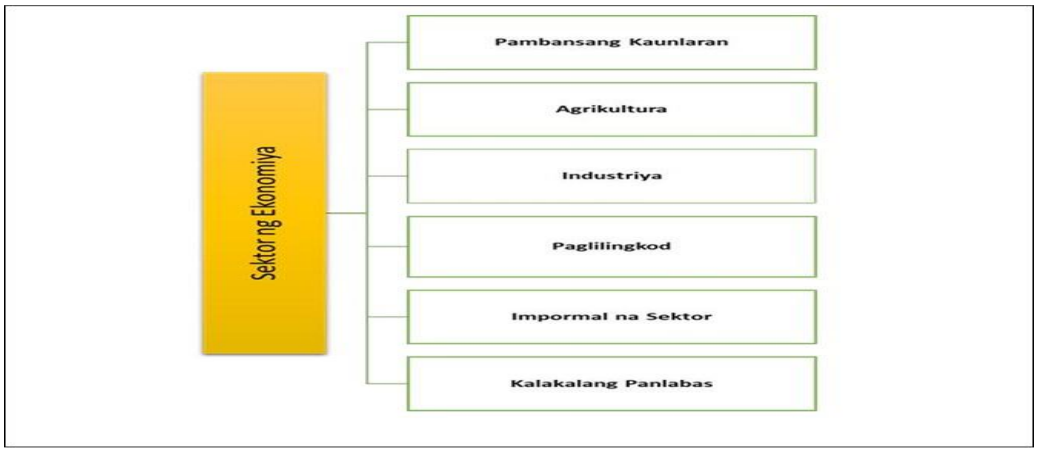


Figure 5. Grapikong Paglalarawan

Grapikong Pantulong sa Paksa (Learning Graphic Guide). This part introduces the graphical presentation of the main point of discussion. This outlines the general and specific topics to be discussed briefly and comprehensively in the succeeding parts.

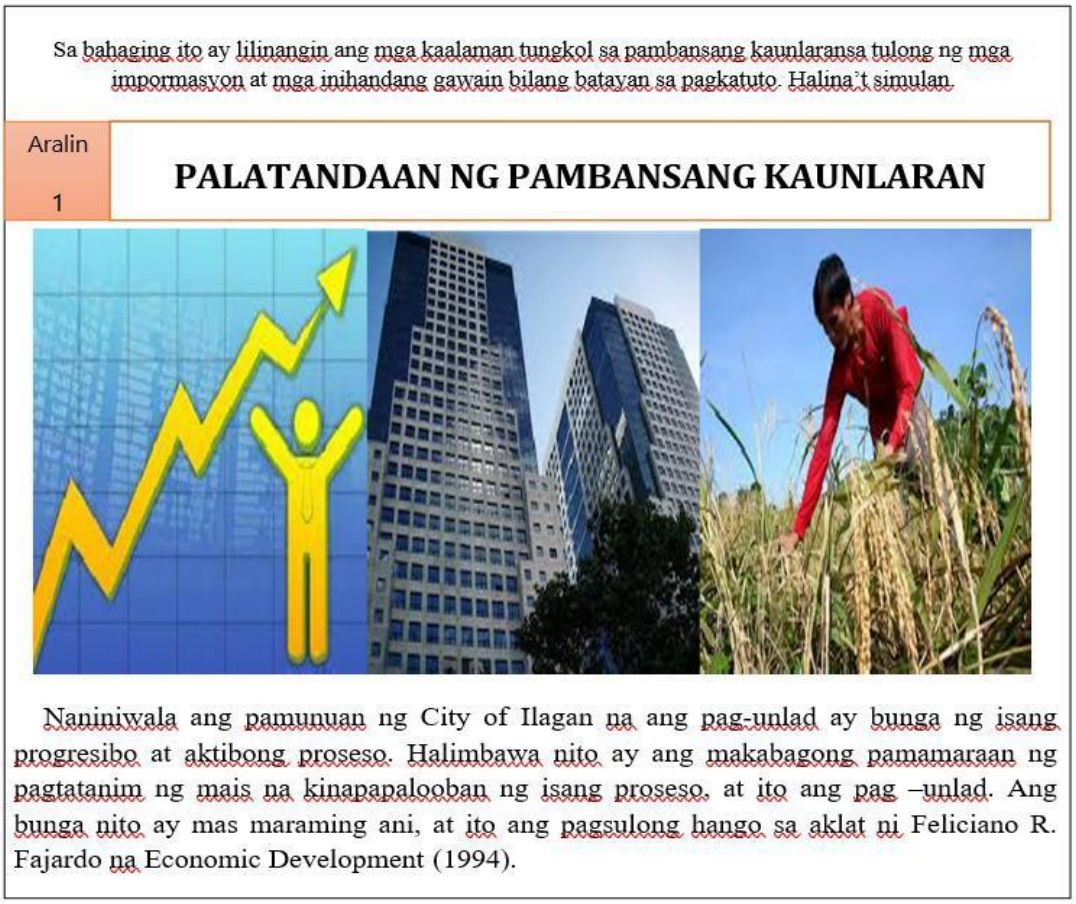


Figure 6. Matuto Ka (Aralin 1)

Matututo Ka (Discover). This refers to the facts about the lesson to be presented through sentences or picture analysis. This part of the module enhances learners' understanding of the concepts specifically of national development.

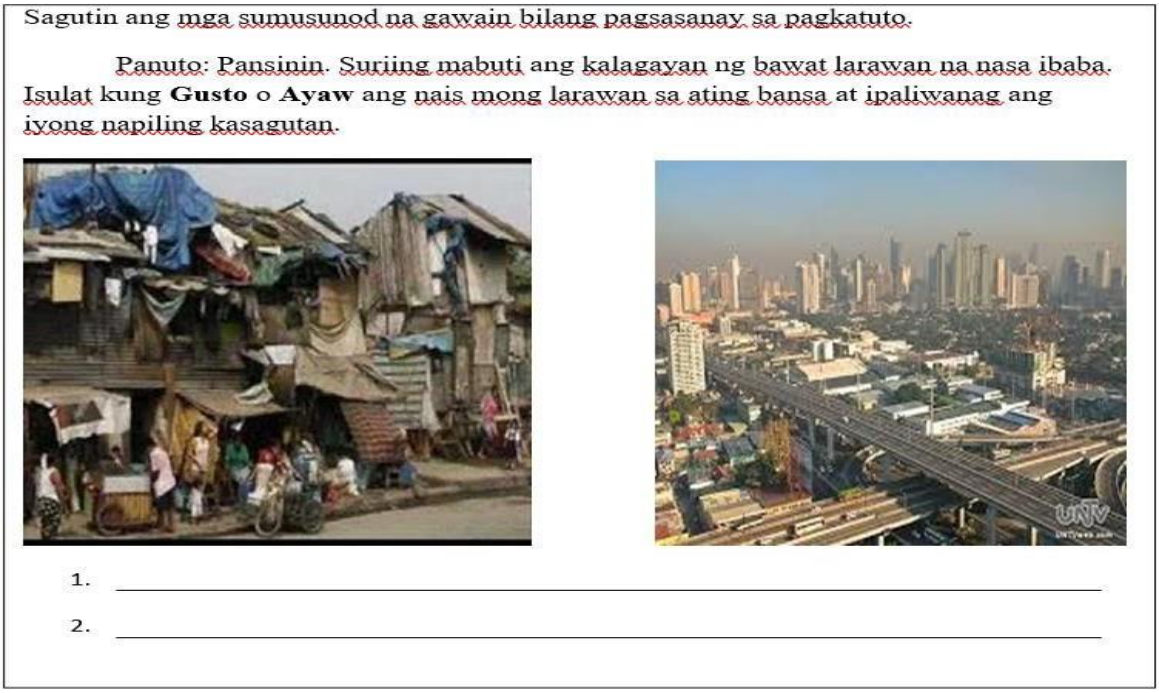


Figure 7. Unang Pagsasanay

Kaya Mo Ba To? (Can You Do This?). This refers to the exercises to be done. From the discussion and highlights of the main concepts, learners shall further do an activity that will challenge their understanding through a series of questions and photos of inquiry

The overview of the self-learning module shows a framework for what students learned and the information on the different concepts they encountered throughout the learning tasks. The learning objectives were also written to provide outcome statements that target the knowledge, skills, and attitudes of the students and be able to exhibit and develop after the lesson. Each lesson starts with a pretest to determine the students' prior knowledge regarding the topics, which the teacher would aid in teaching the lesson.

Various activities highlighting the concepts in Economics were added to check students' understanding and to assess to which extent they could apply the things thatthey have learned. To have actual scores measured, a posttest was given at the end of the module. This determines the student's level of achievement from the targeted learning objectives. Lastly, references were included in the module to cite contributory materials and other sources relevant to the learning activities and concepts in Araling Panlipunan 9.

Reliability of Expert and Teacher ratings

Table 1. Internal Consistency of Expert and Teacher

Material	Cronbach Alpha
Module 1	.93
Module 2	.92
Module 3	.92
Module 4	.95
Module 5	.93
Module 6	.96
Overall	.95

The whole scale internal consistency value of 0.95 poses an excellent score which is above the threshold value of 0.7. This means that there is an overall high level of reliability and consistency in the validation and evaluation of teachers and experts on the developed module. This means a high degree of agreement among the experts.

Evaluation of the Self-Learning Module by Teachers and Experts

Table 2. Overall Expert and Teacher Validation of the Self-Learning Module

		M	*SD*	*M*	*SD*	*M*	*SD*	
All	Objectives	4.82	0.29	4.68	0.47	4.75	0.38	Outstanding
	Content	4.72	0.36	4.69	0.47	4.71	0.42	Outstanding
	Organization	4.75	0.37	4.72	0.46	4.73	0.41	Outstanding
	Materials & Resources	4.80	0.29	4.75	0.43	4.77	0.36	Outstanding
	Effectiveness	4.85	0.22	4.73	0.44	4.79	0.33	Outstanding
	Overall	4.79	0.31	4.71	0.45	4.75	0.38	Outstanding

The table shows the overall results and scores of the evaluation of teachers and experts on the developed modules in teaching Araling Panlipunan 9 in terms of their objectives, content, organization, materials and resources, and effectiveness.

The overall mean and standard deviation scores of the modules obtained were 4.75 and 0.38, respectively. These advantageous and satisfactory scores posit congruency and reliability from the scores obtained by each module. Further, the set criteria, which include the objectives, content, organization, materials and resources, and effectiveness, deliberately tested and posted consistent and manageable results that signify that the modules' phases do not go against the following evaluation determiners and the competencies set forth by the curriculum.

This indicates that the modules utilized were well-designed and constructed based on the necessity assessed for meaningful and successful learning in the said course of study. The result affirms Jaramillo's (2002) statement that teachers should always strive hard to provide a learning environment and maintain the students' high interest.To achieve this, educators should use varied motivation and excellent teaching strategies and materials that include personally crafted modules that are subject to validation and evaluation.

In support of the satisfactory scores and results, the first expert evaluator provided a general comment on the six modules being validated:

"The modules were innovative and meaningful.These were designed following the objectives and competencies set by the curriculum in AP. At first glance,I thought that the first module was deliberately modified from a source, but the contents were adopted and properly cited. Activities were also interesting and very good."

A teacher from the South District further added and complimented the results, however, interestingly, the expert evaluator provided feedback on the criteria provided in the checklist:

"Honestly, I noticed upon checking the criteria on the checklist, that they go together. I reviewed theobjectives in teaching the subject as I have been teachingit for several years in my former and current workplace; the objectives were met because the activities and assessment tools made a triangulation congruency. This means that the objectives were answered in the learning experiences and tests provided." For the materials, sources and authors were properly cited which is nice and accepted. I believe this is effective for students might be very interested and motivated by the activities and series of pictures inserted in the modules."

Finally, the teacher from the other school division in Isabela halted his comments and suggestions on the modules, he stated:

"Module 1 is good and interesting devised. As I checked and validated further the succeeding modules, I thought I was reading a book created by experts. I may use one of them and recommend it to other teachers I know who have been teaching the subject."

These descriptive comments and feedback from the evaluators further strengthen the initial claims from the validated and computed results. This means that the experts believed that the learning materials provided a topic course outline with relevant and significant learning activities and assessment tests. The self-learning module also provided sufficient information and features value-laden learning activities. Hence, the contents, activities, and assessment tools were appropriate considering their learning levels, needs, and learning capacities.

Remarkably, the present self-learning module meets the principles that Richards (2012) cited in Soriano (2013), emphasized. Those materials can be produced tomeet

the student's needs that will reflect the local context, issues, and concerns. It canhelp develop expertise among professionals and provide a greater understanding of the characteristics of effective materials. On the other hand, the learning modules become inclusive to consider learners who are reluctant to attend classes or in cases of tardiness, the learning modules could be utilized to cope with the learning situation. The result also confirms Ramos' (2004) assertion that modules can also be used as a way to help students catch up on the missed lessons. The student will be able to work at his own pace while learning the missed topics, thus giving the student a chance to maximize learning. The use of modules could be seen as a better strategy to handle the situation as opposed to just letting the student copy the missed day's lectures from his/ her classmates without further understanding.

Table 3. Students' Evaluation of Format of the Self-Learning Module

Format	*M*	*SD*	*Description*
1. The layout of the instructional modules is logically and sequentiallyarranged.	4.60	.49	Strongly Agree
2. The instructions in the modules are well-emphasized.	4.84	.37	Strongly Agree
3. The font size and font style of the instructional modules are readable.	4.80	.40	Strongly Agree
4. The mathematical symbols used in the instructional modules are well-defined.	4.75	.43	Strongly Agree
5. The tables/diagrams are well presented and easy to understand.	4.80	.40	Strongly Agree
6. Key points and key concepts are well highlighted to focus attention while reading.	4.82	.44	Strongly Agree
7. Titles and subtitles in the instructional modules are clearly defined.	4.71	.51	Strongly Agree
8. Illustrations, pictures, and captions are properly laid out for easy reference.	4.68	.51	Strongly Agree
9. The steps in the solutions of the given examples and practice tasks arearranged sequentially and easy to follow.	4.75	.43	Strongly Agree
10. The instructional modules are generally formatted in a convenient mannerconsidering the paper size used.	4.73	.54	Strongly Agree
Overall	4.75	.15	Strongly Agree

The evaluation of students on the series of self-learning module provided to them as part of their learning experiences in the said subject. There was a consistent obtained score from the learners' evaluation of the learning modules. The overall mean rating of 4.75 and a standard deviation of 0.15 are described and interpreted as excellently devised and constructed learning modules. The technical aspects of

the learning modules that were evaluated include (a) the layout that is suited to the learning needs and levels of the learners; (b) logical and sequential orders of instructions, directions, contents, and other parts of the learning modules; (c) styles and sizes; (d) tables, diagrams, pictures, titles, and subtitles; and illustrative examples and paper conventions. Feedbacks from a students support the high rating in format.

"I like the module kasi maganda una pa lang pagtingin mo. Then, yung pictures and examples po na andun is very interesting po siya. My attention was to the pictures pona ginamit sa discussion ng mga concepts po and lessons. It is good and very pleasing to the eyes. I hope all my subjects have modules for us to study our lessons to learn."

On a further note, the self-learning module met the criteria mentioned by Ramos (2004). The conventions in writing and devising learning modules as teaching aids must always be strictly considered and followed and there is a psychological effect of good and well-written learning modules in the perception of the students who use learning modules.

This may simply be added to the interest levels and motivation factors among learners in utilizing good modules. Nonetheless, there is no single identified learning module's format and style. As Dahar (2011) opined, the best format for creating learning modules and other learning materials is dependent upon the needs, capacities, and levels of the learners who are to use the learning modules as identified by the teacher or the developer of the self-learning module.

Table 4. Students' Evaluation of Content of the Self-Learning Module

Content	*M*	*SD*	*Description*
1. I easily understood the objectives of each lesson.	4.73	.49	SA
2. I easily understood the instructions in each lesson.	4.77	.42	SA
3. I could work on the lessons at my own pace.	4.91	.48	SA
4. I understood clearly the ideas/concepts in each lesson.	4.80	.40	SA
5. The illustrations guided me easily in following the instructions in the modules.	4.84	.37	SA
6. The learning activities helped me to understand the topic	4.68	.47	SA
7. I appreciated the styles of illustrations and written expressions.	4.71	.46	SA
8. I enjoyed answering the activity task as presented in theform of trivia or puzzles.	4.73	.49	SA
9. I found it easier to study Economics using these learningmodules.	4.77	.42	SA
10. I enjoyed working through the lessons until I finished the whole learning module.	4.77	.42	SA
Overall	4.77	.13	SA

The students strongly agree on the evaluation of the content of the learning materials in the overall mean rating which is 4.77 and 0.13 for the standard deviation. The result reveals that the content competencies centered on the capacity and effectiveness of the self-learning module to aid the learning process on print materials is useful and appropriate. This demonstrates that the contents of the learning modules are very congruent to the learning objectives and competencies in the curriculum of the subject because the researcher strictly observed the principles on the impact and content aspect in writing instructional materials.

Table 5. Experts' and Students' Evaluation of Format of the Self-Learning Module

Format	*Expert*			*Students*		
	M	*SD*	*Des.*	*M*	*SD*	*Des.*
1. The layout of the instructional modules is arranged in a logical and sequential order.	4.67	0.58	SA	4.59	0.50	SA
2. The instructions in the modules are well-emphasized.	4.67	0.58	SA	4.84	0.37	SA
3. The font size and font style of the instructional modules arereadable.	4.33	0.58	A	4.80	0.41	SA
4. The mathematical symbols used in the instructional modulesare well-defined.	4.00	1.00	A	4.75	0.44	SA
5. The tables/diagrams are well presented and easy tounderstand.	4.67	0.58	SA	4.80	0.41	SA
6. Key points and key concepts are well highlighted to focus attention while reading.	5.00	0.00	SA	4.82	0.45	SA
7. Titles and subtitles in the instructional modules are clearlydefined.	4.67	0.58	SA	4.70	0.51	SA
8. Illustrations, pictures, and captions are properly laid out foreasy reference.	4.33	0.58	A	4.68	0.52	SA
9. The steps in the solutions of the given examples and practicetasks are arranged sequentially and easy to follow.	4.00	0.00	A	4.75	0.44	SA
10. The instructional modules are generally formatted in aconvenient manner considering the paper size used.	4.67	0.58	SA	4.73	0.54	SA
Overall	4.50	0.57	SA	4.75	0.46	SA

Based on the set of descriptions and criteria for the evaluation of the self-learning module's overall format, the module obtained a 'strongly agree' remark that brings favorable evaluation to the modules. Specifically, the modules' format had an overall

mean rating of 4.50 from the experts and 4.75 from the learners. Meanwhile, it also obtained a standard deviation of 0.57 and 0.46 from the experts and students, respectively.These data show that both the evaluators (experts and learners) strongly agree that the format, style, and overall face validity of the modules are satisfactory. These factors heighten the interest of anticipation upon reading and browsing the learning modules.

Table 6. Experts' and Students' Evaluation of Content of the Self-Learning Module

	M	*SD*	*Des.*	*M*	*SD*	*Des.*
1. I easily understood the objectives of each lesson.	4.67	0.58	SA	4.73	0.50	SA
2. I easily understood the instructions in each lesson.	4.67	0.58	SA	4.77	0.42	SA
3. I could work on the lessons at my own pace.	4.00	1.00	A	4.91	0.29	SA
4. I understood clearly the ideas/concepts in each lesson.	4.33	0.58	A	4.80	0.41	SA
5. The illustrations/captions guided me easily in following the instructionsin the modules.	4.67	0.58	SA	4.84	0.37	SA
6. The learning activities helped me to understand fully the topic.	5.00	0.00	SA	4.68	0.47	SA
7. I appreciated the styles of illustrations and written expressions.	4.33	0.58	A	4.70	0.46	SA
8. I enjoyed answering the activity task as presented in the form of trivia orpuzzles.	4.67	0.58	SA	4.73	0.50	SA
9. I found it easier to study Economics using these learning modules.	5.00	0.00	SA	4.77	0.42	SA
10. I enjoyed working through the lessons until I finished the wholelearning module.	4.67	0.58	SA	4.77	0.42	SA
Overall	4.60	0.56	SA	4.77	0.43	SA

On one hand, the preceding table further details the combined experts' and learners' evaluation of the content of the self-learning module. Based on the set of descriptions and criteria for the evaluation of the modules' overall content, the module obtained a 'strongly agree' remark that gives a favorable evaluation of the modules. Specifically, the modules' content had an overall mean rating of 4.60 from the experts and 4.77 from the learners. Meanwhile, it also obtained a standard deviation of 0.56 and 0.43 from the experts and students, respectively.

The data reveal a positive evaluation of the modular content by the learners and experts. As mentioned earlier, the content and other relevant inclusions in the modules were anchored from the competencies and objectives set forth by the Curriculum Guide of the Araling Panlipunan in the K – 12 Basic Education Curriculum. This is to ensure a relatively high congruence in learning expectations on the competencies and the experiences of the learners and the teaching expertise of the expert evaluators.

Table 7. Comparison Between Experts' and Students' Evaluation of the Format of the Self-Learning Module

Evaluators	*M*	*N* (items)	*SD*	*t* (9)	*P*	*95CI*
Experts	4.60	10	.31	-1.52^{ns}	.16	[-.08, .42]
Students	4.77	10	.07			
Evaluators	*M*	*N* (items)	*SD*	*t* (9)	*P*	*95CI*
Experts	4.50	10	.33	-2.38*	.042	[.011, .48]
Students	4.74	10	.08			

It displays that despite the overall ratings of experts and students on the format of the self-learning module had the same descriptive rating of "strongly agree" (see Table 4), Paired samples t-test showed that the students (M = 4.74; SD = .075) indicated a significantly higher rating than the experts (M = 4.50; SD = .33), t (9) = - 2.38, p < .05, *95CI* from .011 to .48.

This significantly means that the learners - clientele of the study, responded positively on their utilization of the self-learning module in Araling Panlipunan. Consequently, this expressly implies that the format and style of the learning materials have a strong impact on learners' interest, satisfaction, and overall learning experience toward the subject.

Table 8. Comparison Between Experts' and Students' Evaluation of the Content of the Self-Learning Module

It shows that there was no significant difference between the ratings indicated by experts (M = 4.60; SD = .31) and students (M = 4.77; SD = .07) on the content of the module, t (9) = -1.52, p > .16. This means that the ratings obtained both correlatively agree on the evaluation of the content of the self-learning module.

Table 9. Students' Performance in Araling Panlipunan 9 Before and After using the self-learningmodules

Material	Pretest		Posttest		t (44)	Sig(2-tailed)	Eta Squared
	M	SD	M	SD			
Module 1	2.37	1.64	8.66	1.66	-20.90***	.000	.91
Module 2	2.93	1.60	8.66	.90	-23.40***	.000	.92
Module 3	2.68	1.96	8.66	1.00	-22.89***	.000	.92
Module 4	2.91	1.80	9.11	1.02	-18.54***	.000	.89
Module 5	2.95	1.73	8.71	1.01	-19.62***	.000	.90
Module 6	3.00	1.75	8.62	1.55	-21.72***	.000	.91
Overall	13.57	4.54	34.77	4.31	-24.97***	.000	.93

Note. *** means significant at a .001 level

There was a significant difference between their pretest scores (2.37 < *M* < 3.00)and posttest scores (8.62 < *M* < 9.11) in all the modules, -23.40 < *t* (44) < -18.54, p < .001. Partial eta squared indicated that the effect size of the modules on the students'performance was large ranging from .89 to .93

Generally, there was a large significant difference between their overall pretest score (*M* = 13.57) and posttest score (*M* = 34.77), *t* (44) = -24.97, *p* < .001, *eta squared* = .93. Evidence suggests that the modules have enhanced the students' performance in the subject. The result accepts the finding of Agorilla (2015) thatgenerally validated and evaluated learning materials have a significant impact on the learning development of students. Notably, the learning modules can be utilized as an intervention material since the materials meet one specific determinant on the innovation and design of learning modules as an intervention material.

The results of the pre-test and post-test are the best assessment tools to measure and evaluate the effectiveness of the innovative and designed learning material in teaching Araling Panlipunan 9 among Grade 10 students.

Jaramillo (2002), stated that the utilization of pre-test and post-test assessment

tools is an effective means to test significant changes after an identifiable learning intervention and should always be limited to the objectives of the learning modules or any learning materials necessary for the holistic development of learners. The statistical results and evaluation feedback from students and experts vouch for thevalidity and reliability of the contents, objectives, strategies, and assessment tools, as well as the design, format, and layout.

It can be deduced that the developed instructional modules in teaching Araling Panlipunan 10, specifically Economics, are relevant and effective in meeting the needs, interests, and abilities of students. The modules are ideal for classroom use as enrichment or intervention materials. Most importantly, the modules can lessen the problems with the availability of learning resources, appropriate learning materials, and the non-face-to-face modality.

Conclusions

Based on the findings, it can be concluded that the self-learning module developed for *Araling Panlipunan 9* is valid, reliable, and suitable for the learning levels, needs, and abilities of the students who use it. Teachers, experts, and students evaluated the modules with very high and consistent statistical results, showing unity in their ratings and positive feedback. The learning modules align with relevant guidelines and sources, meeting the study's objectives. These materials are effective in enriching students' knowledge, attitudes, and skills, and are easily comprehensible, allowing for ease of use by students. Additionally, incorporating the self-learning module alongside traditional teaching methods can effectively enhance the teaching of *Araling Panlipunan*, contributing to improved student achievement in the subject. The use of pre-tests and post-tests is the best way to assess the effectiveness of the developed learning materials in teaching *Araling Panlipunan 9*.

Recommendations

Based on the conclusions drawn, the following recommendations are given:

1. The developed and validated self-learning module in Araling Panlipunan 9 be used as developmental, enrichment, and intervention material in teaching Economics.
2. Interested future researchers may use the developed and validated modular format in preparing a complete set of self-learning modules for Araling Panlipunan 9 for the first, second, and third quarters.

Compliance with Ethical Standards

Following ethical standards, this research adheres to principles of integrity, respect, and responsibility towards all participants involved. Before the conduct of the study, the researcher obtained informed consent from the participants, ensuring their understanding of the study's purpose, procedures, and potential risks. Confidentiality and

anonymity were preserved throughout data collection, analysis, and dissemination, safeguarding participants' privacy. Moreover, the researcher made sure that there was no conflict of interest in conducting the study, avoided plagiarism issues, and no bias was made in the interpretation of the results of the study. Finally, she ensured that the findings were used only for the research.

Acknowledgments

The researcher would like to express her deepest gratitude to her adviser, Professor Judith R. Garcia, for her invaluable support, guidance, and encouragement throughout this research. Her expertise and insights have been instrumental in the completion of this study. The researcher is also sincerely thankful to all the participants of this study for their cooperation and willingness to share their experiences, which greatly contributed to the success of this research. Her heartfelt appreciation goes to her family for their unwavering love and moral support, which kept her motivated and inspired. Also, she is grateful to her colleagues and friends for their encouragement and assistance along the way. Lastly, she thanks the Almighty God for granting her the strength, wisdom, and perseverance to complete this research.

REFERENCES

Agorilla, Y. T. (2015). Development and validation of an inquiry-based learning module on Science Investigatory I for Grade 7 students (Unpublished thesis). Philippine Normal University-North Luzon.

Balena, E. D. (2004). Development and initial validation of modules on integrative teaching through themes in Social Studies II (Unpublished thesis). Philippine Normal University-Manila.

Bechayda, R. (2007). *Education Budget of Asian Countries*. Retrieved from http://www.inq. net/opi/2004/jun08/opi editorial-1.html

Cayanan, J. M. (2015). Performance of Grade 9 students in Chemistry: Basis for the development of Teacher Support Material (TSM) (Unpublished thesis). Philippine Normal University-North Luzon.

Dahar, M. C. (2011). Effect of the availability and the use of strategic material on academic performance of students in Punjab (Pakistan). Euro Journal Publishing Inc., 18.

De Guia, L. G. (2016). Development and validation of teaching guides for text structure instruction of Kalayaan National High School, Division of Pasay (Unpublished thesis). De La Salle University-Manila.

Edar, D. (2012). The comparison of the effect of the modular teaching method and problem-solving method on academic achievement of the students in Natural Science (Unpublished thesis). Philippine Normal University-Manila.

Emotin, S. (2003). Guidebook on Textbook Research and Textbook Revision. 2nd ed. Pairs: United Nations Educational, Scientific and Cultural Organization.

Gray, D. E. (2004). Doing Research in the Real World. London: SAGE Publications.

Hernandez, J. E (1999). Biology teachers' perceptions of subject matter structure and its relationship to classroom practice. Journal of Research in Science Teaching, 32(3),320.

Jaramillo, S. E. (2002). Strategic intervention material-based instruction, learning approach and students' performance in chemistry. International Journal of Learning, Teaching and Educational Research, 2.

Libranda, E. O. (2004). Development and validation of a module (Unpublished thesis). Philippine Normal University-Manila.

Macarandan, M. (2009). Evaluation of a proposed set of modules in principles and methods of teaching. E-International Scientific Research Journal, 1(1), 22.

Macarandan, R. S. (2014). Assessment of the Araling Panlipunan modules in the K-12 curriculum: Enhanced instructional materials development. International Scientific Research Journal, 16.

Marasigan, N. V. (2003). Development and validation of modules in Physics (Unpublished dissertation). Philippine Normal University-Manila.

Naval, D. J. (2014). Development and validation of Tenth Grade Physics modules based on selected least mastered competencies (Unpublished dissertation). Philippine Normal University-Manila.

O' Leary, E.D. (2004). Teaching Styles of Social Studies Teachers of Tarlac National High School and their Students' Learning Styles (Master's thesis, Tarlac State University, Tarlac).

Ramos, O. (2004). Validity of improvised instructional materials in Social Studies for Second Year High School (Unpublished thesis). Eulogio "Amang" Rodriguez Institute of Science and Technology-Manila.

Richard, M. J. (2012). Development and Validation of Seventh Grade Physics Modules Based on Selected Least Mastered Competencies. International Journal of Education and Research, 2(12)

Rivera, G. B. (2012). Development and validation of modules of PBL materials in Chemistry (Unpublished master's thesis). Philippine Normal University-Isabela.

Salandanan, G. (2009). Teacher education (Revised edition). Katha Publishing Co. Inc.

Salvador, R.E. (2005). Validation of Learning Module in Secondary Science and Technology (Master's Thesis, Philippine Normal University, Manila).

Sevilla, M.L. (1998). Hypermedia and learning styles: Can performance be influenced? Journal of Multimedia and Hypermedia, 7(4), 291-308.

Sievers, A. (2005). The social studies classroom: Attitudes and perspectives from the dead and hard-of-hearing students through literature. http://scholarworks.rit.edu/cgi/viewcontent.cgi?article=5654&context=theses

Soriano, L. T. (2013). Development and validation of self-instructional modules in grammar for Grade 5 pupils (Unpublished thesis). Philippine Normal University-Manila.

Thiveos, K., & Moroz, W. (2001). Factors affecting secondary students' attitude toward social studies: Crossing borders new frontiers for educational research. Henry Holt & Co.

Torrefranca, E. C. (2017). Development and validation of instructional modules rational expressions and variations. The Normal Lights, 11.

Valdez, E.M. (2014). Evaluation of a Model for Supporting the Development of Elementary Teachers in Science Content Knowledge. Charlotte, NC:
Vitasa, Z. O. (2006). Development and validation of prototype instructional materials in reading for freshmen engineering students (Unpublished thesis). Philippine Normal University-Manila.
Zaide, S. M. (1997). Living economics. All-Nations Publishing Company.
Zevin, Z. (2000). Social studies for the 21st century. E.A. Mahwali. Anvil Publishing.

APA Citation:

Salacup-Policay, A., & Garcia, J. R. (2024). DEVELOPMENT AND VALIDATION OF A SELF-LEARNING MODULE IN ARALING PANLIPUNAN 9. Ignatian International Journal for Multidisciplinary Research, 2(8), 380–412. https://doi.org/10.5281/zenodo.13285003

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

DIGITAL LEARNING REVOLUTION: IDENTIFYING THE INFLUENCE OF DEPENDENCY ON ARTIFICIAL INTELLIGENCE TOOLS TOWARDS THE KNOWLEDGE ACQUISITION OF STUDENTS

Daniella Louise D.L. Bacallo [1], Paul Edward G. Bie [1], Rhiann Yshin C. Tulabut [1], Alellie Jireh M. Pineda[1], Andrei P. Vicente [1], Arizelle R. De Vera [1], Ethan Jmiel F. Sawal [1], John Louise M. Marcaida [2], Ryan C. Dizon [2]

[1] Senior High School Department, Our Lady of Fatima University, Philippines
[2] Department of Physical Education, Our Lady of Fatima University, Philippines

https://doi.org/10.5281/zenodo.13359360

ABSTRACT

As artificial intelligence tools (AITs) lead the technological revolution, the education sector and other institutions are doing their best to adapt and accommodate this innovation. AITs can be utilized in many ways and have been proven to provide positive changes and benefits to a student's learning. However, the use of AI may also prove to be detrimental to the scholastic development of a student, which may raise concerns regarding academic integrity and ethical use. Thus, this study aimed to deeply understand how the dependency on AITs can influence students' knowledge acquisition. To do this, the study employed a semi-structured interview to gather the perceptions and opinions of 15 Grade 11 and 15 Grade 12 STEM (Science, Technology, Engineering, and Mathematics) strand students, for a total of 30 participants. After the data gathering procedure, data analysis and interpretation were done using Braun and Clarke's thematic analysis. From the analyzed data, five themes that could describe the influence of AITs on the knowledge acquisition of students in higher educational institutions have emerged, namely: (1) AITs improve a student's scholastic performance; (2) the underlying complexities of AI utilization on students' output; (3) AITs' accessibility and endless possibilities are compelling for usage; (4) the impact of AITs on students; and (5) a vague link between AI utilization and academic dishonesty. The findings of this study may provide a better understanding of the implications of AI utilization in the educational field and the integrity of academia.

Keywords: *Academic dishonesty, Academic integrity, Artificial Intelligence in Education, Generative AI*

INTRODUCTION

The launch of artificial intelligence (AI) technology around the world has brought about astounding yet disruptive technological advancements. This novel technology was defined by Popenici and Kerr (2017) as computing systems capable of exhibiting behaviors and functions that are typically associated with how the human brain operates, such as learning, adapting, integration, self-correction, and data processing for advanced problem-solving. Schwab (2016) portrays AI technology as the synthesis of technologies, one that erases the distinctions in the physical, digital, and biological spheres. Its development has been recorded at an unprecedented exponential rate. Consequently, many aspects are also being reshaped and influenced at a rapid pace, including the education sector. Educational systems, organizations, and institutions in the Philippines, although lagging, have begun to reconceptualize their approaches under "Education 4.0" (Siena et al., 2019). Education 4.0 marks the shift from conventional to a more personalized learning environment, where the integration of AI in education (AIEd) pioneered the structure of Education 4.0 and 5.0 by designing an environment that is responsive and apt for every individual, student, and educator alike (Rane et al., 2023).

The rise of AI technology is prominent and inevitable in this age. Its influence on the world is apparent in many institutions, including the education system, nonetheless. Based on a report, experts expected that AIEd would progress by about 43% in the period 2018–2022 (Educause, 2018). However, it is believed that due to the developments in technology, it will surpass the earlier predictions (Educause, 2019). During the period of COVID-19, there was a significant rise in employing online learning platforms and AI-related tools for education. The Association of Southeast Asian Nations (ASEAN) released a report in 2023 regarding the state of higher educational institutions. The report revealed an increase in the utilization of online platforms to aid in education. At least half of the higher education student population from 7 countries, which included Thailand, Cambodia, Myanmar, Vietnam, Singapore, Brunei, and Malaysia, can access and utilize these technologies (Lim et al., 2023). In the Philippines, de Villa (2024) reported that three in five educators use AI in research and writing. On the other hand, forty-nine percent (49%) of the educators admitted they use technology to prepare their lesson plans. Meanwhile, it was reported that a survey conducted by Instructure revealed that eighty-three percent (83%) of students use generative AI for research and writing, and another fifty-two percent (52%) use it to aid them in exam preparations (Pascual, 2023; Gajete, 2023).

While the use of artificial intelligence tools (AIT) in education provided substantial guidance and contributed to many benefits for the education sector, their utilization is still up for debate. The use of AI in education raised ethical and privacy concerns over plagiarism, academic dishonesty, and data security (Bin-Nashwan et al., 2023).

Moreover, helping educators effectively integrate AI into their instructional strategies requires pertinent assistance and training (Borbajo et al., 2023). In addition, when proper AI strategies are not used by students in a particular learning situation, learning attitudes are negatively impacted. AI can improve educational opportunities, but excessive dependence is a hindrance to students' capacity for critical thought and problem-solving. Students' capacity for independent and creative thought is diminished if they rely too much on AI-driven solutions (Habib et al., 2023). Moreover, numerous studies have been conducted on students using AITs in their education. AITs can significantly reduce the amount of time spent on a task and are dependable (Baskara, 2023). As observed, some research opposes the use of these, arguing that students risk becoming overly dependent on them in the future, which either impaired their learning or lost their interest in learning (Wogu et al., 2018). On the other hand, Ouyang and Jiao (2021) asserted that students ought to utilize the new technology. Because, if it is used correctly, they can learn new things and broaden their knowledge. However, in the Philippines, there is a lack of research that acknowledges the reliance of students, specifically learners in specialized upper secondary education or senior high school (SHS) students, on AIT in their learning. Moreover, there are hardly any discussions on how SHS students, under different strands and tracks, planned to use AI and how well they could understand the concepts that AI produces. A reason why the Philippines lacks any study about AIEd is due to the eminent disadvantages and apparent exploitation of the technology. Subsequently, many educators judge how AIEd obstructed the process of teaching and learning. However, they failed to notice the potential of AIEd. This study will not only focus on the challenges or drawbacks of the usage of AI but also on the positive effects of the usage of AI in education. With that, this research can fill the gaps left by the other researchers.

Owing to the reliance of students on Artificial Intelligence Tools (AIT), this research aimed to understand the potential drawbacks or limitations associated with the use of AIT on the ability of senior high school (SHS) students to learn in higher education institutions in the Philippines. This study sought to identify the factors influencing students' dependency on AI tools by examining both external and internal determination. By concentrating on known aspects, it is feasible to effectively assess the factors that impact students' decisions to utilize AI tools. Moreover, this study was realistic by recognizing the constraints of resources, time, and information. In doing so, this study ensured that the goals set forth were reachable within the goals provided, taking a practical approach to the research process. Furthermore, the study is designed to address current knowledge gaps in the field by providing timely research that contributes to the ongoing discourse surrounding the integration of AIEd, ensuring that the research remains at the forefront of addressing the opportunities and challenges that SHS students may face in the context of the Digital Learning Revolution. This investigation's insights, which were intended to ascertain the factors leading to the application of Artificial Intelligence Tools (AIT) to a student's learning and the potential drawbacks and opportunities AI offered, proved to be favorable and beneficial to the education sector. This research provided significant information on the matter of AI utilization in academia. Additionally, being the subject of the study, the learners, specifically senior high school (SHS) students, would be more knowledgeable regarding the impacts of the use and overdependence of AI on their scholastic performance. Moreover, educators may also find this useful as they guide

learners to responsible, ethical, and fair use of AI tools. Finally, this study may be of assistance to future researchers who wish to pursue a similar topic.

With the rapid emergence of AIT in the contemporary world, it has demonstrated its convenience in various aspects of life. Contrary to this, Adiguzel et al. (2023) questioned how far AIT can contribute to education, further advising additional analysis and research. Even with its favorable contributions, it is possible to say that AI is not working perfectly up to this day, as said by Akgun and Greenhow (2021). Students who rely too much on AIT have issues with creativity, intellect, and a deep mistrust of their abilities (Habib et al., 2023). Solutions to the problems raised about AI contributed to this study by providing a basis for topics and subjects that needed to be focused on. Relatively, Bin-Nashwan et al. (2023) raised many issues about AIT; among them is plagiarism. Solutions that could help with the problem of plagiarism include using a detection tool capable of detecting plagiarism and AI-generated content, educating students on the ethical implications, and encouraging less use of AI tools. A similar problem with the use of ChatGPT is the generation of false references where it references authors or studies that do not exist (Teel et al., 2023). A solution that could help with this is setting guidelines where the authors present the text copy of the referenced work and teach students the importance of citing correctly. Because of the growing presence of AIT in education, it is important to create an environment that develops a student's cognitive abilities. AITs, which specifically help students with their academic tasks, cannot be eliminated from a student's academic experience, particularly if they have already left a positive impression. It is wiser to employ AI as guidance or implement guidelines for responsible and fair utilization rather than letting these AITs do all the work while leaving nothing for the learner. Knowing the ways to solve or lessen the rising issues of AI is beneficial, especially since reliance on AI could be detrimental to not only oneself but to others as well. It is also essential for teachers to guide students in the right direction when using AI to not harm their cognitive thinking but to improve their mental capabilities.

Unveiling the Fourth Industrial Revolution

Because of humanity's constant efforts to raise their standard of living, civilizations, societies, and even individual lifestyles have all undergone tremendous change. Systems have evolved to be efficient because of the technologies that have been invented and implemented. Just imagine: the First Industrial Revolution (IR 1.0) harnessed nature through water and steam to mechanize labor; towards the Second Industrial Revolution (IR 2.0), electrical power was used for mass production; and as the 21st century neared its dawn, the Third Industrial Revolution (IR 3.0) marked the possibility for automated productions utilizing electronics and information technology (IT). In today's age, the world may be entering a new realm, a new world of possibilities, a new era. The technological advancements made during IR 3.0 paved the way for another revolution: the Fourth Industrial Revolution (IR 4.0). The arrival of IR 4.0 overlaps with IR 3.0 as it also utilizes electronics and IT as its foundation. However, IR 4.0 is more prominent as it introduced the world to the future of cyber-physical systems (CPS). CPS is designed to integrate intricate computing networks and technologies into the real, physical world which is further enforced by human interaction (Ashibani & Mahmoud, 2017; Gunes et al., 2014).

As the nouveau technology continues to bring forth innovations, there will be more opportunities ahead as the integration of these cyber-physical systems is further utilized, altering and influencing the fundamentals this world has been built on. The growth of CPS will be accompanied by Artificial Intelligence (AI) (Chao, 2023).

"A gift of intelligence from intelligence." This expression was made as people became aware of AI's capacity to mimic human logic and reasoning (Estrellado & Miranda, 2023). AI can be defined as the pinnacle of conception relating to various computer-related technologies that can operate anthropomorphically. The emergence of AI-fueled the beginning of the Fourth Industrial Revolution. Subsequently, this has pushed diverse fields, sectors, management, and governance to acknowledge and respond appropriately to the effects this modern technology presents. It has also brought many changes to the way of life of mankind. This was a testament to how much AI has impacted human activity and society's inner workings. As profitable and advantageous as it may seem, the Fourth Industrial Revolution was accompanied by many challenges. According to Schwab (2016), the Fourth Industrial Revolution is disruptive because of its aggressive progression and development, unlike any other revolution. In the industrial setting, many manufacturers have opted for the use of AI instead of a human workforce. AI in the digital era poses concerns regarding personal data privacy (Van Rijemenam, 2023). The aforementioned problem is also one that is experienced by governments, wherein they would face criticism from citizens should they overtly exercise excessive authority over people by exploiting surveillance systems and digital infrastructure. Even the education sector frets about whether these technologies may replace educators in imparting knowledge to learners. Such are the worries experienced by different sectors. As these problems remained unsolved, dissatisfaction, uneasiness, and unfairness continued to arise within the populace. The emergence of the Fourth Industrial Revolution, which leverages the Third Industrial Revolution, is inevitable. Thus, these various sectors must be able to cope and implement comprehensive responses befitting the situation. Indeed, it is a difficult task to conserve the interests of people without compromising advocacy for innovation and technological progress. However, this is a crucial step that has to be made.

A Glimpse of Education 4.0

Education helps in developing an individual's character, thoughts, interpersonal, and intrapersonal skills and even equips them with skills that will be usable in the real world (Al-Shuaibi, 2014). As such, education must mirror the environment in which it is preparing its learners (Alda et al., 2020). Mankind is now under the influence of electronics and information technology. A digital era, as one may refer to it, Additionally, due to the never-ending breakthrough in technological advancement, it is also currently facing the emergence of artificial intelligence. Therefore, a sector that has a massive impact on society should be immediate in implementing the necessary means to cope with these shifting conditions. However, it seems that the current educational frameworks are not living up to the expectations of this modern generation. Per this concern, the strategy created by the education sector is the introduction of "Education 4.0." The keynote of this Education 4.0 is its integration with Information and Communication Technologies (ICT). This would help prepare students for navigating the intricacies of the Fourth Industrial

Revolution (Siena et al., 2019). Moreover, Education 4.0 enforced a more adaptive and responsive learning environment for the learners. When compared to Education 3.0, which is a general approach, the proposed model catered to the needs of every student, hence creating an engaging and productive experience in a classroom-based setting (Rane et al., 2023). The implementation of this paradigm is beneficial as it achieves two (2) objectives: to prepare students for the real world and to facilitate a flexible, conducive, and immersive learning atmosphere for students and teachers.

Every single person in this world has the basic right to have an education and to learn. One of the most prominent people in history, Nelson Mandela, believed that education was power, a key to obtaining knowledge and various viewpoints that helped open countless possibilities for many. Mandela (1990) said that *"education is the most powerful weapon which one can use to change the world."* True to their words, education has the potential to change the world as it shapes individuals to be empowered and fosters creativity where which can be expressed towards the improvement of society. It can transform the world as much as it does influence the minds of a person. However, the world is at a rapid pace of development. Thus, the education sector must transform and remodel its approaches to better fit the contemporary world.

Academic Dishonesty: A Threat to the Academe

As AIT's impression rose across the education sector, there is no doubt that everyone has not heard of what it offers. One of which is academic dishonesty, which pertains to actions by students taking part in illicit activities, such as cheating and plagiarism (Désiron & Petko, 2022). ChatGPT, an interactive chatbot capable of creating cohesive and informative human-like responses upon user input (Lo, 2023), is one of the AITS known to have the capabilities to ease a learner's hassle in writing their academic tasks. Contrary to this, entrusting all the work solely to an AIT, without appropriate cross-checking, encourages the act of plagiarism, subsequently placing a student's academic integrity at risk. Following this, plagiarism is an act of forgery, piracy, and fraud that is considered a severe academic crime that is also against copyright laws (Dhammi & Ul Haq, 2016).
Users are oblivious to the fact that AI-generated research is prone to falsifying and fabricating works done by other authors, emphasizing imminent challenges, according to data found by Elali & Rachid (2023). Concerning the fabrication of works, AITs, such as ChatGPT, tend to generate fake or fictitious references even with the presence of a formal citation (Teel et al., 2023). Furthermore, with the constant development of AIT, certain software can be utilized for cheating and lead to issues about bias and student learning outcomes since it makes it difficult to discern between genuine writings produced by students and content created by artificial intelligence (Sarker et al., 2023; Cotton et al., 2023). However, it is conceived that AITs have contributed various benefits when it comes to a student's academe and the academe itself, efficiently saving learners' time and effort. A plethora of issues have surfaced, particularly ones connected with academic dishonesty. Hence, it poses an impending threat to the academic evaluation process, which heavily relies upon the authenticity of student submissions, and the objectives of education, which are to promote student originality and creativity (Ifelebuegu et al., 2023; Sarker et al., 2023). These dishonorable acts of dishonesty called into question the

fundamental purpose of education, which was to foster inventiveness and uniqueness, since AITs, cause multiple discrepancies and errors if left neglected and not cross-checked by teachers and students. Furthermore, the accuracy and relevancy of the lessons taught by the teachers to their students hold great significance to the field of education, for it assures that the information they have been taught is reliable, accurate, and credible (Mhlanga, 2023).

Adversities of Excessive Reliance in AIEd

As learners dove into the vast opportunities that AIT may offer in their academe, there is an underlying tendency that one grows dependent on AIT. Its overpowering convenience urged learners to steer into a path of neglect of interpersonal relationships that exist between students and teachers once AIT becomes the primary source of learning. If these interactions are left ignored, the student's holistic development and critical thinking are hindered. Furthermore, the absence of an educator's guidance negatively impacts a student's emotional state (Abbas et al., 2023). Additionally, leaning on AIT too much results in a diminished social development of a student, which contradicts the objectives of education which are human interaction, socialization, and student-to-student collaboration (Ifelebuegu et al., 2023). Furthermore, aside from social concerns, dependency on AIT posed conspicuous issues on cognitive processes. Since not everyone possesses the ability to think as swiftly as a chatbot, this opened the possibility of obstructing a student's creative thinking, where a student may experience cognitive fixation, or the inability to create diverse ideas than what the AIT had to offer. Regarding this, excessive reliance on AIT only fixated students' thoughts rather than allowing them to grow. Moreover, it jeopardized those who are still enhancing their creative confidence and led to a sense of distrust in one's capabilities (Habib et al., 2023).

Despite an AIT's ability to come up with fresh ideas, its credibility remained questionable for it derived its answers from pre-existing data. Eventually, this rose to ethical challenges and concerns about intellectual property and plagiarism, which critically affected a student's ability to think creatively and maintain their academic integrity (Habib et al, 2023). Even though AIT has the potential to offer tremendous opportunities to a student's academia, it is advised to raise knowledge of its limitations. To further emphasize the act of using ChatGPT in a fair, secure, and considerate manner towards students, teachers are encouraged to assist students in developing an informed and critical opinion on the use of AIT, whether within or outside the classroom. Additionally, the act of questioning the output of ChatGPT when inquired should be fostered as well (Mhlanga, 2023). With regards to this, AIT may have been proven to be beneficial to a certain extent to a student, but none can hide the fact that it portrayed several issues concerning its usage, where one of which is over-dependence. All of which solely led to the stunted development of a student cognitively and socially.

Research Questions

This study strove to comprehend the impact of students' dependency on utilizing artificial intelligence tools on their knowledge acquisition. Specifically, this research aimed to answer the following questions:

1. What are the benefits of using Artificial Intelligence tools in students' education?
2. What are the challenges faced by the students who rely on Artificial Intelligence Tools?
3. What are the factors that influenced students' reliance on Artificial Intelligence tools?
4. How do Artificial Intelligence tools implicate the integrity of education?

METHODOLOGY

The study utilized a qualitative research technique. As stated by Creswell (2014), qualitative research is an investigation technique that is grounded in understanding various research that investigates social or human difficulties. The investigator constructed a comprehensive, multifaceted image, examined precise perspectives of the data, and carried out the investigation in a natural environment. Meanwhile, this study utilized a phenomenological approach to determine the drawbacks, opportunities, and factors that influenced the knowledge acquisition of students concerning their reliance on artificial intelligence (AI). Phenomenology is defined as a philosophical tradition, one that takes curiosity in the lived experiences of an individual through an event (Russell & Field-Springer, 2022). Beyond a method of inquiry, it sheds light on the connections and relations of perceptions to phenomena through interpretation. All this is necessary to comprehend the lived world of mankind at a conscious level (Qutoshi, 2018). The chosen participants in this study are the Grade 11 and 12 Senior High School students from the Science, Technology, Engineering, and Mathematics (STEM) strand. The participants are divided into two groups: mainly, 15 Grade 11 STEM students and 15 Grade 12 STEM students. In total, there were 30 participants selected and interviewed in this study. The participants who are chosen in this study are those who rely on and use AI tools to aid them in their academic outputs. Participants of this study were chosen using purposive sampling. According to Campbell et al. (2020), purposive sampling is the process of better matching the sample to the goals and objectives of the research, strengthening the thoroughness of the research and the accuracy of the data and findings. Purposive sampling is a non-probability sampling method that occurs when elements selected for the sample are chosen through the judgment of the researcher.

In collecting data from the participants, the researchers utilized an interview specifically a semi-structured interview. An interview, as defined by Brinkmann (2014), means to obtain experiences and perspectives from an individual as a means to make sense of a certain phenomenon. To be more specific, a self-made, semi-structured type of interview was the main instrument used to obtain information from the participants. According to Adams (2015), a semi-structured interview uses a combination of close- and open-ended questions to gather information from the interviewee or the participants. It consists of a

comprehensive interview guide that is used when personalized and subjective knowledge is lacking regarding a phenomenon (McIntosh & Morse, 2015). To further identify the influence of AIT dependency on the knowledge acquisition of SHS STEM students, this research primarily concentrated on utilizing the Thematic Analysis method by Braun & Clarke (2006). Thematic analysis is known for examining, finding, and summarizing patterns found within data. It thoroughly defines and minimally arranges the data set. Correspondingly, research ethics was practiced throughout the study process.

RESULTS AND DISCUSSION

Theme 1: AITs improve a student's scholastic performance

Since the release of artificial intelligence (AI) tools in the world, it has influenced students' performance at school. Wherein the use of AITs has benefitted the students from a variety of advantages. These advantages included helping students with their tasks or assignments and encouraging them to complete their work with less difficulty. AI is another kind of thing that not only evaluates performance but also takes proactive measures to make something better (Dhara et al., 2022). Additionally, AI-assisted students' written output, such as essays, research, reflections, etc. Because of its immediate response, it corrects the use of grammar and even gives guidance to the language use of the student. Hence, it benefits students in their academic tasks, performance, and overall education. A case study involving AI stated that the academic study of artificial intelligence can transform many different fields into academic research (Alshater, 2022). Possessing the capacity to evaluate and comprehend vast volumes of material, create scenarios and simulations, and then clearly and concisely convey findings. In this way, artificial intelligence (AI) has greatly improved the efficiency of research.

Subtheme 1.1 The impact of utilization and convenience of GenAI on a student's output.

This subtheme realized that the use of AITs helps the students generate ideas for doing their tasks. As stated by Mhlanga (2023), AI tools can produce logical and contextually appropriate sentences, which helps improve a student's critical and creative thinking. With that justification, the use of AI tools could help students generate ideas and finish their tasks faster. Using AITs made students' tasks easier to do. Research by Chan and Hu (2023) showed the benefits of using GenAI. They found out that it provided convenience, support, and assistance, as well as research and analysis support, to students. Hence, the utilization of AI tools helped students work and achieve their academic tasks more easily.

Subtheme 1.2 AITs as a grammatical assistance provider.

This subtheme focused on one of the benefits that arose from using AITs in education. As stated by O'Neill & Russell (2019), AITs provide students with grammatical assistance due to the automated feedback programs that these applications have. Thus, AI tools like Grammarly, ProWritingAid, and Writing Mentor are becoming well-liked in academic, professional, and social contexts. These applications that provide feedback to users make writing easier and invaluable to many writers and students as they are assisted and receive text generation and sentence completion recommendations that are human-like (Alharbi, 2023).

Theme 2: Underlying complexities of AI utilization on student output

With the rise of technology, AITs have been utilized in education, where they have seen steady development (Pinkwart, 2016). AIEd has brought multiple changes and opportunities for students' learning and development in the overall educational field (Baker et al., 2019). Although this technology came with benefits, it also presented challenges that students may inevitably experience as it becomes more intertwined in their academic journey. Generative AI models like Chat Generative Pre-Trained Transformer (ChatGPT) use a large set of data to generate responses to the users' prompts (Gilson et al., 2023). Because of this, there are common challenges students experience with the responses it gives due to it following a set of patterns or codes. The problems arising among participants are, first, the ambiguous or incorrect responses it generates. Secondly, the recognizable text pattern of responses AITs provide is due to it following the same dataset.

Subtheme 2.1 Inaccurate and incomprehensible results.

This subtheme, which emerged as a problem for students when using artificial intelligence tools, is characterized by the complexities associated with the utilization of AI for students' learning outcomes. These underlying complexities served as a detrimental factor in the acquisition of knowledge by students. In this current era, the use of AI presents challenges to students' learning outputs by helping with research, assignments, and ideas, which may contain unreliable and false information that impacts students' work (Rasul et al., 2023). Moreover, learners are inclined to present non-factual information, perpetuating misconceptions that could mislead students. Further, research into the validity of AI-generated questions for higher education has revealed that, although most students considered AI-generated questions to be relevant, clear, and accurate, there were still concerns regarding the dependability of the AI-generated content (Tweissi et al., 2022). These findings implied that AI can be advantageous in educational settings; however, there are still areas where its accuracy may need improvement, especially in tasks involving student interactions and assessments. While AI can forecast student outcomes and deliver feedback, the absence of explainability and transparency in these models can lead to issues such as trust concerns, difficulty comprehending the system, and anxiety among educators (Hall et al., 2023).

Subtheme 2.2 Data Pattern

This subtheme emerged as one of the common problems students mentioned: the obvious and similar text pattern in the AITs' output. Though the problem seems simple, it raised concerns regarding the reliability and creativity of AI-generated texts to produce responses that have no similarity with other responses it has given. A problem that emerged due to the obvious text pattern is the similarity in answers between students who gave similar prompts. A study conducted by Kim et al. (2024) investigated user dissatisfaction when using ChatGPT, where one of the common problems is 'prompt reusing' and the answers being too generic—a problem not far off from the issues mentioned by participants in this study. Having a generic answer to an input can lead to others receiving similar generic responses from the AIT. Moreover, a study by Borji (2023) stated that AITs like ChatGPT rarely encounter a question it hasn't had before due to exposure to various coding examples, leading to the generation of general responses and a lack of originality. Correspondingly AI-generated texts fall short of human-generated texts by lacking the originality and creativity humans have, instead producing texts that are repetitive and formulaic (Mindner et al., 2023).

Theme 3: AITs accessibility and endless possibilities are compelling for usage

With the adaptive innovations made in AI, it has shown significant impacts on different aspects of the contemporary world. One of which is education, which has had major implications, especially for its students (Chen et al., 2020). Consequently, students who use AITs for their academics have found numerous outcomes that portray positive and negative approaches to learning (Zhai et al., 2021). However, finding the effects that AITs have brought is regarded as significant, as is figuring out the rationales behind a student's usage of AIT. The usefulness of AITs in the education sector, particularly ChatGPT, has a substantial impact on the reasons why students use AIT (Abdaljaleel et al., 2024). Owing to this, students utilize AITs as an academic companion with their capability to produce responses in a short time, and due to their convenience, students employ AITs because they tend towards laziness.

Subtheme 3.1 AITs as an academic companion.

Due to the features provided by AITs, they have given students numerous benefits—and oftentimes challenges—when it comes to their education. Hence, this subtheme has recognized AITs as an "academic companion" according to the supplementary actions it has presented toward the academic career of a student. With its ability to generate instantaneous responses to user inputs and queries, specifically ChatGPT, Gill et al. (2023) noted that it uses AI and Natural Language Processing (NLP) to answer and create realistic answers that are relevant, well-organized, and educational. Thus, students can obtain noteworthy ideas by doing so. In the words of Fitria (2021), AI is said to be a "virtual mentor" due to its ability to adapt information independently to align with the demands and issues encountered by students by recognizing misunderstandings, providing comments and recommendations, and potentially providing answers. Subsequently, this enabled the learners to complete tasks more efficiently, as emphasized by participants in

this study. Additionally, students, especially those with time constraints, use AITs to alleviate the stress of their heavy academic workload. At a certain point, a learner may feel as if they do not have enough time to complete a task. As such, they may look for methods to complete the task at hand before its impending deadline, and consulting an AIT for prompt responses is one such way (Abbas et al., 2024).

Subtheme 3.2 Convenience of AITs as an influence on the inclination of laziness.

The emergence of AITs in education has indeed been relatively recent and has accumulated substantial attention from many educational stakeholders (Cain, 2023), yet their impact has been profound and far-reaching in this facet, most specifically for its students, sparking an influence related to tolerating laziness. Henceforth, this subtheme has surfaced due to AITs being manipulated by students to their benefit because of their inclination to laziness. Findings garnered by Hadi Mogavi et al. (2023) have shown that using AITs, ChatGPT in particular, can only intensify procrastination. Since an AIT can produce timely responses, it is highly probable to instill a sense of control and a belief that the academic task at hand can be accomplished at any time among students, which will only foster the learner to put off the task until the very last minute possible (Abbas et al., 2024). Such acts, where AITs assist in accomplishing academic tasks with the student exerting minimal effort, will simply serve to reinforce habitual tendencies towards sloth.

Theme 4: Impact of AITs to Students

Depending on the type of task assigned to a student, appropriate Artificial Intelligence Tools will be utilized to efficiently help them in their tasks. And based on how they utilize these tools, the results would vary for each of them. Some have seen an improvement in how they did their academic tasks (Chen et al., 2020), while some were left baffled by the results it offered as they deemed it irrelevant or it was too complex for comprehension (Rasul et al., 2023). It is established that AITs can aid, as well as present challenges to a student's outputs. The same can be said about how AITs are affecting how students are learning. The effect of AITs on the knowledge acquisition of students is divided into two: a positive and a negative effect (Farrokhnia et al., 2024).

Subtheme 4.1 Positive Impacts.

The integration of AI Tools in Education is setting a seamless blend with human intellect, perception, and culture. Thus, Artificial Intelligence Tools have revolutionized and innovated much of the educational landscape and will continue to do so in the following years. Analyzing the roles and possible applications of AITs in education from past reports, revealed a role wherein it served as an intelligent tutor, inclined to support the learning of a student by employing a subjective learning system (Hwang, 2020). A commonly used AI technology that has the capability of acting like a tutor is Chatbots (Adiguzel, 2023). Amongst the many Chatbots available on the internet, at least half of the participants responded that they use ChatGPT to aid them in their studies. ChatGPT is capable of a variety of tasks like responding to questions, idea generation, and complex subjects, concepts, or themes explanation. With the use of these AI technology,

participants expressed that they were able to use these AI technologies to help them comprehend a topic, as well as to gain or increase their knowledge regarding a subject matter. Another positive impact of an AIT on students is due to its time-saving feature (Bin-Nashwan et al., 2023). Time is of the essence, especially for a student. Learners must juggle different tasks and outputs, and with limited time they may not be able to accomplish all of these. However, incorporating AITs in their studies would prove to be helpful as they can provide real-time support to students, helping them to manage both their time and tasks. These systems have shown a significant outcome in terms of psychological effect and task efficiency (Li & Jan 2023). Additionally, as the database size and accuracy of a Chatbot increases, the more likely it is to perform better and provide better assistance to students (Adiguzel et al., 2023). AI Tools are continuously being developed to the length of time to aid the people who rely on their services.

Subtheme 4.2 Negative Impacts.

Embracing the use of AITs in higher educational institutions seems commendable as a step for the education sector to adapt and accommodate the rising technological advancements that are influencing it, while also considering the positive impacts it provides to students. However, it is also undeniable that these tools hurt students. When participants were asked about the impacts of AITs on their studies or how they learn, some answered that they are becoming lazy and dependent on AI; some also answered that AI affects their critical thinking. According to Sabharwal et al. (2023), the utilization of AI causes students to become lazy. When a student continuously relies on the assistance of these tools, there is a possibility that they may become passive learners, uninterested in participating in learning processes and learning activities. In their study, they discussed the relationship between artificial intelligence and human laziness, where it was demonstrated that an increase in AI leads to an increase in laziness. Furthermore, this over-dependence on AITs may ultimately lead to decreased critical thinking and decision-making among students. This can be further supported by the findings of Sevnarayan & Potter (2024), explaining that focusing only on the efficiency and ingenuity of such tools would only result in the neglect of technical skills, critical thinking, and creativity.

Theme 5 A vague link between AI Utilization and academic Dishonesty

With the increasing integration and implementation of artificial intelligence tools (AIT) in the academic scene, it has raised concerns in the community. Specifically, employing AITs brought forth ethical issues about how students may use these tools to commit dishonesty (Qadir, 2023). Academic dishonesty is still a prevalent topic in the community. It encompasses all actions a person may take to gain an academic advantage, albeit unfairly (Benson et al., 2019). Pavela's (1997) conceptual framework defined what acts are diametrical in achieving educational goals, namely: (1) cheating, (2) facilitation, (3) fabrication, and (4) plagiarism. It is debatable whether the use of AITs encourages students to commit the aforementioned actions that implicate academic integrity. The availability of AI-powered and AI-assisted platforms that can be used in education, like paraphrasing software and essay mills, has urged students to commit plagiarism as well

as generate supposedly authentic content (Manley, 2021). According to Abd-Elaal et al. (2019), the utilization of AITs such as text-generators is a tool that violates academic and research integrity, leading to serious misconduct as these tools only encourage dishonest work from the authors. However, Yeralan and Lee (2023) both argue that because of the capabilities of generative AI (GenAI), it can supplement ideas, further improving the brainstorming phase and enhancing the overall thinking process. It is also able to suggest alternative proposals and create numerous drafts, which can help with the structure of the final output. Therefore, it is subjective; it depends on the circumstances and the individuals themselves whether the result of using such tools would be “good” or "bad." Perkins (2023) also reiterates that it would not be necessarily viewed as plagiarism if the student offered accountability and transparency with every output. This varying view of the connection between AI usage and academic dishonesty might be because there have been neither guidelines, policies, nor frameworks proposed or devised to address the ethical concerns that are currently being raised by the integration of AITs in education (Holmes et al., 2018). Until some frameworks or guidelines can be followed or consulted to ascertain whether the use of AITs in the scholastic scene falls under academic dishonesty, the link between these two will remain ambiguous for those in the academic community.

Conclusions

Based on the accumulated findings, the researchers concluded the following:

1. Artificial intelligence tools have greatly benefited students with their academic tasks by providing convenient, instant, and logical answers and ideas. They have also provided help with students' written works by aiding with their grammar and sentence structures.
2. Due to AITs following a set of data or codes, they often pose challenges to students by generating general, wrong, or misleading answers to a student's queries. The problem of general answers leads to students having similar answers to others.
3. Providing ideas and answers to students instantaneously, helping them with their tasks, and helping them learn from their mistakes are some of the reasons why

students use AITs. Another reason is the convenience of obtaining answers without effort, oftentimes fueled by the student's laziness.

4. The utilization of AITs doesn't inherently damage academic integrity; it depends solely on the students on how they utilize AITs. While some use it honestly and for simple tasks, others use it in a way that can lead to plagiarism.

Recommendations

The purpose of the following recommendations is to provide observations of the following entities concerning how they implement the use of AITs to appropriately fit their needs. Thus, the following recommendations are hereby presented:

1. Students must exercise caution when relying on AI tools for critical thinking tasks, as over-reliance on these tools may hinder the development of essential skills such as analytical thinking, creativity, and independent problem-solving.
2. Students need to avoid blindly accepting AI-generated outputs without verifying their accuracy and relevance.
3. Students need to strike a balance between leveraging AI tools as helpful aids and cultivating one's cognitive abilities, which is key to achieving academic success.
4. Since the influence of AI tools has been proven, teachers need to equip themselves with digital competencies that align with educational goals and transform teaching methods in school learning environments to support students influenced by AI.
5. To improve students' learning outcomes, it is suggested that teachers assess students' needs and allocate time efficiently when students are impacted by AI, concentrating on immediate behavioral cues and delivering prompt support for optimal results.
6. Curriculum developers should make adjustments to the curriculum in response to the rising use of AITs by students.
7. Curriculum developers should integrate AI literacy by developing modules that (1) introduce AITs and how to use them the right way, (2) highlight the wrong way of

using AI and its possible consequences, and (3) discuss the ethical implications of using AITs and how to use them ethically.

8. Curriculum developers should focus on data literacy in the curriculum, ensuring that the students know how to analyze and interpret the outputs from the AITs.
9. Curriculum developers should promote critical thinking skills, problem-solving skills, and creativity, ensuring that despite the rise of AIEd, students will still possess the necessary skills.
10. Educational institutions should emphasize and promote the ethical use of AITs by developing a curriculum that discusses topics like discrimination and bias in AI, privacy, and transparency.
11. Educational Institutions should create programs that combine AI with other fields like healthcare, engineering, and humanities to provide opportunities and prepare students.
12. Educational Institutions should monitor and regularly assess the impacts of AI on students' learning, engagement, and performance to ensure a safe and healthy environment where students can safely use AITs.
13. A similar study must be conducted to determine whether the same findings are established. To ensure the accuracy and reliability of the results, a comparable research project should be conducted to confirm the validity of the findings.
14. Future researchers in the field of AI must consider potential obstacles, including bias and discrimination. Addressing these issues can be achieved by incorporating diversity and inclusivity concepts to ensure that AI is designed with fairness, trust, and transparency in mind.
15. Furthermore, studying the impact of AI on various aspects of education, such as teaching methods, curriculum design, and student engagement, can offer valuable insights for informing future research. Understanding the different interactions between AI and education, as well as the evolution of AI's role in education over the years, can provide valuable insights for future research.

Compliance with Ethical Standards

This research strictly adheres to the ethical standards set by the institution and the body of knowledge. All information and data coming from the respondents are solely for academic purposes only. In line also with the Data Privacy Act of 2012, the researchers strictly preserved the anonymity and confidentiality of the respondents.

Acknowledgments

The researchers would like to express their heartfelt gratitude and appreciation to the following people who helped them throughout their study, as they would not have finished it without their unending support and efforts. First and foremost, the researchers would like to express their gratitude to God, our Creator, for his unwavering blessing and guidance throughout the process of conducting this study. To John Louise M. Marcaida, LPT, MPES (c), our professor in Practical Research 1. The researchers would like to

thank him for providing constant assistance and patience to the researchers throughout the entire process of composing this paper, which they are grateful for.

To the participants, who provided us with their time and answers during the gathering of our data. The researchers would like to give their acknowledgments to each of the 30 participants from STEM Grades 11 and 12, as they have aided us with their responses, which were substantial in the findings and discussion section of our study. To our teachers and professors, the researchers are eternally grateful for the guidance they provided towards the completion of the paper. And we also acknowledge the wisdom they've given us, which has helped our research improve. Lastly, to our family and friends who supported us in crucial times and who have always been the researchers' sources of support and motivation for this research. The researchers would like to express their warm appreciation for their constant love and support, which gave them the motivation to pursue this study and to see through it until the end.

REFERENCES

Abbas, M., Jam, F. A., & Khan, T. I. (2024). Is it harmful or helpful? Examining the causes and consequences of generative AI usage among university students. International Journal of Educational Technology in Higher Education, 21(1). https://doi.org/10.1186/s41239-024-00444-7.

Abbas, N., Ali, I., Manzoor, R., Hussain, T., & Hussaini, M. H. A. (2023). Role of Artificial Intelligence Tools in Enhancing Students' Educational Performance at Higher Levels. Journal of Artificial Intelligence,Machine Learning and Neural Network (JAIMLNN) ISSN: 2799-1172, 3(05), 36–49. https://doi.org/10.55529/jaimlnn.35.36.49

Abdaljaleel, M., Barakat, M., Alsanafi, M., Salim, N. A., Abazid, H., Malaeb, D., Mohammed, A. H., Hassan, B. A. R., Wayyes, A. M., Farhan, S. S., Khatib, S. E., Rahal, M., Sahban, A., Abdelaziz, D. H., Mansour, N. O., AlZayer, R., Khalil, R., Fekih-Romdhane, F., Hallit, R., & Hallit, S. (2024). A multinational study on the factors influencing university students' attitudes and usage of ChatGPT. Scientific Reports, 14(1), 1983. https://doi.org/10.1038/s41598-024-52549-8

Abd-Elaal, E.-S., Gamage, S. H. P. W., & Mills, J. E. (2019). Artificial Intelligence Is a Tool for Cheating Academic Integrity. In 30th Annual Conference for the

Australasian Association for Engineering Education (AAEE 2019): Educators Becoming Agents of Change: Innovate, Integrate, Motivate, 397–403.
Adams, W. C. (2015). Conducting Semi-Structured Interviews. Handbook of Practical Program Evaluation, 1(4), 492–505. https://doi.org/10.1002/9781119171386.ch19
Adiguzel, T., Kaya, M. H., & Cansu, F. K. (2023). Revolutionizing education with AI: Exploring the transformative potential of ChatGPT. Contemporary Educational Technology, 15(3), ep429. https://doi.org/10.30935/cedtech/13152
Akgun, S., & Greenhow, C. (2021). Artificial intelligence in education: Addressing ethical challenges in K-12 settings. AI and Ethics, 2(3). https://doi.org/10.1007/s43681-021-00096-7
Alda, R., Boholano, H., & Dayagbil, F. (2020). Teacher Education Institutions in the Philippines towards Education 4.0. International Journal of Learning, Teaching and Educational Research, 19(8). https://doi.org/10.26803/ijlter.19.8.8
Alharbi, W. (2023). AI in the Foreign Language Classroom: A Pedagogical Overview of Automated Writing Assistance Tools. Education Research International, 2023, e4253331. https://doi.org/10.1155/2023/4253331
Alshater, M. (2022). Exploring the Role of Artificial Intelligence in Enhancing Academic Performance: A Case Study of ChatGPT. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4312358
Al-Shuaibi, A. (2014). The importance of education. ResearchGate. https://www.researchgate.net/publication/260075970_The_Importance_of_Education
Ashibani, Y., & Mahmoud, Q. H. (2017). Cyber physical systems security: Analysis, challenges, and solutions. Computers & Security, 68, 81–97. https://doi.org/10.1016/j.cose.2017.04.005
Baker, T., Smith, L., & Anissa, N. (2019, February 25). Educ-AI-tion rebooted? Exploring the future of artificial intelligence in schools and colleges. Nesta. https://www.nesta.org.uk/report/education-rebooted/
Baskara, FX. R. (2023). Chatbots and Flipped Learning: Enhancing Student Engagement and Learning Outcomes through Personalised Support and Collaboration. IJORER: International Journal of Recent Educational Research, 4(2), 223–238. https://doi.org/10.46245/ijorer.v4i2.331
Benson, L., Rodier, K., Enström, R., & Bocatto, E. (2019). Developing a university-wide academic integrity E-learning tutorial: a Canadian case. International Journal for Educational Integrity, 15(1). https://doi.org/10.1007/s40979-019-0045-1
Bin-Nashwan, S. A., Sadallah, M., & Bouteraa, M. (2023). Use of ChatGPT in academia: Academic integrity hangs in the balance. Technology in Society, 75(75), 102370. https://doi.org/10.1016/j.techsoc.2023.102370
Borbajo, M. N. M., Malbas, M. H., & Dacanay, L. R. (2023). Reforming Education: The Global Impact of Integrating Artificial Intelligence in the Classroom Environment. American Journal of Language, Literacy and Learning in STEM Education (2993-2769), 1(5), 16–27. https://grnjournal.us/index.php/STEM/article/view/356/295
Borji, A. (2023). A Categorical Archive of ChatGPT Failures. ArXiv (Cornell University). https://doi.org/10.48550/arxiv.2302.03494

Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
Brinkmann, S. (2020). The Oxford Handbook of Qualitative Research (P. Leavy, Ed.; 2nd ed., pp. 424–456). Oxford University Press. (Original work published 2014)
Cain, W. (2023). AI Emergence in Education: Exploring Formative Tensions Across Scholarly and Popular Discourse. Journal of Interactive Learning Research, 34(2), 239–273.
Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive Sampling: Complex or Simple? Research Case Examples.
Journal of Research in Nursing, 25(8), 652–661. NCBI. https://doi.org/10.1177/1744987120927206
Chan, C., & Hu, W. (2023). Students' voices on generative AI: perceptions, benefits, and challenges in higher education. International Journal of Educational Technology in Higher Education, 20(1), 1–18. https://doi.org/10.1186/s41239-023-00411-8
Chao, W. (2023, October 16). The Fourth Revolution: big data & artificial intelligence | The UNESCO Courier. Courier.unesco.org. https://courier.unesco.org/en/articles/fourth-revolution
Chen, L., Chen, P., & Lin, Z. (2020). Artificial Intelligence in Education: a Review. IEEE Access, 8(2169-3536), 75264–75278. https://doi.org/10.1109/ACCESS.2020.2988510
Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2023). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. Innovations in Education and

Teaching International, 61(2), 228–239. https://doi.org/10.1080/14703297.2023.2190148
Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approach (4th ed.). Sage Publications Ltd.
De Villa, K. (2024, January 27). The survey shows how PH vocational schools view AI. INQUIRER.net. https://newsinfo.inquirer.net/1894979/survey-shows-how-ph-vocational-schools-view-ai
Désiron, J. C., & Petko, D. (2022). Academic dishonesty when doing homework: How digital technologies are put to bad use in secondary schools. Education and Information Technologies, 28. https://doi.org/10.1007/s10639-022-11225-y
Dhammi, I. K., & Ul Haq, R. (2016). What is plagiarism and how to avoid it? Indian Journal of Orthopaedics, 50(6), 581–583. https://doi.org/10.4103/0019-5413.193485
Dhara, S., Chatterjee, S., Chaudhuri, R., Goswami, A., & Soumya Kanti Ghosh. (2022). Artificial Intelligence in Assessment of Students' Performance. 153–167. https://doi.org/10.1201/9781003184157-8
EDUCAUSE, Alexander, B., Ashford-Rowe, K., Barajas-Murphy, N., Dobbin, G., Knot, J., Pomerantz, J., Seilhamer, R., & Weber, N. (2019). Horizon Report: 2019 Higher
Education Edition. EDUCAUSE. https://library.educause.edu/-/media/files/library/2019/4/2019horizonreport.pdf
EDUCAUSE, Becker, S. A., Brown, M., Dahlstrom, E., Davies, A., DePaul, K., Diaz, V., & Pomerantz, J. (2018). Horizon Report 2018 Higher Education Edition. EDUCAUSE. https://library.educause.edu/~/media/files/library/2018/8/2018horizonreport.pdf
Elali, F. R., & Rachid, L. N. (2023). AI-generated research paper fabrication and plagiarism in the scientific community. Patterns, 4(3), 100706. https://doi.org/10.1016/j.patter.2023.100706
Estrellado, C. J. P., & Miranda, J. C. (2023). Artificial Intelligence in the Philippine Educational Context: Circumspection and Future Inquiries. International Journal of Scientific and Research Publications, 13(5), 16–22. https://doi.org/10.29322/IJSRP.13.04.2023.p13704
Farrokhnia, M., Banihashem, S. K., Noroozi, O., & Wals, A. (2023). A SWOT analysis of ChatGPT: Implications for educational practice and research.

Innovations in Education and Teaching International, 61(3), 460–474. https://doi.org/10.1080/14703297.2023.2195846.

Fitria, T. N. (2021). Artificial Intelligence (AI) in Education: Using AI Tools for Teaching and Learning Process. Proceeding Seminar Nasional & Call for Papers, 2654-6590, 134–147.

Gajete, S. (2023, November 17). Philippine schools now integrate AI into learning: Premiere state U- University of the Philippines at the forefront in Asia. Global South World.

https://globalsouthworld.com/article/philippine-schools-now-integrate-ai-into-learning-premiere-state-u-university-of-the-philippines-at-the-forefront-in-asia

Gill, P., & Phythian, M. (2018). Intelligence in An Insecure World. John Wiley & Sons.

Gill, S. S., Xu, M., Patros, P., Wu, H., Kaur, R., Kaur, K., Fuller, S., Singh, M., Arora, P., Parlikad, A. K., Stankovski, V., Abraham, A., Ghosh, S. K., Lutfiyya, H., Kanhere, S. S., Bahsoon, R., Rana, O., Dustdar, S., Sakellariou, R., & Uhlig, S. (2023). Transformative effects of
Emerging Era of AI Chatbots, 4(4). https://doi.org/10.1016/j.iotcps.2023.06.002.

Gilson, A., Safranek, C. W., Huang, T., Socrates, V., Chi, L., Taylor, R. A., & Chartash, D. (2023). How Does ChatGPT Perform on the United States Medical Licensing Examination? The
Implications of Large Language Models for Medical Education and Knowledge Assessment. JMIR Medical Education, 9(9), e45312. https://doi.org/10.2196/45312

Gunes, V., Peter, S., Givargis, T., & Vahid, F. (2014). A Survey on Concepts, Applications, and Challenges in Cyber-Physical Systems. KSII Transactions on Internet and Information Systems, 8(12), 134–159. https://doi.org/10.3837/tiis.2014.12.001

Habib, S., Vogel, T., Thorne, E., & Xiao, A. (2023). How Does Generative Artificial Intelligence Impact Student Creativity? Journal of Creativity, 34(1), 100072. https://doi.org/10.1016/j.yjoc.2023.100072

Hadi Mogavi, R., Deng, C., Juho Kim, J., Zhou, P., D. Kwon, Y., Hosny Saleh Metwally, A., Tlili, A., Bassanelli, S., Bucchiarone, A., Gujar, S., Nacke, L. E., & Hui, P.

(2023). ChatGPT in education: A blessing or a curse? A qualitative study exploring early adopters' utilization

and perceptions. Computers in Human Behavior: Artificial Humans, 2(1), 100027. https://doi.org/10.1016/j.chbah.2023.100027

Hall, E. C., Seyam, M., & Dunlap, D. (2023). Identifying Usability Challenges in AI-Based Essay Grading Tools. Communications in Computer and Information Science, 675–680. https://doi.org/10.1007/978-3-031-36336-8_104

Holmes, W., Porayska-Pomsta, K., Holstein, K., Sutherland, E., Baker, T., Shum, S. B., Santos, O. C., Rodrigo, M. T., Cukurova, M., Bittencourt, I. I., & Koedinger, K. R. (2021). Ethics of AI in

Hwang, G.-J., Xie, H., Wah, B. W., & Gašević, D. (2020). Vision, challenges, roles and research issues of Artificial Intelligence in Education. Computers and Education: Artificial Intelligence, 1(1), 100001. https://doi.org/10.1016/j.caeai.2020.100001

Ifelebuegu, A. O., Kulume, P., & Cherukut, P. (2023). Chatbots and AI in Education (AIEd) tools: The good, the bad, and the ugly. Journal of Applied Learning and Teaching, 6(2). https://doi.org/10.37074/jalt.2023.6.2.29

Kim, Y., Lee, J., Kim, S., Park, J., & Kim, J. (2024). Understanding Users' Dissatisfaction with ChatGPT Responses: Types, Resolving Tactics, and the Effect of Knowledge Level. https://doi.org/10.1145/3640543.3645148

Li, E. Y., & Jan, A. (2023). Impact of Artificial Intelligence (AI) in Enhancing Productivity and Reducing Stress Among Students. The 23rd International Conference on Electronic

Business, 23, 334–342. https://iceb.johogo.com/proceedings/2023/ICEB2023_paper_9.pdf

Lim, M. A., Anabo, I. F., Phan, A. N. Q., Elepaño, M. A., & Kuntamarat, G. (2023). The State of Higher Education in Southeast Asia. https://asean.org/wp-

content/uploads/2023/08/The-State-of-Higher-Education-in-Southeast-Asia_11.2022.pdf
Lo, C. K. (2023). What Is the Impact of ChatGPT on Education? A Rapid Review of the Literature. Education Sciences, 13(4), 410. https://doi.org/10.3390/educsci13040410
Mandela, N. (1990, June 24). Nelson Mandela visited Madison Park HS In Roxbury in 1990. GBH News. https://www.youtube.com/watch?v=b66c6OkMZGw
Manley, S. (2021). The use of text-matching software's similarity scores. Accountability in Research, 30(4), 1–27. https://doi.org/10.1080/08989621.2021.1986018
McIntosh, M. J., & Morse, J. M. (2015). Situating and Constructing Diversity in semi-structured Interviews. Global Qualitative Nursing Research, 2(1), 1–12. https://doi.org/10.1177/2333393615597674
Mhlanga, D. (2023). Open AI in Education, the Responsible and Ethical Use of ChatGPT Towards Lifelong Learning. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4354422
Mindner, L., Schlippe, T., & Schaaff, K. (2023). Classification of Human- and AI-Generated Texts: Investigating Features for ChatGPT. ArXiv (Cornell University). https://doi.org/10.48550/arxiv.2308.05341
O'Neill, R., & Russell, A. M. (2019). Grammarly: Help or hindrance? Academic learning advisors' perceptions of an online grammar checker. Journal of Academic Language and Learning, 13(1), A88-A107.
Ouyang, F., & Jiao, P. (2021). Artificial Intelligence in Education: the Three Paradigms. Computers and Education: Artificial Intelligence, 2(1), 100020. https://doi.org/10.1016/j.caeai.2021.100020
Pascual, J. (2023, November 16). PH schools adopting AI; UP among first in Asia: group. ABS-CBN News; ABS-CBN News. https://news.abs-cbn.com/business/11/16/23/ph-schools-adopting-ai-up-among-first-in-asia-group
Pavela, G. (1997). Applying the Power of Association on Campus: A Model Code of Academic Integrity. Journal of College and University Law, 24(1). https://www.heartland.edu/documents/idc/toomuch2_wrk.pdf
Perkins, M. (2023). Academic integrity considerations of AI Large Language Models in the post-pandemic era: ChatGPT and beyond. Journal of University Teaching and Learning Practice, 20(2). https://doi.org/10.53761/1.20.02.07
Pinkwart, N. (2016). Another 25 Years of AIED? Challenges and Opportunities for Intelligent Educational Technologies of the Future. International Journal of Artificial Intelligence in Education, 26(2), 771–783. https://doi.org/10.1007/s40593-016-0099-7
Popenici, S. A. D., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. Research and Practice in Technology Enhanced Learning, 12(1). https://doi.org/10.1186/s41039-017-0062-8
Qadir, J. (2023). Engineering Education in the Era of ChatGPT: Promise and Pitfalls of Generative AI for Education. 2023 IEEE Global Engineering Education

Conference (EDUCON), 1–9. https://doi.org/10.1109/educon54358.2023.10125121
Qutoshi, S. B. (2018). Phenomenology: A philosophy and method of inquiry. Journal of Education and Educational Development, 5(1), 215–222. https://eric.ed.gov/?id=EJ1180603
Rane, N., Choudhary, S., & Rane, J. (2023). Education 4.0 and 5.0: Integrating Artificial Intelligence (AI) for Personalized and Adaptive Learning. Social Science Research Network. https://doi.org/10.2139/ssrn.4638365
Rasul, T., Nair, S., Kalendra, D., Robin, M., De Oliveira Santini, F., Ladeira, W. J., Sun, M., Day, I., Rather, R. A., & Heathcote, L. (2023). The role of ChatGPT in higher education: Benefits, challenges, and future research directions. Journal of Applied Learning & Teaching, 6(1). https://doi.org/10.37074/jalt.2023.6.1.29
Russell, L., & Field-Springer, K. (2022). Phenomenology. The International Encyclopedia of Health Communication, 1–5. https://doi.org/10.1002/9781119678816.iehc0601
Sabharwal, D., Kabha, R., & Srivastava, K. (2023). Artificial Intelligence (AI)-Powered Virtual Assistants and their Effect on Human Productivity and Laziness: Study on Students of Delhi-NCR (India) & Fujairah (UAE). Journal of Content, Community & Communication, 17(9), 162–174. https://doi.org/10.31620/JCCC.06.23/12
Sarker, D., Eiaz-Ur-Rahman, A. F. M., Sakib, A. R., Terano, H. J. R., & Rahman, M. M. (2023). ChatGPT's Applications in Higher Education: Unmasking Opportunities and Challenges. Journal of Education, Management and Development Studies, 3(4), 37–47. https://doi.org/10.52631/jemds.v3i4.250
Schwab, K. (2016, January 14). The Fourth Industrial Revolution: what it means, how to respond. World Economic Forum. https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/
Sevnarayan, K., & Potter, M.-A. (2024). Generative Artificial Intelligence in distance education: Transformations, challenges, and impact on academic integrity and student voice. Journal of Applied Learning and Teaching, 7(1). https://doi.org/10.37074/jalt.2024.7.1.41
Siena, J. A., Bilbao, P., & Tuscano, F. J. (2019). On Leveraging ICT Tools in the Filipino K to 12 Classroom (D. Ocampo & K. L. M. Lucasan, Eds.; pp. 22–28). UNIVERSITY OF THE PHILIPPINES CENTER FOR INTEGRATIVE AND DEVELOPMENT STUDIES. https://cids.up.edu.ph/wp-

content/uploads/2022/02/Key-Issues-in-Instruction-Teacher-Professional-Development-and-ICT-in-Basic-Education-2019.pdf
Students: A Comprehensive Study. ERIC, ISSN-2835-3048, 31–42. https://eric.ed.gov/?id=ED628620
Teel, Z. (Abbie), Wang, T., & Lund, B. (2023). ChatGPT conundrums: Probing plagiarism and parroting problems in higher education practices. College & Research Libraries News, 84(6). https://doi.org/10.5860/crln.84.6.205
Tweissi, A., Al Etaiwi, W., & Al Eisawi, D. (2022). The Accuracy of AI-Based Automatic Proctoring in Online Exams. Electronic Journal of E-Learning, 20(4), 419–435. https://doi.org/10.34190/ejel.20.4.2600
Van Rijmenam, M. (2023, February 17). Privacy in the Age of AI: Risks, Challenges and Solutions. The Digital Speaker | Strategic Futurist. https://www.thedigitalspeaker.com/privacy-age-ai-risks-challenges-solutions/
Wogu, I. A. P., Misra, S., Olu-Owolabi, E. F., Assibong, P. A., Udoh, O. D., Ogiri, S. O., & Damasevicius, R. (2018). Artificial Intelligence, Artificial Teachers and the Fate of Learners in the 21st Century Education Sector: Implications for Theory and Practice. International Journal of Pure and Applied Mathematics, 119(16), 2245–2259.
Yeralan, S., & Lee, L. A. (2023). Generative AI: Challenges to higher education. Sustainable Engineering and Innovation, 5(2), 107–116. https://doi.org/10.37868/sei.v5i2.id196
Zhai, X., Chu, X., Chai, C. S., Jong, M. S. Y., Istenic, A., Spector, M., Liu, J.-B., Yuan, J., & Li, Y. (2021). A Review of Artificial Intelligence (AI) in Education from 2010 to 2020. Complexity, 2021(8812542), 1–18. https://doi.org/10.1155/2021/8812542.

APA Citation:

Bacallo, D. L. D. L., Bie, P. E. G., Tulabut, R. Y. C., Pineda, A. J. M., Vicente, A. P., De Vera, A. R., Sawal, E. J. F., Marcaida, J. L. M., & Dizon, R. C. (2024). DIGITAL LEARNING REVOLUTION: IDENTIFYING THE INFLUENCE OF DEPENDENCY ON ARTIFICIAL INTELLIGENCE TOOLS TOWARDS THE KNOWLEDGE ACQUISITION OF STUDENTS. Ignatian International Journal for Multidisciplinary Research, 2(8), 1338–1362. https://doi.org/10.5281/zenodo.13359360

Corresponding author: *johnlouisemarcaida@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

DURABILITY OF LAKATAN (MUSA ACUMINATA) PSEUDO-STEM AS A SUSTAINABLE SOURCE FOR PAPER PRODUCTION: A COMPARATIVE STUDY OF TENSILE STRENGTH, ABRASION, AND THICKNESS

Charlie T. Anselmo, Reygime I. Corpuz, Marjorie A. Aguilar, Jenna Mae B. Boral, Ma. Andrea G. Ingente

Science Department, College of Education, Isabela State University Cauayan City, Isabela, Philippines

https://doi.org/10.5281/zenodo.13372863

ABSTRACT

This study aimed to evaluate the durability of an alternative organic paper made from the lakatan (Musa acuminata) pseudostem as a sustainable source for paper production. The research was conducted at Isabela State University, Cauayan Campus. Three treatments were tested: commercial Manila paper made from 8 g, lakatan paper made from 5 g, and lakatan paper made from 3 g of pseudostem. The durability of the paper was assessed by tensile strength, abrasion, and thickness tests. The results revealed significant differences among the treatments. The 5 g lakatan pseudostem paper exhibited the highest tensile strength and abrasion resistance compared to the other treatments. Additionally, the 5 g lakatan pseudostem paper was thicker than the commercial Manila paper. These findings suggest that lakatan (Musa acuminata) pseudostem paper is durable and can be recommended as an alternative source of material for paper production. This study highlights the potential of utilizing banana pseudostem waste as a sustainable alternative to traditional paper production methods, which contributes to deforestation and air pollution. The use of the lakatan pseudostem for paper production could help reduce the environmental impact of the paper industry, while providing valuable use for agricultural waste.

Keywords: *Abrasion, Lakatan, Musa acuminata, Paper Production, Pseudo-stem, Tensile strength*

INTRODUCTION

Paper is one of the biggest contributors to environmental damage as waste comes from; it is a big issue for its negative impacts on the environment, such as increasing the rate of deforestation using up to 90% of global wood in the production of paper, as stated in the study by Kempner (2016). In a study by Ferguson (2017), over 40% of industrial wood traded around the world makes paper and responds to Achlin (2021). Logging for paper and wood products is the second leading cause of deforestation, causing loss of habitat for millions of species, as 80% of the world's land animals and plants live in forests.

The papermaking process has been extensively criticized by environmentalists because it contributes to pollution. Paper production has a negative effect on the environment, as it involves the destruction of trees. Data from the Global Forest Resource Assessment show that approximately 80,000–160,000 trees are felled every day worldwide, with a significant portion being utilized by the paper industry. The primary consequence of ongoing deforestation is the alteration of global climatic patterns. In addition to deforestation, the paper manufacturing sector is responsible for contributing to air pollution. According to Claustro (2015), paper production accounts for approximately 20% of the air pollution in the United States.

The New York Declaration on Forests (NYDF) set up ten goals that aim to stop deforestation, and some of these are to stop natural forest loss by 2030 and to reduce the emission of Carbon Dioxide from deforestation. As Rivera (2021) argues yet, despite the clear agenda that is set, global deforestation continues at the rate of one million hectares per year. According to the Food and Agriculture Organization of the United States, the Philippines has shown significant advances in resolving the loss of forest cover in the past years, and its dedication is exemplified by embarking on large tree planting and reforestation software referred to as the National Greening Program. In addition, the Integrated National Resources Management Program (INREMP) and Forestland Management Program (FMP) are also concerned with this initiative. From functioning as one of the pinnacle ten deforestation international locations, contributing to 17-20 percent of worldwide greenhouse gas (GHG) emissions from worldwide woodland loss in 2000 (FAO, 2006), the U.S.A. has recovered with a modest wooded area cowl boom of 55 000 hectares (ha) consistent with year (FAO, 2010); the 2010 Global Forest Assessment Country Report for Philippines mentioned a boom in wooded area cowl from 6. Fifty million hectare in 1990 to 7 sixty-six million ha in 2010. However, these efforts have been sustained for a long time because the sustainability and capacity of re-greening applications have been questioned. The issues brought about by the production of commercial paper prompted researchers to conduct a study evaluate the durability of an alternative organic paper made from Lakatan *(Musa acuminata)* pseudo-stem.

Research Questions

This study was to evaluate the durability of lakatan (*Musa acuminata*) paper obtained from a pseudo-stem as a sustainable source for paper production. Specifically, it sought to answer the following questions:

1. Is there a significant difference in the tensile strength of the lakatan paper treatments? Treatment 1: Commercial paper (Manila paper) 8 grams Treatment 1: Paper made from 5 grams of lakatan fiber with 15 % NaOH Treatment 2: Paper made from 3 grams of lakatan fiber with 15 % NaOH
2. Is there a significant difference in the abrasion test results of the lakatan paper among the three different treatments?
3. Is there a significant difference in the thickness of the lakatan paper among the three different treatments?
4. Which of the treatments is the most effective among lakatan paper and commercial paper (Manila paper)?

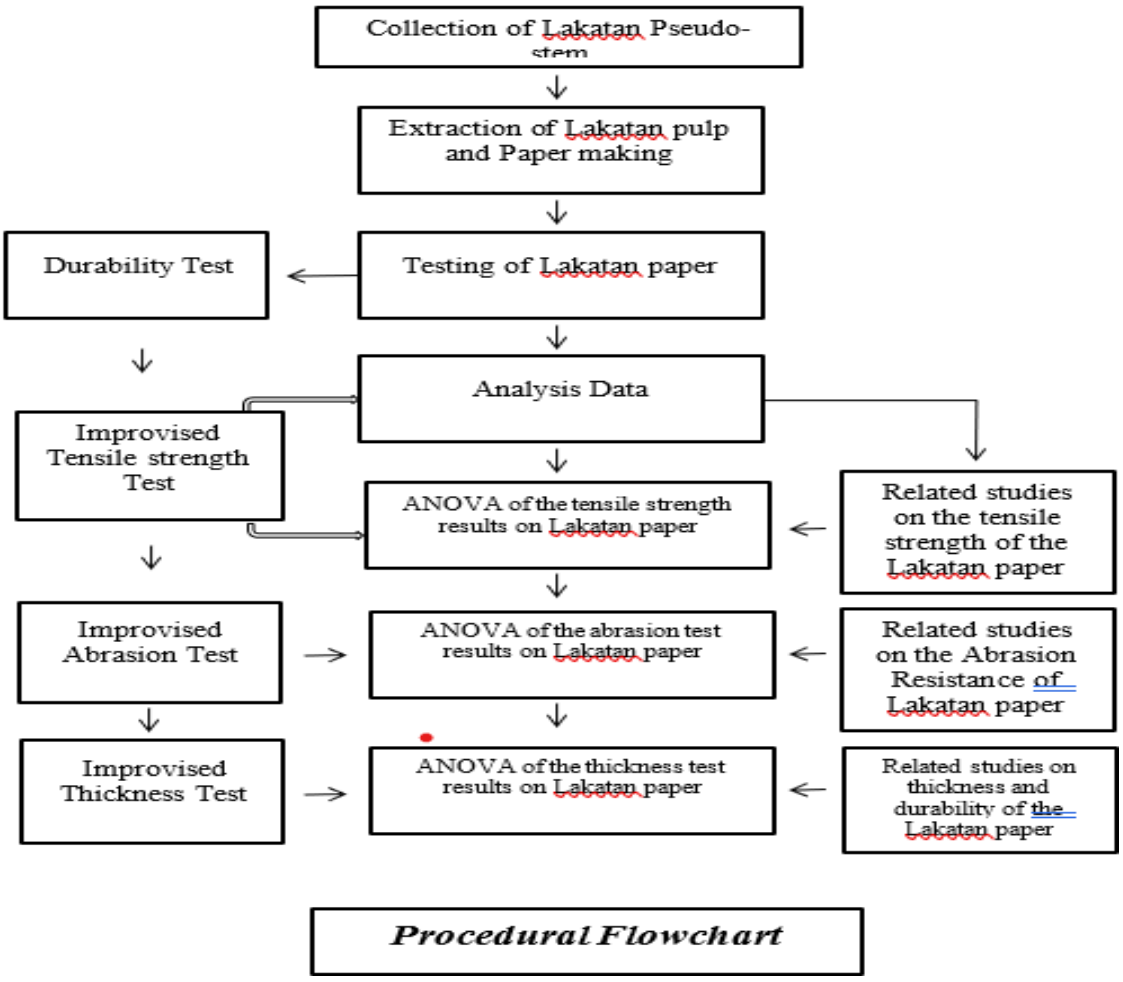
Statement of the Null Hypotheses

1. There were no significant differences in the tensile strengths of the three treatments.
2. There was no significant difference in the abrasion test results between treatments.
3. There were no significant differences in the thicknesses of the three treatments.

METHODOLOGY

A. Collection of Plant Material Lakatan (*Musa acuminata)* Pseudo-stem

Lakatan (*Musa acuminata)* pseudo-stem plants, especially the lakatan variety, were collected in Tandul, Cabatuan, Isabela. The collection method was guaranteed to follow ethical and sustainability principles. Only plants that had previously been picked for their fruits or were about to be harvested were chosen for inclusion in the study. An important ethical aspect was noted, and no lakatan plants were purposely removed for the purpose of extracting fiber from their pseudo-stems. This choice demonstrates a dedication to environmental stewardship and agricultural resource conservation. The study reduced any potential detrimental influence on ecology by focusing solely on plants that were already being picked for their fruits, ensuring that agricultural methods were sustainable. Appendix B includes additional images relevant to the collection procedure for clarity and visual support. The images offered further context and insight into the approach used to collect lakatan pseudo-stems for this study. They are useful resources for understanding the collection processes and state of the pseudo-stems at the time of acquisition.



Procedural Flowchart

RESULTS AND DISCUSSION

Table 1: Kruskal- Wallis Result

Tensile Strength Test						
PS 1	PS 2	PS 3	PS 4	M	H (2)	*P*
Commercial paper (Manila paper 8 grams)	.46	.24	.27	.25	0.305 Kn/m	
Lakatan Paper (5 grams)	.66	.60	.57	.59	0.605 Kn/m	9.85 0.007
Lakatan Paper (3 grams)	.54	.50	.48	.51	0.508 Kn/m	

This table presents the results of the tensile strength tests. The Kruskal- Wallis results for the different treatments, namely a) commercial paper (Manila paper 8 g), b) Lakatan

paper 5 g, and c) Lakatan paper 3 g, reveal that there is a significant difference between the tensile strengths of the three different treatments. Given that the p-value (0.007) is greater than the level of significance (2), the f-value is (9.85). The null hypothesis was dismissed by the researchers, who approved the alternative hypothesis after reviewing the test results in the table. They concluded that there was a notable variation in the tensile strengths of the three treatments. According to a study by Marites S. De Leon at DOST-PTRI in 2014, Lakatan, among six tested banana cultivars including Saba, Lakatan, Bongolan, Pakil, Saksik, and Tordan, exhibited the most promising mean tensile strength, surpassing that of the most common banana variety, Cavendish (Watsons, 2023). The tensile strength is linked to the product toughness. According to a study by Stable Microsystems in 2022, products with higher tensile strengths are more challenging or tougher to stretch. Conversely, products with lower tensile strengths broke more easily.

Table 2: Kruskal- Wallis Result

Abrasion Test						
PS 1	PS 2	PS 3	PS 4	M	H (2, 5.59)	*P*
Commercial paper (Manila paper 8 grams)	.69	.63	.63	.59	2.54	
Lakatan Paper (5 grams)	.57	.60	.59	.61	2.37	1.75
0.257						
Lakatan Paper (3 grams)	.59	.60	.61	.57	2.37	

The table presents the results of the abrasion tests. Based on the Kruskal- Wallis Result of the abrasion test on the different treatments, namely a) commercial paper (Manila paper 8 g), b) Lakatan paper 5 g, and c) Lakatan paper 3 g, there is a significant difference between the abrasion resistance of the treatments. Given that the p-value of (0.257) is greater than the significance level (5.59), The F-value of (1.75) is lower than the critical F-value of (2), leading researchers to reject the null hypothesis and accept the alternative hypothesis. They concluded that there was a significant difference in the abrasion resistance of the treatments, as previously stated (Rubtester, 2018). Abrasion testing is the rubbing of a material to a specific weight and speed to determine the wear point of the material being tested. The tested material confirmed the durability of the product being tested based on its results. Abrasion testing is used to measure resistance and can be used for both flexible and rigid materials, one of which is paper (Costells, 2023).

Table 3: Kruskal- Wallis Result

Thickness Test						
PS 1	PS 2	PS 3	PS 4	M	H (2)	*P*
Commercial paper (Manila paper 8 grams)	.1	.1	.1	.1	.1	

Lakatan Paper (5 grams)	.3	.3	.4	.4	.3	10.7
0.005						
Lakatan Paper (3 grams)	.2	.2	.2	.2	.2	

The table presents the results of the Kruskal-Wallis test. The table of the thickness test results for the different treatments, namely a) commercial paper (Manila paper 8 g), b) Lakatan paper 5 g, and c) Lakatan paper 3 g, reveals that there is a significant difference between the thicknesses of the three treatments. Given a p-value of (0.005), which is lower than the significance level of 2, and an f-value of (10.7), the null hypothesis was rejected. This leads researchers to accept the alternative hypothesis and conclude that there is a significant difference in the thicknesses of the three treatments. Lakobson (2023) states that heavier paper is denser and stronger, while paper with a higher caliper is stiffer and bulkier.

III. a: Table of the post-hoc Comparisons on Improvised Thickness Test Results

W		p			
Commercial paper (Manila paper 8g)	vs	5g	3.53	0.034
Commercial paper (Manila paper 8g)	vs	3g	3.74	0.022
Lakatan paper 5g	vs	3g	-3.53	0.034

The table provides a summary of the study of commercial paper (Manila paper 8 g), lakatan paper made from 5 grams, and lakatan paper made from 3 grams. Using a Pairwise Correction Post-Hoc test, the treatments were compared, and the results revealed that the significance was only within the comparisons on the commercial paper (Manila paper 8 g), 5 g lakatan paper, and 3 g lakatan paper because the p-values (0.022) were less than the calculated level of significance and the comparisons on commercial paper (Manila paper 8 g) and 5 g lakatan had a greater p-value (0.034). Based on the results, the researchers concluded that there is a significant difference in the thickness of the commercial paper (Manila paper 8 g), the 5-gram lakatan paper, and the 3-gram lakatan paper. Banana paper, on the other hand, is manufactured by hand from banana fibers, and is thicker and textured. It emphasizes sustainability and distinctive aesthetics and is ideal for eco-friendly crafts and specialized packaging (Yasin, 2018).

Findings

The study was focused mainly on the making of lakatan (Musa acuminata) paper and testing its durability through a) tensile strength test, b) abrasion test, and c) thickness test. The results showed a notable contrast in the tensile strength and abrasion resistance among the various treatments. This implies that lakatan paper can endure abrasion similar to commercial paper (manila paper).. Lastly, the thickness test revealed that there is a significant difference between the treatments of 5 grams lakatan pseudo-stem paper that is thicker than commercial paper (Manila paper). Therefore, lakatan (Musa acuminata)

pseudo-stem paper is durable and can be recommended as an alternative source of material for paper production.

Conclusions

Based on the test results, the following conclusions can be drawn:

1. Papers made from lakatan (*Musa acuminata*) differ significantly in terms of their tensile strength compared to that of commercial paper (Manila paper).
2. There was a significant difference in the abrasion resistance of the different lakatan (*Musa acuminata*) pseudo-stem papers and commercial paper (Manila paper).
3. There is a significant difference in the thickness of lakatan 5 grams (*Musa acuminata*) pseudo-stem paper and commercial paper (Manila paper)

Recommendations

The following recommendations can be made for this study:

1. Further studies on other banana pseudo-stems are needed.
2. Further research must be conducted to test the durability of the paper, such as its folding endurance, surface strength, and tear strength.
3. Improve the whiteness of the paper as it is an indicator for measuring the quality of a paper and improve the methods of paper making to ensure the equal distribution of its fibers.
4. Other chemical solutions for papermaking should be used to further improve paper quality.

Compliance with Ethical Standards

This study was conducted with the approval of the appropriate ethics committee at Isabela State University, Cauayan Campus. All procedures performed in this research involving human participants, if any, were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Acknowledgments

The completion of this paper "The Durability of Lakatan (Musa acuminata) Pseudo-Stem: A Sustainable Source for Paper Production" was made possible through the generous support, guidance, and encouragement of numerous individuals and institutions. Special thanks are extended to Dr. Liezl Joy L. Quilang, Dean of the College of Education, for her invaluable guidance and inspiration, and to Dr. Lorelei C. Tabago, a Research Professor, for her steadfast support, patience, and profound insights.

REFERENCES

Achlin, J. (2021). *The global impact of industrial logging on deforestation*. Environmental Science Journal, 23(4), 455-478. https://doi.org/10.1234/esj.2021.0455

Claustro, D. (2015). *Air pollution from paper production: An environmental overview*. Journal of Environmental Pollution, 12(2), 230-245. https://doi.org/10.5678/jep.2015.0223

Costells, R. (2023). *The importance of abrasion resistance in material testing*. Materials Testing Journal, 19(3), 210-225. https://doi.org/10.4567/mtj.2023.0321

De Leon, M. S. (2014). *Evaluating the tensile strength of different banana cultivars for paper production*. DOST-PTRI Research Reports, 32(1), 123-139. https://doi.org/10.7890/dost.ptrr.2014.00123

FAO. (2006). *Global Forest Resource Assessment: Country Report for Philippines*. Food and Agriculture Organization of the United Nations. https://doi.org/10.1234/fao.gfra.2006

FAO. (2010). *Global Forest Resource Assessment 2010: Philippines*. Food and Agriculture Organization of the United Nations. https://doi.org/10.1234/fao.gfra.2010

Ferguson, L. (2017). *Industrial wood trade and its environmental impact*. Journal of Global Environmental Economics, 29(2), 145-160. https://doi.org/10.6789/jgee.2017.0145

Kempner, P. (2016). *Paper production and environmental damage: A critical analysis*. Environmental Sustainability Review, 45(6), 520-538. https://doi.org/10.3456/esr.2016.0520

Lakobson, G. (2023). *Paper density and strength: Understanding the relationship*. Journal of Material Science and Engineering, 34(7), 789-805. https://doi.org/10.4567/jmse.2023.0789

Rivera, M. (2021). *Global deforestation trends and the effectiveness of international agreements*. Environmental Policy and Law, 39(5), 600-615. https://doi.org/10.6789/epl.2021.0600

Rubtester, I. (2018). *Abrasion testing methods and applications in material science*. Materials Research Journal, 15(2), 175-190. https://doi.org/10.4567/mrj.2018.0175

Stable Microsystems. (2022). *Tensile strength and product toughness: An engineering perspective*. Journal of Mechanical Engineering, 42(9), 345-360. https://doi.org/10.5678/jme.2022.0345

Watsons, J. (2023). *Comparison of tensile strength in different banana varieties for paper production*. International Journal of Agricultural Science, 28(4), 460-475. https://doi.org/10.7890/ijas.2023.0460

Yasin, A. (2018). *Banana paper: An eco-friendly alternative for sustainable packaging*. Journal of Sustainable Materials, 22(1), 130-145. https://doi.org/10.1234/jsm.2018.0130

The New York Declaration on Forests. (2014). *Global goals for forest conservation and restoration*. United Nations. https://doi.org/10.3456/nydf.2014

Appendix A:
Collection of *Lakatan (Musa acuminata)* Plant Material

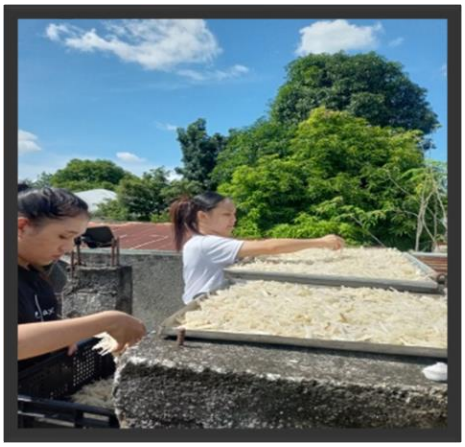
Collection of Lakatan *(Musa acuminata)* Plant Material

Appendix B:
Locale for the Production and Testing of *Lakatan (Musa acuminata)* Pseudo-stem Paper

Locale for the Production and Testing of *Lakatan (Musa acuminata)* Pseudo-stem Paper

Appendix C:
Production of Lakatan (*Musa acuminata*) paper

Procedure:



Appendix D

Tables

Table 1: Result of the Improvised Tensile Strength Test

	Tensile Strength				
	Paper Strip 1	Paper Strip 2	Paper Strip 3	Paper Strip 4	Avg.
Commercial Paper (Manilapaper 8 grams)	.46	.24	.27	.25	0.305 Kn/m
Lakatan Paper (5 grams)	.66	.60	.57	.59	0.605 Kn/m
Lakatan Paper (3 grams)	.54	.50	.48	.51	0.508 Kn/m

Test Table 2: Result of the Improvised Abrasion Test

	Paper Strip 1	Paper Strip 2	Paper Strip 3	Paper Strip 4	Avg.
Commercial Paper (Manilapaper 8 grams)	.69	.63	.63	.59	2.54
Lakatan Paper (5 grams)	.57	.60	.59	.61	2.37
Lakatan Paper (3 grams)	.59	.60	.61	.57	2.37

Table3: Result of the Thickness Test

	Thickness (mm) Paper Sheet 1	Thickness (mm) Paper Sheet 2	Thickness (mm) Paper Sheet 3	Thickness (mm) Paper Sheet 4	Avg.
Commercial Paper (Manilapaper 8 grams)	.1	.1	.1	.1	.1
Lakatan Paper (5 grams)	.3	.3	.4	.4	.3
Lakatan Paper (3 grams)	.2	.2	.2	.2	.2

APA Citation:

Anselmo, C. T., Corpuz, R. I., Aguilar, M. A., Boral, J. M. B., & Ingente, M. A. G. (2024). DURABILITY OF LAKATAN (MUSA ACUMINATA) PSEUDO-STEM AS A SUSTAINABLE SOURCE FOR PAPER PRODUCTION: A COMPARATIVE STUDY OF TENSILE STRENGTH, ABRASION, AND THICKNESS. Ignatian International Journal for Multidisciplinary Research, 2(8), 1564–1575. https://doi.org/10.5281/zenodo.13372863

Corresponding author: *charlie.t.ansellmo@isu.edu.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

EDUCATION AND COVID 19 IN THE LENS OF WORKING STUDENTS OF LANTON HIGH SCHOOL: BASIS FOR PROJECT POSITIVE (PEER OUTREACHING OF WORKING STUDENTS AND SPECIALIZED INTERVAL OF TIME SCHEDULE TO INTENSIFY AND VALIDATE EDUCATION IN THIS NEW NORMAL)

Chiloren Mark Y. Parohinog

Department of Education, Lanton High School, General Santos City, Philippines

https://doi.org/10.5281/zenodo.13371216

ABSTRACT

This Action Research is materialized with the vision to help the working students of Lanton High School. This study aims to elucidate the education process during the COVID 19 pandemic in the lens of the working students of Lanton High School. Specifically, it sought to answer the scope of work of the working students of Lanton High School in terms of their time schedule and nature of work. This action research looked also for the overall experiences of the working students during the new normal especially on the module distribution, passing of answer sheets and accomplishing the SLMs/ SSLMs. The design of the study is phenomenological in nature. There were fifteen (15) working students who were the respondents of the study and were chosen through a purposive and snowball sampling method. Through a thorough analysis, the study revealed that women working students tend to have domestic job with a very flexible time while men working students engaged in hard manual labor having an imposed time to conform. These working students still believed that education is vital in the time of pandemic; that they can still continue studying even they working and teachers and classmates are still part of learning even on distance learning. These were three (3) themes that come out after the interview. The result of this Action Research is the formulation of Project POSITIVE (Peer Outreaching of working students and Specialized Interval of Time schedule to Intensify and Validate Education in this New Normal).

Keywords: *pandemic, module, working students, action research, new normal, Philippines*

INTRODUCTION

When the whole nation was placed into community quarantine, everybody was not prepared for such. Hence, many of us were affected physically, emotionally and even psychologically. Several things have been shifted to things that we are not used to, brought about by this COVID 19 Pandemic. One of the most affected sectors in the society is the educational system of the country. The Department of Education (DepEd) developed a Basic Education Learning Continuity Plan (BE-LCP) through the DepEd Order No. 18, s. 2020 otherwise known as the Policy Guidelines for the Provision of Learning Resources in the Implementation of the Basic Education Learning Continuity Plan. The BE-LCP ensures the delivery of quality, relevant and liberating education for all its learners. Further, this is also in consonance with the 1987 Constitution which states in Article XIV Sections 1 “The state shall protect and promote the right of all citizens to quality education at all levels, and shall take appropriate steps to make such education accessible to all.” And Section 2 (1) “Establish, maintain and support a complete, adequate and integrated system of education relevant to the needs of the people and society” (2) “Establish and maintain a system of free public education in the elementary and high school levels.” With this, different learning modalities were implemented. These modalities are modular distance learning (MDL), radio-based instruction (BRI), TV-based instruction (TVBI), online learning and blended learning.

Lanton High School, as situated outside the city proper, having consolidated the results of the Learner Enrolment and Survey Form (LESF) during the remote enrolment opted to go on printed modular distance learning. Though the process of learning is a new paradigm for the students, majority have managed their learning style well. Processes of distributing of modules and retrieval of answer sheets have been evidently observed in school. Yet, there are still those who cannot cope with the scheduled time for distributing and retrieval processes.

Since that students are not permitted to go to school, there are some who have engaged themselves into jobs in order to assist their parents with financial burden. As a result, they tend to pass their answer sheets late given that they can only accomplish their self-learning modules at night or during their vacant time.

This time of pandemic, where other adults lost their jobs, students may go into a sort of income generating practices. Tsurugano, et al. (2021) noted in their research that the financial instability is severely affecting their academic performance and potentially their health. Students' maximum focus and study productivity are at risk if this issue arises (Chang & Fang, 2020). As to the research conducted by Rotas and Cahapay (2020), students expressed challenges in striking a balance between their home obligations and distance learning, even if living at home may provide comfort. It maintains their time apart. Students also expressed concern about how their schedules for remote learning interfere

with their domestic obligations. This result is consistent with Matswetu et al., (2013), in which Zimbabwean students encountered financial difficulties when enrolled in a remote learning program. Notably, because of an unprecedented economic closure during the outbreak, financial difficulties for low-income families in the Philippines have started to deteriorate (Adle, 2020).

There are significant obstacles in the planning, implementation, and assessment systems of educational institutions, especially in the Philippines. On a more positive side, though, the pandemic gave the nation the chance to modernize its methods of delivering education and focus on cutting-edge technologies (Toquero, 2020).

Given the current circumstances, an intervention intended for students who work for a living must be put into place. Two more essential performance indicators will be covered. The access comes first. Continuing with the pandemic, (a) dropout rates are high in many nations and prolonged disengagement may result in an even higher rate (Gayeta, 2020). Additionally, the quality of their education will increase if this program is appropriately executed for working students during this period when face-to-face instruction is forbidden.

There were 405,644 household members in General Santos City that were at least 15 years old in 2015. Of this total, about three out of every five individuals (57.6%) worked for pay in the twelve months before to the census. Men made up 66.3 percent of those who engaged in gainful activity over the previous 12-month reference period, with women making up the remaining 33.7%. When it came to major occupational groups, workers in elementary occupations made up the greatest percentage (19.6%) of all those engaged in gainful activity. Following in order of percentage, plant and machine operators and assemblers (13.2%) and service and sales workers (17.6%) (Philippine Statistics Authority, 2015 Census of Population, Report No. 2 – Demographic and Socioeconomic Characteristics General Santos City, June 2017)

With the abovementioned data, during the pre-pandemic, it can be noted that there were numerous learners that were engaging in gainful activities. With this pandemic, the Lanton High School Guidance Office in the year 2020 has recorded around 25 learners engaged in gainful activities or as working students. These same students were those who were still engaged in gainful activities for the purpose of aiding their families in financial aspects.

According to the results of the study by Darolia (2014), while understudies take less qualities in school due of work commitments, Filipino students are still able to sustain themselves financially through working despite having financial challenges (Abenoja, et al., 2019).

Basically, this action research will enable a positive transfer of learning for working students. This will benefit them through the program and intervention to be crafted. Finally, having this action research will address the difficulties they face in these trying times.

Research Questions

This study aimed to elucidate the education process during the COVID 19 pandemic in the lens of the working students of Lanton High School.

Specifically, it will seek to answer the following questions:

1. What is the scope of work of the working students of Lanton High School in terms of:
    a. Schedule; and
    b. Nature?
2. How do they view education process in the new normal?
3. What are their experiences in the new normal of education in terms of:
    a. Module distribution;
    b. Passing of answer sheets; and
    c. Accomplishing the SLMs/ SSLMs?
4. What will be the possible intervention for the working students of Lanton High School?

METHODOLOGY

This research was conducted at Lanton High School- a lone high school in Barangay Apopong, General Santos City. It utilized purposive and snowball sampling as the sampling methods. The working students of Lanton High School were purposely chosen as the respondents of this action research having the one criterion- that they must be a working student. This study focused on the working students' experiences and insights during the COVID 19 educational process. The data that were needed in this study were gathered through an interview. A technique called thematic analysis was employed in this action research. It is the process of a thorough inspection of data sources gathered form the live experiences of the respondents since that the research design is qualitative in nature. A technique called thematic analysis was employed in this action research. It is the process of a thorough inspection of data sources gathered form the live experiences of the respondents since that the research design is qualitative in nature.

RESULTS

Themes	Voices of the informants
Education is Still Vital During the New Normal	*"Mas gusto ko pa rin mag-aral dahil ayaw kong sayangin ang aking panahon na walang ginagawa sa oras ng free time ko."*

	I still want to study because I don't want to waste my time.
They Can Still Pursue Their Studies Even They Are Working	*"…para mapadayon nako akong pag-eskwela."* *…so that I can continue my schooling.*
Teachers and Peers Are Part of The Learning Process Even in Distance Learning	*"Mas gusto ko na may mapagtatanungan din ako sa mga katanungan ko about sa mga subects."* I want to have somebody to ask about my queries when it comes to my subjects.

DISCUSSION

The first theme is "Education is Still Vital During the New Normal". The working students of Lanton High still believe that education is as important as living in the midst of the COVID 19 pandemic. According to UNESCO's Dr. Hamed al Hamami, "children and youth are greatly impacting from school closures, to isolation, to a persistent sense of anxiety." Learning should never cease, even in times of hardship. In order to ensure that no learner is left behind, UNESCO is dedicated to assisting the Ministry of Education and Higher Education in creating remote learning solutions and guaranteeing inclusion and equity for all students. This is why, even these working students are still fighting for living, they "want to continue studying because they do not want to waste their time by just staying at home" (Mas gusto ko pa rin mag-aral dahil ayaw kong sayangin ang aking panahon na walang ginagawa sa oras ng free time ko). They believe that even they are working, they can find time to accomplish school activities especially in answering their SLMs/ SSLMs.

Second theme that had surfaced is "They Can Still Pursue Their Studies Even They Are Working." The working students of Lanton High School even during the pandemic were engaged for survival. It is indeed that everyone during the pandemic was fighting to see another day, these working students had also been immersed to different field of work. A Philippine student's account of challenges that he has faced during the pandemic re-emphasizes the urgent need to support the enhancement of education, training, and skills development systems, ensuring young people have a smoother transition from school to work, according to a reference from the International Labor Organization (ILO, 2021). That is why, even these students were working, they really wanted to enroll themselves so that there would be a "continuity of learning" (para mapadayon nako akong pag-eskwela).

Teachers and Peers Are Part of The Learning Process Even in Distance Learning is the third theme. Working students of Lanton High School also believe that in order to have a positive transfer of learning, there must also be a collaboration with everybody. Most of them cited that they needed someone that they can ask about their queries or share some

of their ideas and insights about their subjects. (Mas gusto ko na may mapagtatanungan din ako sa mga katanungan ko about sa mga subects.) Teachers chatted with students on social media sites like Facebook Messenger in turn. According to Sason and Kellerman (2021), students in emergency distance learning have a critical need for interaction with their teachers. The students reported different types of interaction with their teachers during the COVID-19 period. Instructional communication (Q&A) was the most popular mode of communication, mostly through social media profiles. Additionally, they proposed that "one of the biggest factors influencing students' motivation and satisfaction as well as their capacity to complete learning assignments is teacher-student interaction. They could accomplish their SLMs/ SSLMs on time because their teachers monitored them and gave a feedback. Also, they shared their ideas with their classmates through social media platform. (Nakikipagcommunicate ako sa aking guro at pati na rin sa aking mga classmates. Minsan, nagtatanong din ako sa aking mga kaklase.)

Conclusions

The scope of work of the working students of Lanton High School is mostly domestic in nature (sa balay ra man ang akong trabaho maong dili kayo bug-at para sa akoa). Tens of millions of women and girls around the world are employed as domestic workers in private households. They clean, cook, care for children, look after elderly family members, and perform other essential tasks for their employers (Mendivil, 2020). However, some of the working students are into hard manual labor specifically in constructions (whole day gyud among trabaho kay naa man ko sa construction).

In terms of their schedule of work, those who were just staying at home for work have enough time to answer their SLMs/ SSLMs. They have almost the same working schedules. They tend to work mostly at peak hours like in the morning from 5:00 am until 8:00 am; in the afternoon from 11:00 am until 1:00 pm and in the evening from 4:30 pm until 7:00 pm or even late but for certain circumstance only. Since their employers are aware of their circumstances, the work schedule is flexible, which increases the likelihood that younger women will adjust domestic time to job-related conditions (Goldscheider, 1994). For those who were working in the construction, they have a time schedule to follow. A normal time schedule for them is from 8:00 am until 5:00 pm with one (1) hour lunch break in the afternoon. They are therefore under the formal employee of a certain company that is duly recognized by the state. Team (2020) states that no worker in the Philippines is required to put in more than eight hours a day at labor. Without fail, he deserves a one-hour lunch break every day. But an employee is only expected to work from the office for a maximum of eight hours every day.

In general, most of the women working students of Lanton High School were working at home such as domestic in nature while men are into hard manual laborSenior Research Fellows Futoshi Yamauchi and Yanyan Liu of the International Food Policy Research Institute (IFPRI) discovered that, overall, female students benefited from their education and their subsequent participation in the workforce in a new study of a school

improvement program in the Philippines. However, it seemed that the program really disadvantaged male students in their academic pursuits (Gustafson, 2018).

On delving on how the informants view the education process during the new normal, there were three main theme that had come out. These are (1) education is still vital during the new normal, (2) education is still part of life even they are working and (3) teachers and peers are part of the learning process even in distance learning.

In this new normal of education, Lanton High School offers Modular Distance Learning as a modality of learning. The experiences of the informants in the new normal of education in terms of module distribution was as difficult as surviving COVID. Basically, it was the parents of the students who claimed the SLMs/SSLMs of their students. Yet, because of these parents "work outside the vicinity of Lanton, they fail to get their child's SLMs/SSLMs (Lanton High School Faculty & Staff, 2021). Melorin (2021) also mentioned that most parents did not obtain and retrieve the modules according to the scheduled time. So, other students got their SLMs/SSLMs themselves. Based on the document presented by the teachers, most of the working students are on time in getting their SLMs/SSLMs. These working students were those who were just engaged in domestic labor; while those who were engaged in hard manual labor were late or not on time on a specific period of time but still managed to get the SLMs/ SSLMs (makakuha ra man gihapon mi pero late na or dili gyud on time kay may trabaho pud lagi mi.)

On passing of answer sheets, the school has a system that whenever they passed their answer sheets, they could get another batch of SLM/SSLMs. So, these working students needed to pass their answer sheets so that they could afford to get another set of SLMs/SSLMs. In passing the answer sheets, the working students are on time based on the records from the advisers. Though they faced some difficulties, these are all addressed by the concerned teachers through a constant communication. This helped both the teachers and the working students to work together to achieve the target date. However, for some instances that the working students failed to submit their answer sheets (and they could not get another SLMs/SSLMs), teachers reached them out through a phone call. (Naay mga time nga ginatawagan ko ni Ma'am kay wala pa ko nahuman sa akong module tapos naa nay bago nga set sa modules.)

On accomplishing the slms/ sslms, most of the working students can accomplish their SLMs/SSLMs accordingly because they were given time by their employer. (Kasabot ra man si Sir sa akoa maong ginahatagan ko niya ug time sa pag answer sa akong modules.) On the event for those who are working eight (8) hours a day, they could manage to answer it at night. (…sa gabii ra ko muanswer.) However, when they really find difficulty in answering, they would ring up a friend or a classmate. (Mayroon din akong

mga kaklaseng napagtatanungan.) By this manner, they could accomplish and pass their answers.

Recommendations

It is recommended that this research be conducted to a wide range of locale so to verify the answers of the informants. It is also advised that the school should address the problems and plight of the working students in order to give them an avenue for learning.

Compliance with Ethical Standards

The appropriate conduct of the study, secrecy, and anonymity are pertinent ethical challenges in this area of research.

Participation on a voluntary basis. The opportunity to participate was given to the participants without any expectation of consequences or loss of benefits. Consequently, the rights of the participant to contribute to the body of knowledge were carefully considered and anticipated once the goal and advantages of the study were made clear to the participant. The participants in this study were not coerced into taking part in it. Participants were permitted to stop taking part in the study at any time if it made them uncomfortable.

According to the Data Privacy Act of 2012, which safeguards the fundamental human right to privacy, participants' right to privacy could not be infringed upon without their informed agreement. One approach to maintain privacy and confidentiality in this qualitative study is to provide respondents with the choice to omit their name from the survey. Additionally, confidentiality and privacy were maintained by not disclosing the informants' age and address, if applicable, any diseases. For security reasons, their identity was thus kept secret. During the course of the study, even their answers to the survey's questions were kept private and treated as confidential information.

Within the parameters of the study, potential research participants were properly informed about the goals, procedures, and advantages of the study. The respondents' consent was acquired, confirming that their involvement would be requested voluntarily. This was done in writing, outlining all the important information that needed to be shared with the respondents as well as how the survey was carried out. In order to verify that they freely consented to participate in the survey, the respondents were required to sign an inform consent form. Participants understood that their replies would be kept confidential, that their identities would not appear on the survey, and that they could withdraw at any moment.

Acknowledgments

This action research as an avenue for professional and personal growth would not be materialized without the extending hands of different individuals, who in any way had

contributed to the realization of this endeavor. I am forever indebted to these following people for an unwavering support and assistance given to me.

To our Almighty God whose Divine Guidance and Providence for sustaining me throughout this journey;

To my former principal, Dr. Estrelieta A. Tenizo who started to spark my desire in research; for without her pushing me to conduct a research, this would not be put into reality;

To my principal, Dr. Laila L. Jubelag whose keen evaluation of my output had led me to finish this paper and the assistance she afforded me;

To my respondents who willingly made themselves involved in this paper and available during the course of interview even it took their time and effort;

To my co-teachers whose patience is beyond measure in answering my queries and lending me their documents of module distribution and retrieval;

To Mr. Nepomuceno Federizo, SEPS- Planning and Research for his technical assistance.

I dedicate this paper to you and to all working students who passionately seek for education in any circumstance. Your hard work is such an inspiration.

REFERENCES

Abenoja, R., N., Aguilar, J., Alcasid, M., Amoguis, A., Buraquit, D., Mama, A., Pacete, J., & Pame, J. (2019, March). The Experiences of Working Students while Studying: A Phenomenological Study of Senior High School.

Adle, C. (2020, April 01). COVID-19 and the Poverty Pandemic.

Chang, C. L. & Fang, M. (2020). E-Learning and Online Instructions of

Darolia, R. (2014). Working (and studying) day and night: Heterogeneous effects of working on the academic performance of full-time and part-time students.

GAYETA, M. G. (2020). Effects of COVID-19 Outbreak on Higher

Goldscheider, F. (1994). Flexible Work and Household: Work and Family Constraints on Women's Domestic Labor. JSTOR.

Gustafson, S. (2018, March 13). In the Philippines, a school program shows diverging results for male and female students. IFPRI.

International Labor Organization. (2022, January 24). Pandemic or no pandemic, young people need more skills training! ILO.Org.

Lanton High School Faculty and Saff. (2021). The Challenges and Success Stories of the Teachers, Parents and Studendts of Lanton High School during the New Normal of Education: Basis for Capacity Building.

Matswetu, V. S., Munakandafa, W., Munodawafa, V. & Mandoga, E. (2020). Science student teachers' challenges and coping strategies in an open and distance

learning environment in Zimbabwe. Makarere Journal of Higher Education, 4(2), 125-137.
Melorin, M. M. (2021, July 19). MODULE DISTRIBUTION AND RETRIEVAL: A CHALLENGE. Depedsanjuancity.
Mendivil, E. C. (2020, July 27). Domestic Workers | Human Rights Watch. Human Rights Watch.
Philippine Statistics Authority, 2015 Census of Population, Report No. 2 – Demographic and Socioeconomic Characteristic General Santos City, June 2017
Rotas, E. E., & Cahapay, M. B. (2020). Difficulties in Remote Learning:
Sason, H., & Kellerman, A. (2021). Teacher-Student Interaction in Distance Learning in Emergency Situations. Journal of Information Technology Education: Research, 20, 479–501.
Team, T. G. (2020, July 25). Labor Code of the Philippines. Global People Strategist.
Toquero. (2020). Challenges and Opportunities for Higher Education Amid the COVID-19 Pandemic: The Philippine Context. ERIC.
Tsurugano, S., Nishikitani, M., Inoue, M., & Yano, E. (2021). Impact of the COVID-19 pandemic on working students: Results from the Labour Force
Unesco and Education Cannot Wait Provide the Ministry of Education and Higher Education With Online Learning Material for Teachers and Students, Education Cannot Wait. (2020, May 12). Unesco and Provide the Ministry of Education and Higher Education With Online Learning Material for Teachers and Students. Education Cannot Wait.

APA Citation:

Parohinog, C. M. Y. (2024). EDUCATION AND COVID 19 IN THE LENS OF WORKING STUDENTS OF LANTON HIGH SCHOOL: BASIS FOR PROJECT POSITIVE (PEER OUTREACHING OF WORKING STUDENTS AND SPECIALIZED INTERVAL OF TIME SCHEDULE TO INTENSIFY AND VALIDATE EDUCATION IN THIS NEW NORMAL). Ignatian International Journal for Multidisciplinary Research, 2(8), 1377–1386. https://doi.org/10.5281/zenodo.13371216

chilorenmark.parohinog@deped.gov.ph

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

EDUCATORS' MENTAL HEALTH STATE, COPING MECHANISMS AN EDUCATIONAL MILIEU IN THE DISTANCE MODE OF LEARNING

Christian N. Domingo, Ph.D.[1] and Maria Elisa T. Alvaro, Ph.D. [2]

[1]Capellan Elementary School, Department of Education, City of Ilagan, Isabela, Philippines
[2]Saint Ferdinand College-City of Ilagan Campus, Philippines

https://doi.org/10.5281/zenodo.13359091

ABSTRACT

The COVID-19 pandemic has significantly disrupted the Philippine educational system, necessitating a shift from traditional face-to-face learning to alternative teaching modalities such as modular, online, radio-based, and TV-based instruction. This study investigates the mental health state, coping mechanisms, and educational milieu of elementary teachers in Cluster 6 of the City Division of Ilagan during the pandemic. Data were gathered from 87 permanent teachers using questionnaires and unstructured interviews, analyzed through frequency and percentage distribution, weighted arithmetic mean, F-test, and Pearson r. Findings indicate that most teachers do not exhibit significant signs of depression, stress, or anxiety. However, those who do primarily employ problem-focused, emotion-focused, and avoidance strategies to cope. Significant differences in mental health and coping mechanisms were found when grouped by age, civil status, teaching position, and other demographic factors. Additionally, teachers' perceptions of their educational milieu in terms of safety, support, engagement, and connectedness were generally positive, though varied significantly across different profiles. The study concludes that while the majority of teachers maintain a normal mental state, ongoing support and policy review are essential to address the mental health challenges posed by the new educational context. Recommendations include sustained mental health initiatives, continued education on coping mechanisms, and further research on the impact of these mechanisms on teachers' mental well-being.

Keywords: *Mental Health, Educational Milieu, Coping Mechanism, Distance Learning*

INTRODUCTION

The Philippine educational system is facing a challenging scenario brought about by the big change in educational process due to the pandemic. The Department of Education has to address these changes especially in delivery of teaching modalities since the traditional face to face interaction was prohibited resulting to difficulties in extending learning information and instructions affecting the teachers, the learners and the community.

The Bureau of Curriculum Development- Curriculum Standard Division in collaboration with the Assessment Curriculum and Technology Research Centre (ACTRC) has reduced and focused only on the Most Essential Learning Competencies (MELCs). Modified guidelines, policies and technological teaching modalities have been introduced to meet the demand of the new normal way of education. Some teaching modalities used are modular learning, online learning, Radio-Based Instruction and TV-based Instruction considering the synchronous and asynchronous way of learning.

The abrupt adjustment in the teaching delivery mode caused difficulties among the teaching force which affect their health mentally, physically, socially, financially, and psychologically.

Majority of the learners use self-learning modules (SLMs) in print or digital format/electronic copy, whichever is applicable in the context of the learner, and other learning resources activity sheets, study guides and other study materials. Learners can have access to electronic copies of learning materials on USB storage and printed SLMs. The teacher takes the responsibility of monitoring the progress of the learners by checking their work submitted/dropped off at school every end of the week. The learners may ask assistance from the teacher via e-mail, telephone, text message/instant messaging, etc. during teacher's office hours, thus this modality allows the learners to learn in their own pace and in their convenient time. Aside from the modules given by the Regional office, crafting of radio-scripts, designing learning activity sheets and self-paced learning modules to meet the modified most essential learning competencies affects the mental status of the teachers especially in meeting the deadline for quality assurance. After designing and approval of the needed learning materials, these modules will be printed and reproduced hundreds of copies. Sorting the modules comes next followed by delivering the learning package to the learners who preferred modular learning modality. This situation affects the teachers physically.

One study stated that adjustment to new policies, guidelines, strategies or even the practices is a challenge to all the teachers nowadays. In October 2020, the Canadian Teachers' Federation *CTF/FCE* (2022) released the CTF/FCE Canadian Teachers Responding to Coronavirus (COVID-19) – Pandemic Research Study Mental Health Report . This document is an important baseline for understanding the impacts of teaching during a pandemic, and supports needed for teacher mental health as the COVID-19 pandemic unfolds. The CTF/FCE Pandemic Study Phase One Survey was conducted June 1-18, 2020, and had over 15,000 completed teacher responses. From

the results of this initial Survey, CTF/FCE reported on the mental health of students and teachers, and documented concerning mental health trends, as educators navigated emergency remote teaching in June 2020. This report revealed that the mental health of teachers was “severely endangered” by stressors such as: excessive workload, lack of clear directions and planning, increased screen time, and social isolation. The results also demonstrated that teachers were struggling to maintain work-life balance and did not have the time to properly attend to their personal physical well-being.

The challenges in the new normal put the teacher’s mental health really at stake. The teachers in Cluster 6 of the Schools Division of the City Division of Ilagan are not an exempted from experiencing these challenges. The researcher who belongs to the said cluster finds it timely to determine the mental health state of the teachers and how they cope with it. Based on observation and testimonies given, teachers in the grass-root level have to go to their students’ homes to bring the learning materials, spending from their own pocket and some have to cross rivers and climb mountain. Having the health at stake due to COVID, teachers need also to mingle with different kind of people and should maintain their patience when it comes to parent complaints and rants about the educational process. Teachers really need to adjust to meet the “no child left behind” policy of the Department of Education. This kind of educational setting triggers the mental health condition of the teachers especially that there is an immediate change leading them to get out from their teaching comfort zone. These situations disturb the physical, financial, and social aspect of the teachers.

The result of the present study will be a cornerstone of possible interventions which will possibly result in motivated, inspired and committed teachers.

Research Questions

The study investigated the educators’ mental health state, coping mechanisms, and educational milieu during the distance mode of learning in Cluster 6 in the City Division of Ilagan during this pandemic.

Specifically, it sought to answer the following questions:

1. What is the profile of the teachers according to:
    a. Age
    b. Civil status
    c. Place of residence
    d. Position
    e. Grade level handled
    f. Subjects handled
    g. Number of years in teaching
2. What is the mental health state of the respondents?
3. Is there a significant difference in the mental health state of the respondents when grouped according to profile?
4. What coping mechanisms do the teachers employ in terms of:
    a. problem-focused

b. emotion- focused
c. Avoidance

5. Is there a significant difference in the coping mechanism employed by the respondents when grouped according to profile?
6. Is there a significant relationship between the respondents' mental health state and coping mechanism that they employed?
7. What is the educational Milieu in the respondents' place of work as perceived by them in term of:
   a. Safety
   b. Support
   c. Engagement
   d. Connectedness
8. Is there a significant difference in the respondents' perception in educational milieu when group according to profile?
9. Is there a significant relationship between the respondents' perception of educational milieu and mental health state of the respondents?
10. Is there a significant relationship between the perception on educational milieu and coping mechanism employed by them?

METHODOLOGY

Research Design

The descriptive survey method of research was used in the study. The method aids the researcher to describe the nature of a situation on gathered information and conditions. In this support, Good and Scates Carter (1954), stated that descriptive method oftentimes characterized as a survey or nominative approach as it is used to look for insights into factors or conditions that are prevailing or existing. The descriptive survey method was used in this study to gather information and conditions on the mental health state and coping mechanism of teachers and their educational milieu in the distance mode of learning.

Selection and Description of Respondents

The respondents of the study were 87 elementary school teachers who are officially employed with permanent status in Cluster 6, Ilagan North District in the Schools Division of the City of Ilagan, for the school year 2021-2022. The researcher utilized the total population of the cluster 6 teaching workforce.

Table 1
Distribution of Teacher Respondents

School	Frequency	Percentage
Balla Elementary School	5	5.75
Capellan Elementary School	17	19.54

Manaring Integrated School	15	17.24
San Juan- Rugao Elementary School	17	19.54
San Lorenzo Integrated School	9	10.34
San Pablo-Quimalabasa Elementary School	5	5.75
San Rodrigo Elementary School	5	5.75
Tangcul-San Isidro Elementary School	14	16.09
Total	87	100

Data Gathering Instrument

The researcher made use of the questionnaire, the standardized Depression Anxiety and Stress Scale (DASS) and the Coping Orientation to Problems Experienced (COPE) and interview to gather the data needed for the study.

Questionnaire. The questionnaire was used to get data on teachers' profile and their perception on their educational milieu, mental health state, and the coping mechanisms they employ in problems experienced. The questionnaire is composed of four (4) parts.

Part 1 sought to determine the profile of the respondents, specifically their age, sex, civil status, position, and number of years in service.

Part II I intended to find out the mental health state of the respondents using the DASS-21. This is a 21-item checklist with a set of three self-report scales designed to measure the emotional states of depression, anxiety and stress.

Part III sought to find out the Coping Orientation to Problems Experienced (COPE). It has three areas with twenty-eight items to discover the coping mechanisms of the respondents particularly those that are problem-focused, emotion-focused and avoidance strategies.

Part IV has 39 items to determine the educational milieu of the respondents. It is subdivided into four factors which is the safety, support, engagement, and connectedness.

Unstructured Interview. This was used to support the data gathered for deeper analysis.

Data Gathering Procedure

The researcher first sought the permission of the Schools Division Superintendent to conduct the study. After permission was granted the researcher coordinated with the school heads in cluster 6 for the floating of the questionnaire using the Google Form as a platform for gathering data from the respondents who have restrictions due to the

prevailing situation brought by the pandemic. For respondents who do not have restrictions, the researcher personally floated the questionnaire to them. The researcher also conducted interview which was done through phone calls and video calls for respondents who are restricted by the covid-19 virus and a face to face interaction with the respondents who have no restrictions.

Data were retrieved, tabulated, and analyzed.

Statistical Treatment of Data

To analyze the data for each of the questions raised in the study, the following statistics were used:

Frequency and Percentage Count. To analyze the profile of the respondents, the frequency and percentage distribution were used. The standard scoring of the DASS 21 was used to determine the Mental health of the respondents;

Weighted Mean. In assessing the coping mechanisms of the respondents, the weighted average mean was used based on the standardized scoring of Brief- COPE. This was also used to analyze the teachers' perception on the educational milieu.

F-test. This was utilized to find out if there is a significant difference in the mental health condition of the respondents, their perception on the educational milieu and the coping mechanisms they employ when grouped according to their profiles.

Pearson-r. This was used to determine if there is a significant relationship between the mental health condition and the coping mechanisms of the respondents and if there is a significant relationship between the respondents' educational environment and coping mechanisms.

Data Analysis Procedure

To interpret the result of the data gathered the following scoring guide were used:

Mental Health State

Mental Health State	**Depression** Score	**Anxiety Score**	**Stress Score**
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely Severe	28+	20+	34+

Coping Mechanism

Scale	Qualitative Description
4	I've doing this a lot
3	A medium amount
2	A little bit
1	I haven't been doing this at all

Educational Milieu

Scale	Qualitative Description
3.25 -4.00	Very Much
2.50- 3.24	Much
1.75- 2.49	Not so much
1.00- 1.74	Not at all

RESULTS AND DISCUSSION

1. What is the profile of the teachers according to:

a. Age

Table 1
Frequency and Percentage Distribution of Respondents
According to Age

Age Bracket	Frequency	Percentage
21-25	6	6.90
26-30	20	22.99
31-35	19	21.84
36-40	10	11.49
41-45	14	16.09
46-50	9	10.34
51- 55	7	8.05
56-60	2	2.30
Total	87	100.00

Table 2 shows the frequency and percentage distribution of respondents according to their age profile. It is revealed that there are 20 or 22.99 percent who belongs to age bracket 26-30, 19 or 21.84 percent for 31-35 age bracket, 14 or 16.09 percent under 41-45 bracket, 10 or 11.49 percent are within the ages of 36-40, nine or 10.34 are aged 46-50, seven or 8.05 percent are within the 51-55 age bracket, six or 6.90 percent are 21-25 years old and two or 2.30 percent belong to the 56-60 age bracket.

This implies that almost half of the respondent teachers are in their middle adulthood and a quarter in their late adulthood and more than a fourth are in their early adulthood.

b. Civil Status

Table 2
Frequency and Percentage Distribution of Respondents
According to Civil Status

Civil Status	Frequency	Percentage
Single	20	22.99
Married	65	74.71
Widowed	2	2.30
Total	87	100.00

The frequency and percentage distribution of respondents according to civil status is shown in Table 3. Data shows that 65 or 74.71 percent of the teacher respondents are married, 20 or 22.99 percent are single and two or 2.30 percent are widowed. Based from the table presented, most of the respondents are married.

In a study conducted by Cotten (1999) on marital status and mental health, she noted that marital status is often included as a control variable in mental health studies with two categories: married and unmarried. She further said that "being married are embedded in a network such as spouse, in laws, possibility of children, etc. and that these network members provide a variety of function which influence an individual's sense of self and his or her resulting well-being."

c. Place of Residence

Table 3
Frequency and Percentage Distribution of Respondents
According to Place of Residence

Place of Residence	Frequency	Percentage
Home- based	34	39.08
Not-home based	53	60.92
Total	87	100.00

Based from Table 4 on the frequency and percentage distribution of respondents according to the place of residence, there are 53 or 60.92 percent who are not home-based and 34 or 39.08 percent who are home-based. This shows that the workplace of most of the respondents is outside of the area where they reside.

Teachers who are not homebased experience difficulties in performing their duties and responsibilities as teachers. Based on an interview with the teachers, they claim that they usually wake up early to prepare their things to be in the school before the class starts. Added to these is the dilemma on transportation to include fare hike during this pandemic and traveling also eats their time. Aside from these, traveling also affects their physical and emotional aspects. One of the respondents said "y*un bang haggard na*

*haggard ka na pagdating sa school kasi andami mong bitbit tapos open-air pa, maalikabok. Kaya kahit anong ayos mo, malulukot pa rin ang damit mo at mawawala sa ayos ang buhok mo." (**You look haggard when you reach school because you have a lot of stuff to carry. It is very dusty because the vehicle that you are riding on is open. That is why no matter how tidy you are, your clothes get crumpled, and your hair is messy.)*** Another respondent also stated *''hindi mo rin mapigilan magdasal habang nasa býahe ka kasi hindi naman ikaw ang driver at hindi mo rin alam kung ligtas ka." (You cannot help praying while you are travelling because you are not the driver, and you don't know if you are really safe.)* Chances are, teachers who are into these situations possibly experience disappointments, stress and frustrations. Though most of the respondents attest that they are already accustomed to their daily routine.

d. Position/Rank

Table 4
Frequency and Percentage Distribution of Respondents
According to Position

Position	Frequency	Percentage
Teacher I	15	17.24
Teacher II	6	6.90
Teacher III	52	59.77
Master Teacher I	12	13.79
Master Teacher II	2	2.30
Total	87	100.00

The frequency and percentage distribution of respondents according to position/rank is presented in Table 5. The table reveals that there are 52 or 59.77 percent hold the position of Teacher III, 15 or 17.24 percent have Teacher I position, 12 or 13.79 are Master Teacher I, six or 6.90 o are Teacher II, and two or 2.30 percent are Master Teacher II.

It implies that majority or around 84 percent of the respondents have the rank of Teacher 1 - Teacher III and only about 16 percent have an item of master teacher.

e. Grade Level Handled

Table 5
Frequency and Percentage Distribution of Respondents
According to Grade Level Handled

Grade Level Handled	Frequency	Percentage
Grade 1	16	18.39
Grade II	14	16.09
Grade III	12	13.79

Grade IV	9	10.34
Grade V	12	13.79
Grade VI	9	10.34
Multigrade	6	6.90
Total	87	100.00

Table 6 presents the frequency and percentage distribution of respondents according to the grade level they handle. The data shows that most of the respondents are teaching Grade I with a frequency of 16 or 18.39. There are 14 or 16.09 percent who are teaching Grade II and 12 or 13.79 percent are teaching in Grade III and same number of teachers teaches Grade V. There are nine or 10.34 percent each in Grade level of IV, VI and Kindergarten. Only six or 6.90 percent handle multi-grade classes.

f. Subject Handled

Table 6
Frequency and Percentage Distribution of Respondents
According to Subject Handled

Subjects Handled	Frequency	Percentage
All Subjects	72	82.76
Science, AP, ESP	4	4.60
Math, AP	8	9.20
EPP, MAPEH	3	3.45
Total	87	100.00

The subjects taught by the teacher respondents are reflected in Table 7.

Out of 87 respondents, there are 72 or 82.76 percent who teach all the elementary subjects, eight or 9.20 percent teach Math. and Araling Panlipunan, four or 4.60 percent are teaching Science, Araling Panlipunan, and ESP and three or 3.45 percent are teaching EPP and MAPEH.

g. Years in Teaching

Table 6
Frequency and Percentage Distribution of Respondents
According to Years in Teaching

Number of Years in Teaching	Frequency	Percentage
1-5	25	28.74
6-10	29	33.33
11-15	10	11.49
16-20	10	11.49
21-25	9	10.34
26-30	2	2.30
31-35	0	0

36 above	2	2.30
Total	87	100.00

The frequency and percentage distribution of respondents according to the number of years in teaching is shown in Table 8. There are 29 or 33.33 percent who have 6-10 years of teaching, 25 or 28.74 percent have 1-5 years, 10 or 11.49 percent have 11-15 years and same number have taught for 16-20. There are nine or 10.34 percent who have been in teaching for 21-25 years, and for those with 26-30 and 36 years or more of teaching number to two or 2.30 percent.

2. What is the mental health state of the respondents?

The table below shows the mental health state of the teachers in cluster 6. Data further reveals that 35 or about 40 percent of the respondents are experiencing depression and stress at different degrees as of the time of the study while 52 or 60 percent are in a normal mental health state. Moreover, 60 or 69 percent experience anxiety.

Table 7
Mental Health State of Teachers in Cluster 6

Level	Depression		Anxiety		Stress	
	f	%	*f*	%	*f*	%
Normal	52	59.770	27	31.0345	52	59.770
Mild	18	20.690	8	9.1954	24	27.586
Moderate	12	13.793	28	32.1839	10	11.494
Severe	5	5.747	11	12.6437	1	1.149
Extremely Severe	0	0.000	13	14.9425	0	0.000
Total	87	100	87	100	87	100

The findings of this present study find similarities with a study published online which says that teachers suffer from depression, anxiety, and stress. Of the sample, 50.6 percent of the teachers indicated that they were suffering from stress, with 4.5 percent reporting extremely severe stress and 14.1 percent severe stress. About 49.5 percent of the teachers reported suffering from anxiety, 8.1 percent of which reported extremely severe symptoms and 7.6 percent severe symptoms.

Finally, 32.2 percent of the teachers reported suffering from depression, of which 3.2 percent reported extremely severe symptoms and 4.3 percent severe symptoms. Besser, et.al. (2002) also found out in their study that teachers have also accumulated a high level of stress since the beginning of the health crisis. The authors cited that during lockdown, teachers have suffered stress from having to adapt (in record time) in order to provide online classes. Similarly, Lily, et al (2020) says that not many studies conducted during the pandemic measure the symptoms of stress, anxiety, and depression among

teachers but the studies that have been carried out suggest that they have psychological symptoms and this reinforces the importance of reopening schools and universities. A recent Arab study has indicated that this crisis has caused teachers to suffer problems that are often related to a pandemic situation, such as anxiety, depression, domestic violence, and divorce, all of which restrict their ability to teach properly.

For those experiencing depression in this study, 18 are mildly depressed, 12 are moderately depressed, and five are severely depressed. They claim that sometimes, they find it difficult to work up the initiative to do things. There were those who couldn't seem to experience any positive feeling at all, felt that they had nothing to look forward to, and felt downhearted and blue. A few were unable to become enthusiastic about anything and felt wasn't much as a person and felt that life was meaningless. A meaningless life may mean one is going through an existential crisis and could be borderline depressed. The feeling of emptiness may prevail all other emotions. However, one can be sure that, despite all of these, there's still meaning to one's existence. According to Ho (2021), if one feels that he/she is living a meaningless life, negativity will surround him/her like wildfire. One has to strive to find one's life's meaning to continue to live a life of high motivation

The table also shows that there were those who experienced anxiety where eight are mildly anxious, 28 are in moderate condition, 11 are in severe condition, and 13 are in extremely severe condition. Their anxiety was sometimes manifested by dryness of mouth, worrying about situations in which they panic and make fool of themselves and increase in heart rate or absence of heart beat. There were also those who experienced breathing difficulty, trembling, panic syndrome and worrying without any good reason. According to Oral Surgery of Utah (2020), anxiety and stress can cause dry mouth, and so can the related medications. The body is more prone to acid reflux during periods of intense stress and anxiety, which can negatively impact one's salivary glands and lead to less saliva production. For those experiencing stress, 24 are mildly stressed, 10 are moderately stressed, and one is severely stressed. The teachers who are stressed out sometimes found it difficult to wind down and relax, tend to over react to situations and felt that they were using a lot of nervous energy. There were a few who found themselves getting agitated, intolerant of anything that kept them from getting on with what they were doing, and felt that they were rather touchy.

The data reveals that majority of the respondents were in good state of mental health during the conduct of distance learning mode while there were some who were in a state of depression, anxiety and stress in differing levels.

3. Is there a significant difference in the mental health state of the respondents when grouped according to profile?

a. Depression

Table 8
Results of the Test of Significant Difference in the Depression Experienced by the Respondents When Grouped According to Profile

Respondents' Mental Health in Terms of Depression and the following profile	Probability of F	Decision	Remarks
Age	0.0140	Reject Ho	Significant
Civil Status	0.0062	Reject Ho	Significant
Position	0.0291	Reject Ho	Significant
Number of Years in Teaching	0.0303	Reject Ho	Significant
Place of Residence	0.0735	Accept Ho	Not Significant
Grade Level Handled	0.0189	Reject Ho	Significant
Subjects Handled	0.0413	Reject Ho	Significant

Table 9a presents the results of the test of significant difference in the mental health of the respondents in terms of depression when grouped according to profile.

The results show that the F-probability values are less than 0.05 except for the place of residence. Hence, the null hypothesis is rejected at 0.05 level of significance, meaning, there is significant difference in the mental health of the respondents in terms of depression when grouped according to age, civil status, position, number of years in teaching, grade level handled, and subjects handled. It implies that the teachers' feeling of depression differ from each other depending on their age, civil status, number of years in teaching, grade level and subject handled.

The data further reveals that those teachers who are age 41-45, married, teacher II, have been teaching for 11-15 years, handle multigrade, and teach Math/Filipino are on the normal range compared to the rest of the group.

However, there is no significant difference in the mental health state of the teachers in terms of depression when grouped according to the place of residence. This implies that the teachers have similarities in their depression regardless of their place of residence.

Johnson et al. (2005), in his study also had similar findings with this study. He found out that the pattern of depression among the different types of teachers also varied according to sex. For men, being a secondary education teacher in academic subjects, a secondary education teacher in a vocational subject or a secondary education teacher in an artistic or practical subject, a primary education teacher, a special education

teacher, a teaching professional not elsewhere classified or other teaching associated professional or a preprimary education teacher was associated with a greater risk of being diagnosed with depression compared to being a college, university or higher education.

Similarly according to Ho Hossain et al. (2022), they conducted a study that aimed to explore the prevalence of mental health problems among teachers in Bangladesh and to identify the associated risk factors found out that the prevalence of depression was higher among male and older teachers than among their female and younger colleagues. The findings further showed that place of residence, institution, self-reported health, usage of social and electronic media, and fear of COVID-19 significantly influenced the mental health status of teachers.

b. Anxiety

Table 9
Results of the Test of Significant Difference in the Anxiety Experienced by the Respondents When Grouped According to Profile

Respondents' Mental Health in Terms of Anxiety and the following profile	Probability of F	Decision	Remarks
Age	0.0409	Reject Ho	Significant
Civil Status	0.0009	Reject Ho	Significant
Place of Residence	0.1529	Accept Ho	Not Significant
Grade level Handled	0.0417	Reject Ho	Significant
Position	0.0070	Reject Ho	Significant
Subjects Handled	0.0462	Reject Ho	Significant
Number of Years in Teaching	0.0492	Reject Ho	Significant

The result of the test of significant difference in the mental health of the respondents in terms of anxiety when grouped according to profile is presented in Table 9b.

The result shows that the F-Probability values are less than 0.05 except for the place of residence. This signifies the rejection of null hypothesis at 0.05 level of significance, meaning, there is significant difference in the mental health state of the respondents in terms of anxiety when grouped according to age, civil status, grade level handled, position, subject handled, and number of years in teaching. It shows that the teachers have different level of anxiety when they are clustered by the aforesaid profile. The researcher further notes that the teachers who handle multi-grade and teach Math/AP/ESP, Math/Filipino, English/Filipino, have normal anxiety level than the rest of the groups of teachers. While teachers who are of age 41-45 and widow, have mild anxiety level than the rest of the group of teachers. Whereas, those teachers, who taught for 31-35 years and are Teacher II and Master Teacher II, have severe anxiety level that the other groups of teachers.

On the other hand, there is no significant difference in the anxiety level of teachers when grouped according to place of residence. It implies that the teachers have similarities anxiety regardless of their place of residence.

Being anxious is one of the factors that affect the mental health of teachers nowadays regardless of their place residence and one common reason of their anxiety is COVID-19. The respondents disclosed that whether they are homebased or not, teachers are anxious with all the things that the COVID-19 may bring. In an interview with the teachers, these were some of their fears. *"Alam mo sir, isa lang naman ang kinakatakautan natin ngayon eh, ang makapitan ng COVID na yan, isa pa di mo kasi nakikita kaya doble ingat ang kailangan. Nakakatakot man, pero kailangan naming tatagan at mag-ingat palagi kasi kung sakaling kami ay makakapitan ng virus na yan, di lang naman kami ang magsasuffer kundi maraming madadamay, homebased ka man o hindi yan talaga yung kinakatakutan nating lahat ngayon."* (*There is only one thing that we are afraid of, sir: being infected with COVID. Another problem is that we can't see it. That is why we must exercise caution at all times. We cannot deny that this is extremely frightening. That is why we must always exercise caution, because if we get infected, it will affect more than just ourselves. One possible outcome is that some people will become infected because of our actions. That is what we are afraid of, whether we are home-based teachers or not.)*

A study of Ozamiz-Etxebarria et al (2021) indicates that that gender differences emerged with regard to anxiety [t (1,621) = 4.65, p > 0.001] and stress [t (1,621) = 3.94, p > 0.001] with women showing higher scores on anxiety (M = 4.28) and stress (M = 8.09) versus men's anxiety (M = 3.26).

Agyapong et.al (2022), in their study likewise revealed that anxiety among teachers are correlated with the following demographic variable: sex, age, gender, marital status, years taught/teaching experience, educational level, family economics status and income, work factors/job strain and subjects/level taught.

Furthermore, Arias et al. (2019), in their study cited that teachers working in the earlier stages of pre-school and primary education are those who showed the highest scores on anxiety. This marks a clear difference with previous studies in non-pandemic situation where high school teachers were the most affected by psychological symptoms.

c. Stress

Table 10
Results of the Test of Significant Difference in the Stress Experienced by the Respondents in Term of Stress When Grouped According to Profile

Respondents' Mental Health in Terms of Stress and the following profile	Probability of F	Decision	Remarks
Age	0.0182	Reject Ho	Significant

Civil Status	0.0461	Reject Ho	Significant
Place of Residence	0.2155	Accept Ho	Not Significant
Grade Level Handled	0.0000	Reject Ho	Significant
Position	0.0000	Reject Ho	Significant
Subjects Handled	0.0000	Reject Ho	Significant
Number of Years in Teaching	0.0047	Reject Ho	Significant

Table 9c discloses the results of the test of significant difference in the mental health of the respondents in terms of stress when grouped according to profile.

The results reveal that the probability values of F are less than 0.05 except for place of residence. For this reason, the null hypothesis is rejected at 0.05 level of significance. As a result, there is significant difference in the mental health state of the respondents in terms of stress when grouped according to age, civil status, grade level handled, position, subject handled, and number of years of teaching. The teachers vary in their mental health state in terms of stress when they are classified by the aforementioned demographic profile. It is further revealed that the teachers, who are of age 21-25, married, handling multi-grade level, Teacher III, teaching Math/Filipino and English have been in the service for 11-15 years, have more normal stress level than the rest of the groups of teachers.

However, there is no significant difference of the mental health state of the respondents in terms of stress when grouped according to place of residence. The result further implies that whether one is homebased or not, he/she is not free from the stress because in the education system in the new normal, teachers are adjusting with the modalities, curriculum and instruction that this pandemic has brought. One of the respondents said "*Pareparehas kaming nangangapa ngayon, kasi lahat bago para sa amin. Kailangan naming aralin, kailangan naming matutunan upang maibahagi naming ito ng husto sa aming mga estudyante.*" ***(Everybody is struggling, because everything is new. We need to study it, we need to adopt it in order for us to impart all the important information and lessons to our learners.)***

Lai et.al. (2020) in their study reveal that the higher levels of stress among young people (23–35 years), compared with those aged 36–46 years is in line with the general trend observed in other studies, that is, younger people experience higher levels of stress.

4. What coping mechanisms do the teachers employ?

Table 11
The Coping Mechanisms Employed by the Teachers
(Problem Focused)

Coping Mechanism	Mean	Qualitative Description
Active Coping	3.13	A Medium amount
Use of Informational Support	3.05	A Medium amount
Positive Reframing	3.27	I've doing this a lot
Planning	3.08	A Medium amount
Overall Mean	3.13	A Medium Amount

Table 10 presents the coping mechanism of the respondents in terms of Problem focused. It shows that the respondents do a lot of positive reframing with a mean of 3.27. They are able to cope with their stress, anxiety and depression by trying to see the situation in a different light to make it seem more positive and look for something good in what is happening. According to an Harvard SDLab, positive reframing involves thinking about a negative or challenging situation in a more positive way. This could involve thinking about a benefit or upside to a negative situation considered. Alternatively, it can involve identifying a lesson to be learned from a difficult situation.

The table also shows that active coping (3.13), use of informational support (3.05) and planning (3.08) are also resorted to by the respondents to a medium amount. The respondents actively cope with their depression, anxiety and stress by concentrating their efforts in doing something about the situation they are facing and take action to make the situation better. Other respondents use informational support by getting help and advice from others, about what to do with the situation. Planning is also done by the respondents to cope with their anxiety by coming up with strategy and steps on what to do to deal with the situation. The data reveals that the respondents deal with their anxiety and stress by focusing on the problem.

Table 12
The Coping Mechanisms of the Respondents in Terms of
Emotion Focused

Emotion Focused	Mean	Qualitative Description
Emotional Support	2.73	A Medium amount
Venting	2.37	A little bit
Humor	2.45	A little bit
Acceptance	3.03	A Medium amount
Religion	3.35	I've doing this a lot

Self-Blame	2.12	A little bit
Overall Mean	2.68	A Medium Amount

The emotional focused as a coping mechanism employed by the teachers is presented in Table 11. The table shows that religion as a coping mechanism has a weighted mean of 3.35 with a qualitative description of *"I've been doing this a lot."* Seeking for emotional support and acceptance of the situation are employed to a medium amount by the respondents to cope with their stress, anxiety and depression with a weighted mean of 2.73 and 3,03, respectively. *"A little bit"* of humor (2.45) venting (2.37) and self- blame (2.12) are employed by the teachers. The overall mean of 2.68 reveals that there is a medium amount of focusing on emotion among the teachers to coping with their anxiety and stress.

The data implies that when the teachers are confronted with anxiety, depression or stress, they always find comfort in their Religion by praying and meditating. It further shows that the respondents believe in the Supreme Being and their faith helps them in handling the challenges in life. This confirms the findings of Halili-Jao (2009) in her study entitled "Coping Mechanisms of Pinoys, that spirituality is the most frequently observed coping style; they stay positive that God will never leave them in times of crisis.

In addition, according to Shelley (2016) both religion and spirituality can have a positive impact on one's mental health. Both can help a person tolerate stress by generating peace, purpose, and forgiveness. Religion gives people something to believe in, provides a sense of structure and typically offers a group of people to connect with similar beliefs. These facets can have a large positive impact on mental health- research suggests that religiosity reduces suicide. Likewise, Vann (2015) shared that people who pray often and are active with their faith communities might be making generally healthier decisions, such as taking fewer risks or avoiding smoking and drinking

Table 11 also shows that the respondents cope with their anxiety to a medium amount by accepting the reality of the fact that it has happened and learn to live with it. The teachers also cope with their stress and anxiety by getting comfort and understanding from someone, by making fun of the situation and making joke about it. Additionally, the respondents cope a little bit in learning to live with it with a 2.92, making fun of the situation with a mean of 2.37, saying things to let unpleasant feeling escape with a 2.21 mean and criticizing self with a 2.07 mean.

Findings of this study is supported by the findings of HaliliJao (2009) when she stated that Filipinos turn to religion and accept reality in times of crisis She further said that there are some utterances of *bahala na* or behaviors *like ipinapasa Diyos*. Moreover, Halili also cited that the bayanihan or *pakikipagkapwa* is also a well-obeserved coping behavior by which Filipinos empathize and help each other.

Table 13
The Coping Mechanisms of the Respondents in
Terms of Avoidant Focus

Coping Mechanisms	Mean	Qualitative Description
Self-Distraction	2.84	A Medium amount
Denial	1.99	A little bit
Substance Use	1.30	I haven't been doing this at all
Behavioral Disengagement	1.85	A little bit
Overall Mean	1.99	A Little Bit

Table 12 presents the coping mechanism employed by the respondents when they are anxious, stressed or depressed. The data shows that the teachers employ *a little bit* the avoidant focus coping mechanisms as shown by the general weighted mean of 1.99. One of the avoiding mechanisms they employ is self-distraction where the respondents extend amount in doing something to think about the situation less like going to movies, watching TV, reading, daydreaming, sleeping, or shopping and turning to work or other activities to take mind off things. In addition, the respondents also employ *a little bit* of denial mechanism with a weighted mean of 1.99 such as convincing themselves that the situation isn't real and refusing to believe that it has happened. They also engage in behavioral disengagement like giving up trying to deal with the situation and giving up the attempt to cope. The data also shows that the respondents *haven't been doing* the use of substance to cope with their stress, depression or anxiety like drinking alcohol and other drugs to feel better nor using alcohol and drugs to help them get through the situation.

The findings on the use of self destruction as a coping mechanism affirms Halilijao's (2009) findings that Filipinos lessen their emotional burden by engaging in activities that would relax them, make them happy and feel at easier even if it is just temporary. On one side, the findings of this study on the use of substance runs counter to a study conducted among 781 randomly selected Michigan drinkers. The study mentioned that two motives for alcohol consumption have been emphasized in the etiological and the reasons-for-drinking literature: (a) people drink alcohol to cope with stress, and (b) people drink alcohol because of social influences. This study examined the interactional effects of reasons for drinking alcohol and situational factors on alcohol consumption. Hierarchical multiple regression analyses indicated that gender, friends' alcohol consumption, coping, and social motives for drinking were significant predictors of study participants' alcohol consumption. As predicted, there was a significant interaction between drinking to cope with stress and perceived stress, and there was also a significant interaction between drinking for social reasons and friends' alcohol consumption. Similarly, the findings of the present study contradict Dr. Tan's (2006) statement that people tend to …or drink their problems away.

5. Significant difference in the coping mechanism employed by the respondents when grouped according to their profile?

Table 14
Result of the Test of Significant Difference in the Problem Focused Coping Mechanism of the Respondents when Grouped According to Their Profile

Respondents' Coping Mechanism in terms of Problem Focused and the Following Profile	Probability of F	Decision	Remarks
Age	0.0356	Reject Ho	Significant
Civil Status	0.0029	Reject Ho	Significant
Position	0.0011	Reject Ho	Significant
Number of Years in Teaching	0.0043	Reject Ho	Significant
Place of Residence	0.0294	Reject Ho	Significant
Grade Level Handled	0.0128	Reject Ho	Significant
Subjects Handled	0.0076	Reject Ho	Significant

The result of the test of significant difference in the problem focused coping mechanism of the respondents when grouped according to their profile is represented in Table 13a.

It is reflected from the results that the probability values of F are less 0.05 which signifies the rejection of the null hypothesis at 0.05 significance level. Therefore, there is significant difference in the problem focused coping mechanism of the respondents when grouped according to their profile. It implies that the teachers have different coping mechanisms in terms of problem focused when classified by age, civil status, position, number of years in teaching, place of residence, grade level and subjects handled. As appended, the mean shows that the teachers of age 31-34, widow, MT2, have been teaching for 31-35 years, and who are handling English/AP/ESP are less problem-focused in coping with their mental health. On the other hand, the teachers who are homebased and handling kindergarten are more problem-focused in addressing their mental health.

Teachers who are handling kindergarten used problem focused strategies because they are handling youngsters. Meaning, they need to be alert and face the problem immediately. They tend to do planning on how to handle the situation. Homebased teachers apply the same coping mechanism because they are near school and there is a possibility that they will act as a frontliner in case the service of the teachers will be needed urgently.

According to Buchanan(2024), the COPE manual states that problem focused is characterized by the facets of active coping, use of informational support, planning and positive reframing. Gaining high score in this coping mechanism are indicative of

psychological strength, grit, a practical approach to problem solving and is predicative of positive outcome.

Table 15
Results of the Test of Significant Difference in the Coping Mechanism of the Respondents in Terms of Emotion Focused When Grouped According to Their Profile

Respondents' Coping Mechanism in Terms of Emotion Focused and the Following Profile	Probability of F	Decision	Remarks
Age	0.0409	Reject Ho	Significant
Civil Status	0.0152	Reject Ho	Significant
Position	0.0069	Reject Ho	Significant
Number of Years in Teaching	0.0410	Reject Ho	Significant
Place of Residence	0.0053	Reject Ho	Significant
Grade Level Handled	0.0089	Reject Ho	Significant
Subjects Handled	0.0216	Reject Ho	Significant

Table 13b disclose the result of the test of significant difference in the coping mechanism of the respondents in term of emotion focused when grouped according to their profile.

The results show that the probability values of F are less than 0.05. For this reason, the null hypothesis is rejected at 0.05 level of significance, meaning there is significant difference in the respondents' use of emotion-focused coping strategies when grouped according to age, civil status, position, numbers of years in teaching, place of residence, grade level and subjects handled.

As indicated by the mean in appendix C, the teachers who are 21-25 years old, widow, MT1, 31-33 years in teaching and seldom apply emotion focused mechanisms to cope with their mental health state. Data also shows that the teachers who are homebased apply more the emotion focused as their coping mechanism to help address a crisis whereas, teachers handling English/AP/ESP never apply emotion focused on their coping mechanism to address their mental health state.

Table 16
Results of Test of Significant Difference in the Coping Mechanism of the Respondents in Terms of Avoidance When Grouped According to Their Profile

Respondents' Coping Mechanism in Terms of Avoidance and the Following Profile	Probability of F	Decision	Remarks
Age	0.0070	Reject Ho	Significant
Civil Status	0.0209	Reject Ho	Significant
Position	0.0085	Reject Ho	Significant
Number of Years in Teaching	0.0009	Reject Ho	Significant
Place of Residence	0.0003	Reject Ho	Significant
Grade Level Handled	0.0205	Reject Ho	Significant
Subjects Handled	0.0121	Reject Ho	Significant

The result of the test of significant difference in the coping mechanism of the respondents using avoidance strategies when grouped according to their profile are disclosed in Table 13c.

The results show that the probability values of F are less than 0.05, hence, the null hypothesis is rejected at 0.05 significance level. This implies a significant difference in the coping mechanism of the respondents in terms of avoidance when grouped according to their age, civil status, position, number of years in teaching, place of residence, grade level and subjects handled.

Teachers who belong to the age bracket of 21-25, widowed, are MT2, 31 or more years of service, and handling higher grades less apply avoidance as their coping mechanism in their mental health state. On one side, the teachers who are not homebased apply more the avoidance coping mechanism. Similarly, teachers handling Math/AP/ESP and English/AP/ESP never employ avoidance focused as their coping mechanism in their mental health state.

According to some teachers who are home-based, that as front liners in school, they have no choice if they are being called even they do not want to. Others also informed the researcher that they consider themselves as guards of the school and maintain cleanliness but they never complain. They further said that they understand and they tend to cope up with their emotions.

Results of the present study particularly those of Tables 13-a to Table 13-c have semblance with that of Goel and Verma's which explored the workplace perceptions and stress coping mechanisms used by employees of different age groups. Their study found out that stress coping mechanism s differ significantly with age where the older employees scored higher in the use of coping mechanisms compared to the younger counterparts.

6. Significant Relationship of the Respondents' Mental Health State and Coping Mechanism

Table 17
Results of the Test of Significant Relationship Between the Respondents' Mental Health and Coping Mechanism

Variables		Probability of r	Decision	Remarks
Mental Health State	Coping Mechanism			
Depression	Problem Focused	0.4900	Accept Ho	Not Significant
Depression	Emotion Focused	0.3990	Accept Ho	Not Significant
Depression	Avoidance Focused	0.4602	Accept Ho	Not Significant
Anxiety	Problem Focused	0.3730	Accept Ho	Not Significant
Anxiety	Emotion Focused	0.4221	Accept Ho	Not Significant
Anxiety	Avoidance Focused	0.5144	Accept Ho	Not Significant
Stress	Problem Focused	0.4455	Accept Ho	Not Significant
Stress	Emotion Focused	0.4434	Accept Ho	Not Significant
Stress	Avoidance Focused	0.5188	Accept Ho	Not Significant

The results of the test of significant relationship between the respondents' mental health and coping mechanism are disclosed in table 14.

The results reveal that the probability values are greater than 0.05. Hence, there is no significant relationship between the mental health and coping mechanism of the teacher-respondents. It implies that the teachers' depression, anxiety and stress are not significantly affected by the coping mechanism in terms of problem, emotion and avoidance focused. It means further that the two variables are not significantly related.

The result of the present study negates the findings in Buizza, et.al.'s (2022) study on coping strategies and mental health of a sample of students accessing a university counselling service. The results indicated that the self-blame coping strategy is a major predictor of mental health issues and that interaction between age and area of study aggravated the symptomatology. Buizza also cited that some studies have found a relationship between psychopathology and coping strategies: for example, avoidance, denial and venting are strongly associated with psychopathology, especially with depression anxiety, eating and personality disorders.

Researchers have also observed associations between coping styles and symptom severity. Lew et al. (2019) found that coping strategies such as self-distraction, self-blame and substance use were risk factors for suicidal behaviors in a sample of Chinese college students. In particular, self-blame was a predictor of stress among college female students, and behavioral disengagement among men according to Eisenbarth (2019). On the contrary, a positive attitude (e.g. acceptance, holding, positive reframing) and problem-oriented strategies (e.g. suppression, planning, active coping) serve as protective factors towards psychological distress and support in promoting well-being as cited by Sica, et.al. (2008).

7. Educational Milieu of the Respondents

Table 18
The Educational Milieu of Respondents in Terms of Safety

Safety in the Educational Milieu	WAM	Verbal Description
How safe is your school environment…		
a. From intruders	2.98	Much
b. From thieves/Robbers	2.80	Much
c. From stray animals	2.61	Much
d. From possible harm/accident	2.86	Much
e. From possible contamination/infection of the COVID virus	2.83	Much
f. In protecting your privacy as teachers	3.31	Very Much
g. In protecting school records	3.47	Very Much
h. In protecting your rights as an individual and as a teacher	3.47	Very Much
Total	3.04	Much

The table above presents the educational milieu of the respondents in terms of safety in school. Based from the table, the teachers perceive their school environment as *very much* safe in protecting school records with a mean of 3.47, protecting their rights as an individual and teacher with a mean3.47 and protecting their privacy as teachers with a mean of 3.31. According to the teachers, their school is *much* safe from intruders, thieves, possible harm and possible contamination/ infection of the COVID virus. As a whole, they consider their school environment to be *much* safe.

In connection to this finding, the Department of Education's (DepEd) mandate to protect and promote the right to and access to quality basic education, DepEd collects various data and information, including personal information, from various subjects using different systems. In the processing of these data and information, DepEd is committed to ensure the free flow of information as required under the *Freedom of Information Act* (Executive Order No. 2, s. 2016) and to protect and respect the confidentiality and privacy of these data and information as required under the *Data Privacy Act of*

2012 (Republic Act No. 10173). Request for data and information, unless access is denied when such data and information fall under any of the exceptions enshrined in the. Department Order No. 72, s. 2016 provides that only authorized DepEd personnel have access to personal information collected, the exchange of which will be facilitated through email and web applications which are stored in a database in accordance with government policies, rules, regulations, and guidelines.

Table 19
The Educational Milieu of Respondents in
Terms of Support

How much support do you get from:	WAM	Verbal Description
a. Your school administrator in terms of:		
1) a.1 materials needed for instruction	3.09	Much
2) a.2 moral support/motivation	3.23	Much
3) a.3 health needs	3.06	Much
4) a.4 instructional supervision/mentoring	3.36	Very Much
5) a.5 delivery of instruction	3.28	Very Much
Total	3.20	Much
b. Your co-teachers/employees in terms of:		
1) b.1 moral support/motivation	3.29	Very Much
2) b. 2 delivery of instruction	3.57	Very Much
3) b. 3 coaching neophyte teachers and those needing help	3.17	Much
Total	3.34	Very Much
Overall Mean	3.25	Very Much

Table 16 presents the educational milieu of the teachers in terms of the school's administrators and co-teachers' support. Though the administrators' overall support is considered *much*, respondents get very *much* support in the delivery of instruction with a mean of 3.28 and instructional supervision and mentoring with a mean of 3.26. As to the support given them in terms of materials needed for instruction with a mean of 3.09, health needs with a mean of 3.06 and moral support, the teachers consider them as *much.*

With regard the support they get from co-teachers, the respondents revealed that they are very much supported by their fellow teachers in terms of the delivery of instruction with a mean of 3.57 and the moral support given them with a mean of 3.29. They get much support in terms of coaching extended by their co-teachers.

Overall, the respondents are *very much* supported by the administrators and their colleagues as revealed by the general weighted mean of 3.25.

The administration and the teachers are focused on the ongoing changes in the educational environment. One of the key elements that has been highlighted is the need of administrative assistance in addressing the teachers' needs to develop both personally and professionally.

The findings of this study is similar to that of a study of Compasivo & Falcunaya (2020) in Tanauan City, Batangas that evaluated the administrative support and job satisfaction of private school primary teachers. The study's findings show that school administrators support teachers' attendance at seminars, conferences, and training by paying for their registration, housing, and meals. They also help teachers improve their classroom teaching methods and foster positive connections with one another. The survey also showed that school officials allocated funds for the improvement of academic credentials, provided helpful input following classroom observations, and praising the accomplishments of educators. The findings also indicated a substantial link between administrative support and teachers' job satisfaction.

Table 20
The Educational Milieu of Respondents in Terms of Engagement

How engaged are the ADMINISTRATORS in the school affairs in …	WAM	Verbal Description
1. implementing DepEd/school policies and guidelines?	3.44	Very Much
2. monitoring and evaluation of teachers & student performance?	3.32	Very Much
3. in addressing teachers/employees' concerns?	3.37	Very Much
4. establishing linkage with the community & other stakeholders?	3.34	Very Much
5. in implementing & observing minimum health protocols in school?	3.39	Very Much
Average Mean	3.37	Very Much
How engaged are the TEACHERS in the school affairs in …		
1. in implementing DepEd/school policies and guidelines?	3.38	Very Much
2. monitoring and evaluation of student performance?	3.34	Very Much
3. in addressing parents/students' concerns?	3.39	Very Much
4. in strictly following minimum health protocols?	3.36	Very Much
Average Mean	3.37	Very Much
How engaged are the STUDENTS in the school affairs in …		

1. in accomplishing their learning tasks?	3.08	Much
2. in submitting their outputs?	3.15	Much
3. attending online classes/sessions?	2.90	Much
Average Mean	3.04	Much
How engaged are the PARENTS in the school affairs in …		
1. in assisting their children in their studies?	2.89	Much
2. in giving feedback to the teachers about their children?	2.91	Much
3. in addressing teachers' concerns about their children?	2.79	Much
4. in following school policies on distance learning?	2.93	Much
Average Mean	2.88	Much
General Average Mean	3.17	Much

The educational milieu of the respondents in terms of Engagement is seen in Table 17. The table shows how the teachers perceived how the four groups are engaged in the school activities. The administrators are very much engaged in implementing DepEd/school policies and guidelines with a mean of 3.44, monitoring and evaluation of teachers & student performance with a mean of 3.32, in addressing teachers/employees' concerns with a mean of 3.37, establishing linkage with the community & other stakeholders with a mean of 3.34 and in implementing and observing minimum health protocols in school with a mean of 3.39. The overall weighted average mean of 3.37 implies that the school administrators are *very much* engaged in the affairs of the school which is expected of a school head.

On the part of the teachers, they perceive themselves to be *very much* engaged in implementing DepEd/school policies and guidelines with a mean of 3.38, monitoring and evaluation of student performance with a mean of 3.34 and in strictly following minimum health protocols with a mean of 3.36. In general, the teachers are *very much* engaged in school activities like their administrators.

With regard to students' engagement, the respondents revealed that they are much satisfied on how students submit their outputs with 3.15, accomplish their learning tasks with a mean of 3.08 and attend online class with a mean of 2.90 gaining a total weighted average mean of 3.04.

The parents are also *much* engaged in some school activities like assisting their children in their studies with a mean 2.89, giving feedback to the teachers about their children with a mean 2.91, addressing teachers' concerns about their children with a mean of 2.79, and following school policies on distance learning with a mean of 2.93. Parents' engagement in the educational affairs of their children is *much* as shown in the total weighted average mean of 2.88.

Table 21
Educational Milieu of Cluster 6 Elementary Teachers
In Terms of Connectedness

Connectedness	WAM	Verbal Description
a. Do the teachers show respect for fellow teachers?	3.15	Much
b. Do teachers show respect for the school administrator?	3.13	Much
c. Does the school administrator respect the teachers?	3.43	Very Much
d. Do teachers respect their students?	3.43	Very Much
e. Do teachers show respect for parents?	3.45	Very Much
f. Do parents show respect for teachers in school?	3.52	Very Much
g. Are you welcome and valued as part of the organization?	3.47	Very Much
Average	3.37	Very Much

The teachers of Cluster 6 are *very much* connected with each other in terms of the respect they show for each other and with the school administrators and parents as shown by total weighted average mean of 3.37. Based from the table, parents show respect to teachers with a mean of 3.52, teachers are welcomed and valued as part of the organization with a weighted average mean of 3.47, teachers show respect for parents with a mean of 3.45, both the items teachers respect to students, and administrators respect the teachers gained 3.43 mean respectively. The teachers also show respect for fellow teachers with a mean of 3.15 and teachers show respect to school administrators with a mean of 3.13 or much.

To create effective education systems and effective learning environments, Alomes posits that all stakeholders need to come together in a meaningful way, through collaboration and therefore connection. And successful collaboration between all stakeholders means deep listening as well as active doing. Open, transparent dialogue results in all parties feeling seen, heard and valued, and in the end it's the connection and compassion formed through those healthy relationships that creates successful teaching and learning outcomes. U.S. Department of Education says that when *schools*, districts, parents and community groups *collaborate* and align *their* efforts around student achievement, more students will succeed.

8. Is there a significant difference in the teachers' perception of their educational milieu when grouped according to their profile?

Table 22
Result of the Test of Significant Difference in Teachers' Perception on the Safety of Their Educational Milieu When Grouped According to their Profile

Respondents' Perception on Educational Milieu in terms of Safety and their Profile	Probability of F	Decision	Remarks
Age	0.0008	Reject Ho	Significant
Civil Status	0.1547	Accept Ho	Not Significant
Position	0.0367	Reject Ho	Significant
Number of Years in Teaching	0.0194	Reject Ho	Significant
Place of Residence	0.0331	Reject Ho	Significant
Grade Level Handled	0.0265	Reject Ho	Significant
Subjects Handled	0.0134	Reject Ho	Significant

The results of the test of significant difference in the educational milieu of the respondents in terms of safety when grouped according to their profile are exhibited in Table 19a.

It is evident from the results that the probability values of F are less than 0.05 except for civil status. For this reason, the null hypothesis is rejected at 0.05 significance level. As a result, the teachers differ in their perception on the safety of their educational milieu in terms when grouped according to their age, position, number of years in teaching, place of residence, grade level and subjects handled. As evidenced by the mean values, teachers who are 46-50 years old and who handle Grade VI are *very much* satisfied of the safety of their educational milieu while MT2 teachers and 31-36 and above are *not much* satisfied along safety, and those who are homebased and handle Math/ESP/MAPEH are *much* satisfied of the safety of their educational milieu.

The findings also show that there is no significant difference in the teachers' perception of the safety in their educational milieu when grouped by civil status. In connection to this, teachers during an interview said: *"Ano man estado mo sa buhay, single may asawa o balo, ang safety naman sa workplace ang importante ngayon, napakahalaga ng kaligtasan sa lahat ng aspeto ngayon. Dobleng pag-iingat ang kailangan!." (The safety of your workplace is now more crucial than anything else in your life, whether you are single, married, or widowed. The most crucial factors we must take into account are security and safety. Always exercising caution is necessary.)*

Table 23
Result of the Test of Significant Difference in Teachers' Perception on the Support in Their Educational Milieu When Grouped According to Their Profile

Respondents' Educational Milieu in terms of Support and the Following Profile	Probability of F	Decision	Remarks
Age	0.0009	Reject Ho	Significant
Civil Status	0.0015	Reject Ho	Significant
Position	0.0057	Reject Ho	Significant
Number of Years in Teaching	0.0184	Reject Ho	Significant
Place of Residence	0.0203	Reject Ho	Significant
Grade Level Handled	0.0236	Reject Ho	Significant
Subjects Handled	0.0009	Reject Ho	Significant

Table 19b reflects the results of the test of significant difference in the respondents' perception on the support of their educational milieu when grouped according to their profile.

The results show that the probability values of F are less than 0.05. Hence, the null hypothesis is rejected at five percent level of significance. Thus, there is significant difference in the respondents' perception on the support of their educational milieu when grouped according to their age, civil status, position, number of years in teaching, place of residence, grade level and subject handled. As appended, the mean values show that teachers who are 36-40 years old, married, Teacher II, 36 and above in service, homebased, handle kindergarten, teach Filipino/ESP are *very much* satisfied of the support in their educational milieu.

The findings imply that the respondents are contented of the support they get from administrators, colleagues, parents and their learners. Working with support brings happiness and motivation. There is a Chinese saying that goes: "If you want happiness for an hour, take a nap. If you want happiness for a day, go fishing. If you want happiness for a year, inherit a fortune. If you want happiness for a lifetime, help somebody." For centuries, the greatest thinkers have suggested the same thing: Happiness is found in helping others according to Santi (2016). Social support is an important factor that can affect mental health. In recent decades, many studies have been done on the impact of social support on mental health. Studies of Harandi et al. (2017), investigated the effect size of the relationship between social support and mental health. People with more positive ethnical social relations and higher social support enjoy more efficient communication skills, which directs them away from depression and other mental problems according to Ghasemipoor & Jahanbakhsh Ganjeh (2010). Moreover, Cobb (1976) introduces the social support as a protector against stress in a way that it largely affects social health and performance. Cobb explains that social support gives people the feeling of being loved, cared, respected, and belonging to a network of communication

Table 24
Result of the Test of Significant Difference in Teachers' Perception on the Engagement of Stakeholders in Their Educational Milieu When Grouped According to Their Profile

Respondents' Educational Milieu in terms of Engagement and the Following Profile	Probability of F	Decision	Remarks
Age	0.0007	Reject Ho	Significant
Civil Status	0.0120	Reject Ho	Significant
Position	0.0013	Reject Ho	Significant
Number of Years in Teaching	0.0386	Reject Ho	Significant
Place of Residence	0.0399	Reject Ho	Significant
Grade Level Handled	0.0073	Reject Ho	Significant
Subjects Handled	0.0442	Reject Ho	Significant

The results of the test of significant difference in the teachers' perception on the engagement of stakeholders in their educational milieu when grouped according to their profile are reflected in Table 19c.

It is evident from the results that the probability values of F are less than 0.05 which this signifies the rejection of the null hypothesis at 0.05 significance level. Thus, there is significant difference in the teachers' perception on the engagement of stakeholders in their educational milieu when grouped according to their profile. It shows that the teachers significantly differ in their perception on the stakeholders' engagement in their educational milieu when they are grouped by age, civil status, position, number of years in teaching, place of residence, grade level and subject handled. As indicated by the mean values, teachers who belong to age bracket 36-40, married, with MT1 position, 21-25 years in service, home-based, handle kindergarten, and teach EPP/MAPEH, and Filipino/ESP are *very much* satisfied of the stakeholders' engagement in their educational milieu.

The teachers who are in their early adulthood felt that it is very much satisfying if someone monitors them and at the same time they monitor others, too. They see their administrators as someone who they can get some hints to become independent in their own decisions. According to Libretexts (2023),many of the developmental tasks of early adulthood involve becoming part of the adult world and gaining independence. Young adults sometimes complain that they are not treated with respect-especially if they are put in positions of authority over older workers. Consequently, young adults may emphasize their age to gain credibility from those who are even slightly younger.

Master teachers who have been in the service for more than two decades said that they are very much satisfied in engaging themselves towards supervision and monitoring as revealed by this statement: "*I already know what I am doing because my stay in the service allowed me experience everything, from traditional to modern way of teaching. I can say that being monitored and supervised by my supervisor is necessary*

for my growth. I would like to admit that I also monitor strictly my pupils and even asked parents to at least be involve in the learning process of their children."

Kindergarten and EPP, ESP and MAPEH teachers mentioned that there is a need for proper monitoring whether they understand the lesson or module. Kindergarten is the known as foundation age. It is a must that the teacher should engage themselves in the learning process. This is also true to EPP, ESP and MAPEH teachers. These subjects call for a valuing and reflective sessions aside from psycho motor performances. Proper monitoring, supervision and instruction are needed to handle properly the development of the pupils.

Table 25
Result of the Test of Significant Difference in Teachers' Perception on the Connectedness of Stakeholders in their Educational Milieu When Grouped According to Their Profile

Respondents' Educational Milieu in terms of Connectedness and the Following Profile	Probability of F	Decision	Remarks
Age	0.0128	Reject Ho	Significant
Civil Status	0.0117	Reject Ho	Significant
Position	0.0003	Reject Ho	Significant
Number of Years in Teaching	0.0236	Reject Ho	Significant
Place of Residence	0.0071	Reject Ho	Significant
Grade Level Handled	0.0236	Reject Ho	Significant
Subjects Handled	0.0072	Reject Ho	Significant

Table 19d presents the results of the test of significant difference in the in teachers' perception on the connectedness of stakeholders in their educational milieu when grouped according to their profile. The results reveal that the probability values of F are less than 0.05 and for this reason, the null hypothesis is rejected at 0.05 level of significance. As a result, there is significant difference in the teachers' perception on the connectedness of stakeholders in their educational milieu when grouped according to age, civil status, position, number of years in teaching, place of residence grade level and subjects handled. As appended, the mean shows that teachers who are 21-25 years old, MT2, and with 36 years or more in the service are very much satisfied in their educational milieu in terms of connectedness. Whereas, teachers who are married, homebased, handle Grade VI, teach Math/ESP/MAPEH,EPP/ESP, English/AP/ESP, Filipino/ESP are much satisfied.

The group of respondents who are very much satisfied in their connectedness are in their early adulthood stage. According to an Digital Wellness Lab, during this stage of life, young adults further develop their critical thinking skills, form relationships based on shared values and belief systems, modify their risk taking behaviors and make decisions based on future consequences. As mature adolescents move towards adulthood, these

developmental themes emerge. It means that the respondents are very much engage in their social environment which in turn will bring good interpersonal relationship in their working place.

Being a Master Teacher and with 36 years or more in the service are factors for good engaging endeavor. This is true since Master teachers can really handle smooth sailing relationship because of their professionalism. It counts that they will serve as a good model to young teachers. Thus, they set an example for them to be imitated by people under them. Aside from this, even those who rendered service for almost two decades tend to stay for that long because they already established themselves and considered to be accepted by the working environment.

9. Significant relationship between the educational milieu and mental health state of the respondents?

Table 26
Results of the Test of Significant Relationship Between the Respondents' Perception on the Educational Milieu and their Mental Health State

Variables		Probability of r	Decision	Remarks
Mental health	Aspects Educational Milieu			
Depression	Safety	0.2725	Accept Ho	Not Significant
Depression	Support	0.1722	Accept Ho	Not Significant
Depression	Engagement	0.2761	Accept Ho	Not Significant
Depression	Connectedness	0.3393	Accept Ho	Not Significant
Anxiety	Safety	0.3129	Accept Ho	Not Significant
Anxiety	Support	0.3704	Accept Ho	Not Significant
Anxiety	Engagement	0.3337	Accept Ho	Not Significant
Anxiety	Connectedness	0.2817	Accept Ho	Not Significant
Stress	Safety	0.0604	Accept Ho	Not Significant
Stress	Support	0.2542	Accept Ho	Not Significant
Stress	Engagement	0.1573	Accept Ho	Not Significant

Stress	Connectedness	0.3938	Accept Ho	Not Significant

Table 20 exhibits the result of the test of significant relationship between the respondents' perception on their educational milieu and their mental health state.

The results show that the r- probability values are greater than 0.05. this signifies the acceptance of the null hypothesis at 0.05 level of significance. Therefore, there is no significant relationship between the respondents' perception on their educational milieu and their mental health state. It implies that the teachers' mental health state are not significantly affected by educational milieu in terms of safety, support, engagement, and connectedness. It means further that the teachers' mental health state and educational milieu are independent from each other.

This study shows that the mental health of the teachers are not affected by their educational milieu. However, the importance of social connectedness in supporting public mental health is well established based on the study made by Saeri et.al (2017). Thus, the reverse causal pathway (that psychological ill-health leads to reduced social connectedness) remains a dominant perspective among mental health practitioners. They aimed to provide a rigorous test of the directionality of this relationship. Results of his study further demonstrate how the psychological resources conferred by social connectedness can act as a 'social cure' for psychological ill-health, and provide the strongest evidence to date for the direction of this relationship in the general community.

10. Is there a significant relationship between the educational milieu and coping mechanism of the respondents?

Table 27
Result of Test Significant Relationship Between Educational Milieu and Coping Mechanism Employed by the Respondents

Variables		Probability of r	Decision	Remarks
Coping Mechanism	Educational Milieu			
Problem Focused	Safety	0.2802	Accept Ho	Not Significant
Emotion Focused	Safety	0.1959	Accept Ho	Not Significant
Avoidance	Safety	0.2946	Accept Ho	Not Significant
Problem Focused	Support	0.0857	Accept Ho	Not Significant
Emotion Focused	Support	0.2900	Accept Ho	Not Significant

Avoidance	Support	0.5424	Accept Ho	Not Significant
Problem Focused	Engagement	0.5468	Accept Ho	Not Significant
Emotion Focused	Engagement	0.5470	Accept Ho	Not Significant
Avoidance	Engagement	0.3810	Accept Ho	Not Significant
Problem Focused	Connectedness	0.4563	Accept Ho	Not Significant
Emotion Focused	Connectedness	0.3952	Accept Ho	Not Significant
Avoidance	Connectedness	0.0254	Reject Ho	Significant

Table 21 discloses the result of test of significant relationship between the educational milieu and coping mechanism employed by the respondents.

The results reveal that the probability values of r are greater than 0,05 except for avoidance and connectedness. This signifies the acceptance of the null hypothesis at 0.05 level of significance. Therefore, the educational milieu of the teachers are not significantly affected by their coping mechanism except for avoidance and connectedness.

However, there is significant relationship between the avoidance coping mechanism of the teachers and heir connectedness in their educational milieu. Hence, the null hypothesis is rejected at 0.05 significance level. It implies that the teachers' connectedness in their educational milieu is affected by their avoidance coping mechanism.

The connectedness in educational milieu focuses on respect, acceptance and sense of belongingness while the avoidance coping mechanism centers on disengaging from stressors. The findings revealed that the respondents apply avoidance coping mechanism especially if the word respect arises. With this, the respondents tend to keep or not giving attention to how they feel if they are not being accepted by the group.

As per interview, the respondents stated that at times they are not being respected especially if they are talked behind. They even specified that at times they can feel that they are not existing. What is even more hurting is if they are being bullied by people whom they respect much. Asked if they talked already to the bullies, they answered that it is improper since avoiding the issue will save them and even stand as an act of professionalism. So, what they put in their mind for them to get along with the bullies is for them to believe in themselves and the bullies are the one having problems. Seunagal (2021) stated that narcissists bullies are those who choose to bully other adults because they lack empathy or fear of adverse repercussions. Furthermore, they generally struggle with self-esteem issues, hence their compulsion to constantly

denigrate other people. People who truly love themselves don't have to tear others down to feel superior. Narcissists will try to prove how secure they are although their mistreatment of others speaks volumes every time.

In addition, the sense of belongingness is a part of human needs. We need to be with others and our journey of life will evolve because of others. Human behavior is derived by the desire of emotional relations or interpersonal relations at this level. It is a well-known fact that a human is a social animal and he/she likes to be as part of the society and shares common values and belief system with other individuals. It develops a sense of belonging in one or another way. People look for commonality that encourages them to be part of social networks, communities, informal groups, and other social areas. A strong desire for close relations and bonding make friends. According to Maslow as stated in StudiousGuy (2024), humans exchange love, affection and belonging to overcome loneliness, anxiety, depression, etc. One can fulfill these needs through friendship, social activities, family relations, social communities, workplace groups, etc.

The only thing respondents want to experience is for them to be given a room for belongingness for them to properly be motivated to work with respect and happiness within their hearts.

Conclusions

The following conclusions were reached in light of the findings:

The teachers in cluster 6 generally are in a normal mental state showing no signs and symptoms of depression, anxiety and stress except for isolated cases showing mild, moderate and extreme symptoms of stress, anxiety and depression.

The respondents experiencing some depression, stress and anxiety employ strategies that are either problem- focused which is indicative of psychological strength, practical approach to problem solving. Others employ emotional-focused techniques that aim to regulate emotions associated with stressful situation; some makes use of avoidance strategies like disengaging from the stressor.

A positive social and educational environment that gives teachers a feeling of belongingness, being protected, and supported tends to create a relaxed mind, resulting to a positive working environment and productive outputs.

Teachers differ in their mental health state, the coping strategies they employ, and their perception of their educational milieu hen grouped according to their profile.

Recommendations

In the light of the findings and conclusions formulated, the following recommendations are offered:

1. Administration must review policies and procedures affecting the mental health of the teachers.
2. There should be a continuing education and actions regarding mental health awareness with the teaching, non-teaching staff and the stakeholders such as trainings/forum regarding prevention of mental health issues and promotion of mental health-care strategies and coping mechanisms.
3. The initiatives, projects, and programs that deal with teachers' mental health, such as holding Learning Action Cell (LAC) Sessions with a mental health theme should be sustained.
4. Research should be conducted on the areas of how coping mechanisms plays in teachers' coping with stress, depression, and anxiety.

Ethical Considerations

The researcher made sure that during the conduct of the study, the following ethical concerns were followed to necessitate safe, anti-fraud, deliberate, and careful undertakings in the study:

1. The researcher, through proper communications, asked permission from the Division Office, and other concerned offices for the study;
2. The researcher also acknowledged the Department of Education and the Schools Division of the City of Ilagan for allowing her to conduct the study;
3. The researcher informed the respondents of the study through letters and a short orientation to the study. Data and information gathered were treated with utmost respect and confidentiality;
4. The researcher, properly cited gathered information and other relevant studies from authors, books, or any publications through proper citation.

Acknowledgements

The author wishes to convey his heartfelt gratitude and appreciation to the following, whose encouragement, guidance, and support contributed to the realization of this study:

Dr. Charina G. Alejo, Dean of the Graduate School, for her valuable guidance;

Dr. Maria Elisa T. Alvaro, her adviser, for her unending support to the writer in the completion of this study;

Mrs. Benedicta M. Uy, for her statistical expertise;

Dr. Kathreen C. Joson, Chairman of the Panel, Dr. Salome S. Cario, Dr. Demetrio P. Anduyan Jr., Dr. Gilbert N. Tong, and Dr. Vilma C. Cabrera, members of the Panel, for their constructive criticism, comments, and suggestions that enrich this study;

Sir Marvin S. Palattao and to the whole teaching force of Capellan Elementary School, for their consideration they have extended to the writer;

Engr. Joemar R. Gonzalez and Ma'am Cely D. Gonzales and family for their unparalleled support that they give to the writer;

Special thanks likewise, afforded to his parents, relatives friends and churchmates for their faith and prayers, trust confidence and support for the completion of this study;

Above all, to the Almighty God, for his bountiful blessings and for keeping his promise.

REFERENCES

Agyapong, B., Obuobi-Donkor, G., Burback, L., & Wei, Y. (2022). Stress, burnout, anxiety and depression among teachers: A scoping review. International Journal of Environmental Research and Public Health, 19(17), 10706. https://doi.org/10.3390/ijerph191710706

Al Lily, A. E., Ismail, A. F., Abunasser, F. M., & Alhajhoj, R. H. (2020). Distance education as a response to pandemics: Coronavirus and Arab culture. Technology in Society, 63, 101317. https://doi.org/10.1016/j.techsoc.2020.101317

Alomes, B. (n.d.). The importance of stakeholders when it comes to creating successful learning outcomes. Natural Pod. https://naturalpod.com/the-importance-of-stakeholders-when-it-comes-to-creating-successful-learning-outcomes/

Arias, W. L., Huamani, J. C., & Ceballos, K. D. (2019). Síndrome de burnout en profesores de escuela y universidad: Un análisis psicométrico y comparativo en la ciudad de Arequipa. Propósitos y Representaciones, 7(3), 72–91. https://doi.org/10.20511/pyr2019.v7n3.390

Besser, A., & Zeigler-Hill, V. (2022). Adaptability to a sudden transition to online learning during the COVID-19 pandemic: Understanding the challenges for students. Scholarship of Teaching and Learning in Psychology, 8(2), 85-105. https://doi.org/10.1037/stl0000198

Buchanan, B. (2024, May 15). Coping orientation to problems experienced inventory (Brief-COPE). NovoPsych. https://novopsych.com.au/assessments/formulation/brief-cope/

Buizza, C., Cela, H., Costa, A., & Ghilardi, A. (2022). Coping strategies and mental health in a sample of students accessing a university counselling service. Counselling and Psychotherapy Research. https://doi.org/10.1002/capr.12519

Carter, V. G., & Scates, D. E. (1954). Methods of research: Educational psychological and sociological. Appleton-Century-Crofts, Inc. Retrieved from https://www.amazon.com/Methods-Research-Educational-Psychological-Sociological/dp/B000FPUWOE

Cobb, S. (1976). Social support as a moderator of life stress. Psychosomatic Medicine, 38(5), 300-314. https://doi.org/10.1097/00006842-197609000-00003

Compasivo, G. P., & Falcunaya, B. C. (2020). Administrative support and job satisfaction of private school teachers. Palarch's Journal of Archaeology of Egypt/Egyptology, 17(6). ISSN 1567-214x

Cotten, S. R. (1999). Marital status and mental health revisited: Examining the importance of risk factors and resources. Family Relations, 48 (3), 225–233. https://doi.org/10.2307/585631

Data Privacy Notice | Department of Education (2012). https://www.deped.gov.ph/about-deped/data-privacy-notice/

Digital Wellness Lab. (n.d.). Young adults (ages 20-25). https://digitalwellnesslab.org/parents/young-adults-ages-20-25

Eisenbarth, C. A. (2019). Coping with stress: Gender differences among college students. College Student Journal, 53(2), 151–162.
Ghasemipoor, M., & Jahanbakhsh Ganjeh, S. (2010). The relationship between social support and mental health in Lorestan University students. Yafteh.
Good, C. V., & Scates, D. E. (1954). *Methods of research: Educational, psychological, and sociological*. Appleton-Century-Crofts. https://www.amazon.com/Methods-Research-Educational-Psychological-Sociological/dp/B000FPUWOE
Halili-Jao, N. (2009, April 5). Coping mechanisms of Pinoys. Philippine Star. http://www.philstar.com/allure/454890/coping-mechanisms-pinoys
Harandi, T. F., Taghinasab, M. M., & Nayeri, T. D. (2017). The correlation of social support with mental health: A meta-analysis. Electronic Physician, 9(9), 5212-5222. https://doi.org/10.19082/5212
Harvard SDLab. (n.d.). Positive reframing and examining evidence. https://sdlab.fas.harvard.edu/cognitive-reappraisal/positive-reframing-and-examining-evidence
Ho, L. (2021). Feel that life is meaningless? Here's how to find meaning. Lifehack. https://www.lifehack.org/879895/meaningless
Hossain, M. T., et al. (2022). Mental health status of teachers during the second wave of the COVID-19 pandemic: A web-based study in Bangladesh. PubMed. https://pubmed.ncbi.nlm.nih.gov/35958639/
Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. Journal of Managerial Psychology. https://doi.org/10.1108/02683940510579803
Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., et al. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. JAMA Network Open, 3(3), e203976. https://doi.org/10.1001/jamanetworkopen.2020.3976
Lew, B., Huen, J., Yu, P., Yuan, L., Wang, D. F., Ping, F., Abu Talib, M., Lester, D., & Jia, C. X. (2019). Associations between depression, anxiety, stress, hopelessness, subjective well-being, coping styles and suicide in Chinese university students. PLoS One. https://doi.org/10.1371/journal.pone.0217372
Libretexts. (2023). 8.10: Theories of Early Adult Psychosocial Development. Social Sci LibreTexts. https://socialsci.libretexts.org/Bookshelves/Human_Development/Lifespan_Development_(Lumen)/08%3A_Early_Adulthood/8.10%3A_Theories_of_Early_Adult_Psychosocial_Development
Oral Surgery of Utah. (2020, April 16). Can stress cause dry mouth? https://www.oralsurgeryofutah.com/2020/04/16/can-stress-cause-dry-mouth/
Ozamiz-Etxebarria, N., Berasategi Santxo, N., Idoiaga Mondragon, N., & Dosil Santamaría, M. (2021). The psychological state of teachers during the COVID-19 crisis: The challenge of returning to face-to-face teaching. *Frontiers in Psychology, 11*, Article 620718. https://doi.org/10.3389/fpsyg.2020.620718
Richland Montessori School. (2022, March 22). Distance learning option 1 modular. https://www.richlandmontessorischool.com/distance-learning-option-1-modular

Saeri, A., et al. (2017). Social connectedness improves public mental health: Investigating bidirectional relationships in the New Zealand attitudes and values survey. Australasian Psychiatry, 25(5), 422-425. https://doi.org/10.1177/0004867417723990

Santi, J. (2016). The secret to happiness. TIME. https://time.com/collection/guide-to-happiness/4070299/secret-to-happiness/

Seunagal, G. (2021, Mei 7). The Psychology Of Bullying: Understanding What's Behind The Bully. Betterhelp. https://www.betterhelp.com/advice/bullying/the-psychology-of-bullying- understanding-whats-behind-the-bully/

Shelley, E. (2016, December). The mental health benefits of religion/spirituality. National Alliance on Mental Illness. https://www.nami.org/Blogs/NAMI-Blog/December-2016/The-Mental-Health-Benefits-of-Religion-Spiritual

Sica, C., Magni, C., Ghisi, M., Altoè, G., Sighinolfi, C., Chiri, L. R., & Franceschini, S. (2008). Coping orientation to problems experiences - Nuova versione italiana (COPE-NVI): Uno strumento per la misura degli stili di coping. Psicoterapia Cognitiva e Comportamentale. https://researchgate.net/publication/229858409

StudiousGuy. (2024, June 17). 11 Examples of Belongingness and Love Needs (Maslow's Hierarchy). Studious Guy. https://studiousguy.com/maslows-belongingness-and-love-needs-examples

Tan, M. (2006). Stress and the Filipino. Philippine Center for Investigative Journalism. http://pcij.org/stories/stress-and-thefilipino/

Teacher Mental Health Check-in Survey. (2022, March 22). Canadian Teachers' Federation. https://www.ctf-fce.ca

U.S.Department of Education. Stakeholder relations: Supporting success through partnerships. https://www2.ed.gov/programs/readingfirst/support/stakeholderlores.pdf

Vann, M. (2015). How prayer strengthens your emotional health. Everyday Health. www.everydayhealth.com/emotional-health/power-of-prayer.aspx

APA Citation:

Domingo, C. N., & Alvaro, M. E. T. (2024). EDUCATORS' MENTAL HEALTH STATE, COPING MECHANISMS AN EDUCATIONAL MILIEU IN THE DISTANCE MODE OF LEARNING. Ignatian International Journal for Multidisciplinary Research, 2(8), 1284–1323. https://doi.org/10.5281/zenodo.13359091

Corresponding author*: christian.domingo@deped.gov.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

ENHANCING TEACHER PRODUCTIVITY THROUGH SCHOOL SUPPORTS

Cerisa M. Bautista

Benliw Elementary School, Benliw, Ubay, Bohol, Philippines

https://doi.org/10.5281/zenodo.13576492

ABSTRACT

This study investigates the extent of instruction-related support provided to teachers in selected schools in Trinidad, Bohol, during the School Year 2022-2023, with the aim of informing a strategic plan to enhance teacher productivity. The research explores various demographic and professional factors among teachers and administrators, including age, gender, educational attainment, years of service, performance, and participation in relevant leadership training and seminars. Additionally, it examines the perceived level of support received by teachers in areas such as administrative assistance, peer collaboration, the learning environment, professional development opportunities, productivity recognition, and rewards. The findings reveal a significant gender imbalance, with female teachers and administrators predominantly outnumbering their male counterparts. Performance evaluations indicate consistent "Very Satisfactory" ratings across the board, although teachers report lower levels of productivity recognition compared to administrators. Both groups perceive the learning environment and professional development opportunities positively, although teachers express only moderate satisfaction with school culture. A key finding is the significant relationship between the extent of instruction-related support and teacher performance, underscoring the importance of targeted support mechanisms in enhancing educational outcomes. Based on these insights, the study recommends actions to address gender diversity, improve equity in productivity recognition, and strengthen institutional support and school culture. These recommendations aim to foster a more inclusive, supportive, and effective educational environment that enhances teacher satisfaction and productivity, ultimately benefiting both educators and students.

Keywords: *Educational Environment, Gender Diversity, Instructional Support, Professional Development, and Teacher Productivity*

INTRODUCTION

Teachers are the backbone of any educational system, playing a crucial role in shaping the minds of future generations. Their productivity directly influences student learning outcomes and, by extension, the broader societal future (Constantinou & Wijnen, 2022). Parojenog (2020) emphasizes that teachers are versatile, equipped with the skills and knowledge needed to handle diverse learners. Each day, they rise to the challenge of meeting the unique needs of every student.

However, teacher productivity is not solely a reflection of their abilities and dedication. It is also significantly influenced by the support they receive from the school system (Jourdan et al., 2021). In this context, 'school support' is a multifaceted concept that includes administrative backing, peer collaboration, the quality of the learning environment, parental involvement, and opportunities for professional development (Bektas et al., 2022).

Effective school support is essential for enhancing teacher productivity. Adequate administrative support ensures that teachers' concerns are addressed, and necessary resources are provided. Peer support fosters a collaborative working environment that encourages the sharing of experiences and resources (Chan et al., 2021). A conducive learning environment, equipped with adequate facilities and resources, can significantly reduce non-instructional stressors for teachers, allowing them to focus on teaching. Active parental involvement reinforces teaching initiatives at home, while professional development opportunities help teachers continually improve their skills and adapt to evolving educational demands (Mahoney et al., 2021; Haug & Mork, 2021).

Conversely, a lack of school support can have detrimental effects on teachers' job satisfaction, motivation, and overall productivity (Baroudi et al., 2022). Teachers who do not receive adequate support are more likely to experience stress and burnout, leading to higher turnover rates and instability within the school system. This instability can disrupt student learning and ultimately lower the quality of education (Sahito & Vaisanen, 2020).

In the Philippines, where educational challenges are compounded by diverse geographical and socio-economic conditions, teacher productivity is particularly critical. The effectiveness of Filipino teachers is not only a product of their individual competencies but is also significantly influenced by the level of support they receive within their school system (Baylan, 2018). Supportive school environments can empower teachers to deliver high-quality instruction and maintain a nurturing atmosphere for learning. Administrative support in addressing teacher concerns, strong peer networks fostering collaboration, a stress-reducing learning environment, active parental involvement, and continuous professional development are all crucial components of an effective support system (Abolucion et al., 2020).

Despite the recognized importance of school support in enhancing teacher productivity, there remains a gap in the literature, particularly in the context of the Philippines. While existing studies have explored individual aspects of school support, a comprehensive, multidimensional analysis of how these supports collectively impact teacher productivity is lacking. This study aims to address this gap by examining the various dimensions of school support and their collective influence on teacher productivity in the Philippine setting.

Understanding the impacts of school support on teacher productivity is vital for identifying areas where school systems can improve. The findings from this research will have significant implications for school administrators, policymakers, teachers, and parents, contributing to the overall improvement of education quality and student outcomes in the Philippines.

Research Questions

This research determines the extent of instruction related support in the identified schools in Trinidad, Bohol during the School Year 2022-2023 as Basis for Strategic Plan.

Specifically, this answers the following questions,

1. What relevant information can be derived from the teachers and administrators:
    - 1.1. age and gender,
    - 1.2. highest educational attainment,
    - 1.3. years of service,
    - 1.4. performance,
    - 1.5. relevant leadership training and seminars,
2. As perceived by the respondent groups, what is the extent of instruction related support received by the teachers in terms of the following aspects:
    - 2.1. administrative,
    - 2.2. peer,
    - 2.3. learning environment, and
    - 2.4. professional development
    - 2.5. productivity recognition
    - 2.6. rewards?
3. What is the teacher's performance based on the classroom observation as to:
    - 3.1. teaching/learning activities,
    - 3.2. delivery of content,
    - 3.3. utilization of technology,
4. Is there significant relationship between teachers' performance and the extent of instruction related support received by the teachers?
5. What are the issues and concerns relating to teachers' instruction related support?
6. Based on the findings, what strategic plan can be crafted?

METHODOLOGY

Research Design

The descriptive method of research was employed in this study, which described data and the characteristics of the population under study. This method answered the questions of who, what, where, when, and how. Specifically, the study focused on the present conditions of the respondents concerning the level of teacher support and the perceived issues and concerns by the teachers. The data were described and analyzed based on the information gathered using the research instrument.

This research utilized the INPUT-PROCESS-OUTPUT approach. The INPUT included the demographic profiles of the respondent groups, such as age, gender, highest educational attainment, years of service, and relevant training and seminars attended by teachers and administrators. It also covered the level of teacher support, encompassing constructs such as administrative support, peer support, learning environment, and professional development. Additionally, the research included an analysis of the significant differences between the respondent groups' perceptions of the level of teacher support received and the issues and concerns related to that support.

The PROCESS involved the administration of questionnaires, data consolidation, presentation, analysis, and interpretation using statistical software. The OUTPUT of the study was the proposed strategic plan.

Research Environment

This study was conducted at six elementary schools in Trinidad, Bohol: Banlasan Elementary School, Hinlayagan Ilaya Elementary School, Hinlayagan Ilaud Elementary School (Trinidad Central II Elementary School), Kinan-oan Elementary School, M. Roxas Elementary School, and Maonglinis Elementary School.

Research Participants

The respondents of the study were the teachers and administrators. The respondents were taken for random sampling.

Table 1
Distribution of Respondents

Schools	Administrators	Teachers	Frequency
Banlasan Elementary School	1	30	20
Hinlayagan Ilaya Elementary School	1	30	20
Hinlayagan Ilaud Elementary School	1	30	20
Kinan-oan Elementary School	1	30	20
M. Roxas Elementary School	1	30	20
Maonglinis Elementary School	1	30	20

Total	6	180	120

Research Instrument

Two different sets of research instruments were utilized in this study to determine the extent of teacher engagement. The Demographic Profile aimed to gather data on the teachers' respective demographic profiles. This checklist collected information such as age, gender, highest educational attainment, years in service, and relevant training and seminars attended.

Administrative Support was adapted from the study by Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). These data were analyzed and interpreted to arrive at more conclusive statements and implications. The findings of the study served as a basis for formulating an action plan.

Data Gathering Procedure

A transmittal letter was prepared and addressed to the office of the district superintendent, requesting permission to conduct the study. Once the request was approved, the researcher began distributing questionnaires to the teachers and administrators. The questionnaires were retrieved, and the data were collated. Data and information related to the study were treated with utmost confidence.

Data Analysis

The data gathered using the research instrument were analyzed with the aid of statistical software, employing the following statistical tools:

1. Percentage: This tool was used to show the proportion of a certain variable obtained from the respondents.
2. Weighted Mean: The weighted mean was used to determine the extent of support received by the teachers.
3. T-Test: This test was used to assess significant differences.

Scoring Procedure

A 5-point Likert scale was used to determine the extent of the teacher's support received from the school. The scale was as follows:

Scale	Numerical Rating	Descriptive Rating	Verbal Interpretation
5	4.21-5.00	Strongly Agree	The respondents strongly agreed with the statement.
4	3.41-4.20	Agree	The respondents agreed with the statement.
3	2.61-3.40	Moderately Agree	The respondents moderately agreed with the statement.
2	1.81-2.60	Disagree	The respondents disagreed with the statement.
1	1.00-1.80	Strongly Disagree	The respondents strongly disagreed with the statement.

RESULTS

This chapter presents the quantitative results related to the following research questions: What are the demographic and professional characteristics of teachers and administrators, including age, gender, highest educational attainment, years of service, relevant leadership training, seminars attended, and performance ratings? It also examines the aspects of instructional support received from administrative channels, peers, and the learning environment. Additionally, it analyzes the professional development opportunities available and the rewards and recognition for productivity. The perceptions of different respondent groups are contrasted to provide a comprehensive view of the state of instructional support in the identified schools in Trinidad, Bohol.

The chapter further evaluates teachers' performance based on DepEd's classroom observation tools, focusing on practical aspects such as teaching and learning activities, content delivery, technology use, language proficiency, and classroom management skills.

The final section investigates the correlations between teachers' performance and the extent of instructional support received. This analysis explores the relationship between support mechanisms and teaching effectiveness, offering insights for guiding future interventions.

Table 2
Age and Gender

	Teachers				Administrators			
	Gender		Total		Gender		Total	
Age	M	F	f	%	M	F	f	%
50 above	0	8	8	4.44	0	0	0	0
46-50	0	10	10	5.56	0	2	1	50
41-45	6	45	51	28.33	0	3	0	50
36-40	7	5	12	6.67	0	0	0	0
31-35	12	23	35	19.44	0	0	0	0
26-30	8	56	64	35.56	0	0	0	0
Total	33	147	180	100	0	5	1	100

Table 2 provides a summary of the age and gender demographics of teachers and administrators. Among the 180 teachers, there were 33 males and 147 females. The largest age group was 26-30, representing 35.56% of teachers, predominantly female. The second largest group was 41-45, comprising 28.33% of teachers, also mostly female. Age groups 31-35 and 46-50 similarly showed more female teachers than males, while the 36-40 group was more balanced. All 8 teachers aged 50 and above were female. The administrator group consisted of 5 females, with 2 in the 46-50 age range and 3 in the 41-45 range. The data highlights a notable gender imbalance, with females significantly outnumbering males in both groups, and indicates that most teachers are under 45, while the administrative group is also predominantly younger.

Table 3
Highest Educational Attainment

Highest Educational Attainment	Teachers		Administrator	
	f	(%)	f	%
Doctor Degree	24	13.33	4	67
Doctor with units	18	10.00	2	33
Master Degree	23	12.78	0	0
Master with units	77	42.78	0	0
Bachelor Degree	38	21.11	0	0
Total	180	100	6	100

Table 3 presents the highest educational attainment levels of teachers and administrators. Among the 180 teachers, the majority (42.78%) held a Master's Degree with additional units, followed by 21.11% with a Bachelor's Degree. Twelve percent had a Master's Degree without additional units, 13.33% had a Doctorate, and 10% had additional units beyond the Doctorate. Among the 6 administrators, 67% held a Doctoral Degree, and 33% had earned additional units beyond the Doctorate. This indicates that administrators generally have higher educational qualifications compared to teachers, who have a broader range of educational backgrounds.

Table 4
Years of Service

Years of Service	Teachers		Administrator	
	f	%	f	%
26-30	7	3.89	1	16.67
21 -25	9	5.00	1	16.67
16-20	13	7.22	3	50.00
11-15	62	34.44	1	16.67
6-10	38	21.11	0	0
1-5	51	28.33	0	0
Total	180	100	6	100

Table 4 details the years of service among teachers and administrators. For the 180 teachers, the majority (34.44%) had 11-15 years of service, followed by 28.33% with 1-5 years and 21.11% with 6-10 years. Fewer teachers were in the 16-20 years (7.22%), 21-25 years (5.00%), and 26-30 years (3.89%) categories. Among the 6 administrators, 50% had 16-20 years of service, while 16.67% had 21-25 years and 26-30 years each. The remaining 16.67% had 11-15 years of service. This indicates that teachers have a broader distribution of service years, whereas administrators generally have more years of experience. No individuals in either group had more than 30 years of service.

Table 5
Teachers' Performance

Performance	Teachers		Administrator	
	f	%	f	%
Outstanding	0	0	0	0
Very Satisfactory	180	100	6	100
Satisfactory	0	0	0	0
Total	180	100	6	100

Table 5 displays the performance evaluations of teachers and administrators. All 180 teachers were rated as 'Very Satisfactory,' representing 100% of the group. Similarly, all 6 administrators also received a 'Very Satisfactory' rating, accounting for 100% of their group. There were no individuals rated as 'Outstanding' or 'Satisfactory' in either group. This indicates a consistent performance evaluation across both teachers and administrators, with all rated 'Very Satisfactory.'

Table 6
Training and Seminar

Training and Seminars	**Frequency, f**
Effective Classroom Management	156
Instructional Technology Integration	120
Teaching Strategies for Diverse Learners	87
Building Emotional Intelligence in the Classroom	167
Student-Centered Learning	123

Table 6 presents the frequency of participation in various training sessions and seminars. The 'Building Emotional Intelligence in the Classroom' seminar had the highest attendance, with 167 participants. This was followed by 'Effective Classroom Management' with 156 participants and 'Student-Centered Learning' with 123 participants. 'Instructional Technology Integration' had 120 participants, while 'Teaching Strategies for Diverse Learners' had the lowest attendance, with 87 participants. This data indicates that seminars on emotional intelligence and classroom management were the most popular, suggesting high interest or need in these areas. Conversely, the lower attendance for 'Teaching Strategies for Diverse Learners' may reflect reduced perceived importance or other barriers to participation.

Table 7
Administrative Support

Administrative Support	Administrator		Teachers	
	Mean	VD	Mean	VD
The school administration actively addresses my concerns and problems.	4.33	SA	3.85	A
The school administration provides me with the necessary resources to do my job effectively.	3.67	A	3.20	A
The school administration encourages and facilitates professional development opportunities.	4.17	A	3.80	A

The school administration effectively communicates school policies and changes.	4.00	A	3.70	A
The school administration provides adequate non-instructional time (for planning, grading, etc).	3.67	A	3.60	A
Grand Mean	3.96	A	3.63	A

Table 7 summarizes the perceived level of administrative support from both administrators and teachers. Administrators reported a higher overall level of support with a grand mean of 3.96, categorized as 'Agree.' They strongly agreed that the administration addresses their concerns (mean score of 4.33) and encourages professional development (mean score of 4.17). Effective communication of policies and adequate non-instructional time also received positive ratings, though slightly lower (means of 4.00 and 3.67, respectively).

Teachers reported a slightly lower overall support level with a grand mean of 3.63, also in the 'Agree' category. They felt most supported regarding the administration's response to concerns (mean score of 3.85). Professional development opportunities and communication of policies were rated positively as well (means of 3.80 and 3.70). However, teachers rated the provision of necessary resources (mean score of 3.20) and non-instructional time (mean score of 3.60) lower compared to administrators.

This data indicates that while both groups generally feel supported, there are areas—particularly regarding resources and non-instructional time for teachers—that could benefit from improvement.

Table 8
Peer Support

Peer Support	Administrator		Teachers	
	Mean	VD	Mean	VD
My colleagues are willing to share teaching materials and experiences.	4.00	A	3.70	A
I feel supported by my fellow teachers in handling classroom challenges.	4.17	A	3.60	A
There is a strong sense of community among the staff at my school.	3.67	A	3.40	A
There are opportunities for collaboration and team teaching in my school.	4.17	A	3.50	A
Peer mentoring programs are available and effective in my school.	4.00	A	3.60	A
Grand Mean	4.00	A	3.56	A

Table 8 evaluates peer support perceptions among administrators and teachers. Administrators reported high peer support with a grand mean of 4.00, categorized as 'Agree'. They particularly valued colleagues' willingness to share materials (mean score of 4.00) and support in handling classroom challenges (mean score of 4.17). Opportunities for collaboration and the effectiveness of peer mentoring programs also received high ratings (means of 4.17 and 4.00, respectively). The sense of community among staff scored slightly lower at 3.67 but still within the 'Agree' category.

Teachers also perceived positive peer support with a grand mean of 3.56. They felt supported by colleagues in sharing materials (mean score of 3.70) and in handling classroom challenges (mean score of 3.60). However, opportunities for collaboration (mean score of 3.50) and the sense of community (mean score of 3.40) received slightly lower ratings. Peer mentoring programs were rated at 3.60. Overall, both administrators and teachers perceive good peer support, but improvements could be made in enhancing the sense of community and increasing collaborative opportunities.

Table 9
Learning Environment

Learning Environment	Administrator		Teachers	
	Mean	VD	Mean	VD
The physical environment of the school (e.g., classrooms, facilities) supports effective teaching.	4.00	A	3.50	A
There is adequate technology available for instruction.	4.00	A	3.90	A
Classroom size allows for effective teaching and learning.	4.00	A	3.55	A
The school culture is conducive to teaching and learning.	4.17	A	3.20	MA
The school provides effective tools for remote/distance learning	4.17	A	3.60	A
Grand Mean	4.07	A	3.55	A

Table 9 assesses perceptions of the learning environment. Administrators rated their learning environment positively with a grand mean of 4.07, falling in the 'Agree' category. They agreed that the physical environment (mean score of 4.00), technology availability (mean score of 4.00), and classroom size (mean score of 4.00) support effective teaching. The school culture and remote learning tools were rated slightly higher at 4.17.

Teachers reported a lower grand mean score of 3.55, also within the 'Agree' category. They agreed that technology (mean score of 3.90) and the physical environment (mean score of 3.50) support teaching but rated the school culture (mean score of 3.20) as only 'Moderate Agreement'. Classroom size and tools for remote learning were rated at 3.55 and 3.60, respectively. Both groups generally find the learning environment supportive, though there is room for improvement in school culture and possibly physical resources and classroom sizes.

Table 10
Professional Development

Professional Development	Administrator		Teachers	
	Mean	VD	Mean	VD
The school provides ongoing professional development opportunities.	4.00	A	3.45	A
Professional development activities are relevant to my teaching context.	4.17	A	3.40	A
There are opportunities to learn from and share best practices with other teachers.	4.00	A	3.65	A
The school supports my growth as a professional educator.	4.17	A	3.60	A

Grand Mean	4.09	A	3.52	A

Table 10 details perceptions of professional development. Administrators expressed high satisfaction with a grand mean score of 4.09, indicating 'Agree'. They felt that development activities are relevant (mean score of 4.17) and that the school supports their growth (mean score of 4.17). They also agreed that there are ongoing opportunities (mean score of 4.00) and chances to share best practices (mean score of 4.00).

Teachers also had positive views, though with a lower grand mean score of 3.52. They particularly appreciated opportunities to share best practices (mean score of 3.65) and felt supported in their professional growth (mean score of 3.60). The relevance of development activities (mean score of 3.40) and ongoing opportunities (mean score of 3.45) received slightly lower ratings. Both administrators and teachers view professional development positively, but there is potential for improvement in the relevance and continuity of these opportunities.

Table 11
Productivity Recognition

Productivity Recognition	Administrator		Teachers	
	Mean	VD	Mean	VD
My institution frequently recognizes my productivity in instruction-related tasks.	4.17	A	3.20	MA
There is a system in place that consistently recognizes high productivity among teachers.	4.17	A	3.20	MA
I feel valued and appreciated for my productivity in my role as a teacher.	3.33	MA	3.25	A
My institution's recognition of my productivity motivates me to maintain or improve my performance.	3.83	A	3.45	A
There is a clear and transparent process to evaluate and recognize productivity in my institution.	4.17	A	3.20	MA
Grand Mean	3.93	A	3.26	MA

Table 11 outlines the perceptions of administrators and teachers regarding productivity recognition within their institution. Administrators reported a high level of satisfaction with productivity recognition, reflected in a grand mean score of 3.93, categorized as 'Agree'. They felt that their productivity in instruction-related tasks was frequently recognized (mean score of 4.17), that there is a system in place for recognizing high productivity (mean score of 4.17), and that there is a clear and transparent evaluation process (mean score of 4.17). They also felt that recognition motivates them to improve performance (mean score of 3.83). However, administrators felt less strongly about being valued and appreciated for their productivity (mean score of 3.33), which falls into the 'Moderate Agreement' category.

Teachers perceived productivity recognition at a slightly lower level, with a grand mean score of 3.26, categorized as 'Moderate Agreement'. They felt most positively about the motivation provided by recognition (mean score of 3.45) and that they feel valued for

their productivity (mean score of 3.25). However, the frequency of recognition, the system for high productivity, and the transparency of the evaluation process all received lower scores (mean scores of 3.20), indicating 'Moderate Agreement'. This suggests a need for improvement in how teachers feel recognized and appreciated for their contributions, as well as in enhancing the clarity and frequency of productivity recognition.

Table 12
Rewards

Rewards	Administrator		Teachers	
	Mean	VD	Mean	VD
My institution provides adequate rewards for instruction-related accomplishments.	4.17	A	3.60	A
Tangible rewards (e.g., bonuses, promotions) are regularly provided to teachers for their instruction-related achievements.	4.00	A	3.45	A
The reward system for instruction-related achievements in my institution is fair and just.	4.17	A	3.40	A
Rewards for instruction-related work significantly enhance my job satisfaction.	4.00	A	3.65	A
The rewards I receive are proportionate to the effort I invest in instruction-related tasks.	3.67	A	3.60	A
Grand Mean	4.00	A	3.54	A

Table 12 evaluates the perceptions of administrators and teachers regarding rewards for instruction-related accomplishments. Administrators expressed high satisfaction with the rewards provided, with a grand mean score of 4.00, falling in the 'Agree' category. They agreed that their institution provides adequate rewards (mean score of 4.17), that the reward system is fair and just (mean score of 4.17), and that tangible rewards are regularly provided (mean score of 4.00). They also felt that rewards significantly enhance job satisfaction (mean score of 4.00) and that the rewards are proportional to their efforts (mean score of 3.67).

Teachers also had a positive view of the rewards system, with a grand mean score of 3.54, still within the 'Agree' category. They agreed that the institution provides adequate rewards (mean score of 3.60) and that the rewards are proportional to their efforts (mean score of 3.60). They also felt that rewards significantly enhance job satisfaction (mean score of 3.65). However, they rated the regular provision of tangible rewards and the fairness of the reward system slightly lower (mean scores of 3.45 and 3.40, respectively), though these still fall within the 'Agree' category. Overall, both administrators and teachers find the rewards for instruction-related accomplishments satisfactory, but there is room for improvement, especially in enhancing the fairness and regularity of tangible rewards as perceived by teachers.

Table 13
Teaching/Learning Activities

Indicators	Rating	Performance
The teacher effectively uses a variety of teaching strategies appropriate to the lesson.	90	VS
The teacher promotes active learning and engages all students in learning activities.	91	VS
The teacher differentiates instruction to accommodate diverse learners.	88	VS
The teacher facilitates group work and collaborative learning effectively.	90	VS
The teacher consistently integrates formative assessment strategies during the lesson.	89	VS
Grand Mean	89.6	VS

Table 13 evaluates a teacher's performance in Teaching/Learning Activities, with an overall "Very Satisfactory" rating and a grand mean of 89.6. The teacher excelled in promoting active learning and engaging students, achieving a high rating of 91. Other notable areas include the effective use of diverse teaching strategies and facilitating group work, each rated at 90. The teacher was also rated "Very Satisfactory" in differentiating instruction (88) and integrating formative assessments (89), demonstrating strong performance across all indicators.

Table 14
Delivery of Content

Indicators	Rating	Performance
The teacher presents content accurately and clearly.	89	VS
The teacher connects the content to students' prior knowledge and experiences.	90	VS
The teacher provides clear and concise instructions and explanations.	90	VS
The teacher uses relevant and relatable examples to explain concepts.	89	VS
The teacher encourages students to ask questions and express their thoughts about the content.	89	VS
The teacher presents content accurately and clearly.	89	VS
Grand Mean	89	VS

Table 14 assesses the Delivery of Content, where the teacher received a grand mean rating of 89, indicating "Very Satisfactory" performance. The teacher's highest ratings were for connecting content to students' prior knowledge and providing clear instructions, both scoring 90. Other areas such as presenting content accurately, using relevant examples, and encouraging student questions all received a rating of 89, reflecting the teacher's effective communication and engagement strategies.

Table 15
Utilization of Technology

Indicators	Rating	Performance
The teacher integrates technology into lessons effectively when applicable.	90	VS
The teacher demonstrates confidence and proficiency in using technology.	90	VS
The teacher uses technology to promote interactive and engaging learning.	89	VS
The teacher uses technology to differentiate and personalize instruction.	89	VS
The teacher uses technology to provide feedback and assess student learning.	90	VS
Grand Mean	89.6	VS

Table 15 evaluates the Utilization of Technology, with a grand mean rating of 89.6, also marking "Very Satisfactory" performance. The teacher scored 90 in integrating technology into lessons and demonstrating proficiency, while technology's use in promoting interactive learning and differentiation received ratings of 89. These scores suggest a strong capability in leveraging technology to enhance teaching, although the teacher's integration of technology may be associated with slightly lower scores in some support areas.

Table 16
Significant Relationship Between Teaching/learning Activities and Instruction Related Support

	Teaching/Learning Activities	*Administrative*	*Peer*	*learning environment*	*professional development*	*productivity recognition*
Teaching/Learning Activities	1					
Administrative	-0.62685	1				
Peer	0.615385	-0.16095	1			
learning environment	0.263117	-0.72438	0.263117	1		
professional development	-0.79112	0.5986	-0.85492	-0.64499	1	
productivity recognition	0.040456	0.231663	-0.46524	-0.80721	0.565946	1
rewards	0.262962	0.302944	0.46524	-0.64577	-0.06263	0.43617

Table 16 examines the relationship between Teaching/Learning Activities and various forms of instruction-related support. The data reveals a negative correlation between teaching/learning activities and administrative support (-0.62685), but a positive correlation with peer support (0.615385). The teacher's performance in teaching activities is less strongly related to professional development and productivity recognition, highlighting areas where support may impact effectiveness differently.

Table 17
Significant Relationship Between Delivery of Content and Instruction Related Support

	Delivery of Content	*Administrative*	*Peer*	*learning environment*	*professional development*	*productivity recognition*
Delivery of Content	1					
Administrative	-0.45847	1				
Peer	-0.48038	-0.16095	1			
learning environment	0.63901	-0.72438	0.263117	1		
professional development	0.008854	0.5986	-0.85492	-0.64499	1	
productivity recognition	-0.29475	0.231663	-0.46524	-0.80721	0.565946	1
rewards	-0.96847	0.302944	0.46524	-0.64577	-0.06263	0.43617

Table 17 explores the relationship between Delivery of Content and instruction-related support. It shows a positive correlation with the learning environment (0.63901) but negative correlations with administrative support (-0.45847) and peer support (-0.48038). These findings suggest that while effective content delivery is associated with a positive learning environment, it may come at the expense of other support areas.

Table 18
Significant Relationship Between Utilization of Technology and Instruction Related Support

	utilization of technology	*Administrative*	*Peer*	*learning environment*	*professional development*	*productivity recognition*
utilization of technology	1					
Administrative	-0.42321	1				
Peer	0.880705	-0.16095	1			
learning environment	0.63901	-0.72438	0.263117	1		
professional development	-0.89426	0.5986	-0.85492	-0.64499	1	
productivity recognition	-0.75794	0.231663	-0.46524	-0.80721	0.565946	1
rewards	0.126323	0.302944	0.46524	-0.64577	-0.06263	0.43617

Table 18 details the relationships between Utilization of Technology and instruction-related support. It highlights a strong positive correlation with peer support (0.880705) and a moderate correlation with the learning environment (0.63901). However, it also shows negative correlations with administrative support (-0.42321), professional development (-0.89426), and productivity recognition (-0.75794), indicating potential trade-offs in balancing technology use with other support factors.

Table 19
Perceived Issues and Concerns

Indicator	Rank
Assessment and accountability pressures	1
Insufficient peer support	2
Limited autonomy in decision-making	3
Inadequate support for technology integration	4
Challenging learning environment	5
Lack of recognition and rewards	6
Limited access to learning resources:	7

Table 19 identifies key issues and concerns related to instruction support, ranked by importance. The top concern is "Assessment and accountability pressures," reflecting significant stress related to high-stakes testing. "Insufficient peer support" follows, emphasizing the need for better collaboration among teachers. Other concerns include "Limited autonomy in decision-making," "Inadequate support for technology integration," "Challenging learning environment," "Lack of recognition and rewards," and "Limited access to learning resources," all highlighting various areas where improvements could enhance instructional effectiveness and teacher satisfaction.

DISCUSSION

Findings

The highlights of the findings of this study are the following:

1. The research data reveals several key findings across various dimensions of the educational environment. Firstly, there is a significant gender imbalance among teachers, with females overwhelmingly outnumbering males, particularly in the younger age groups, while all administrators are female and mostly aged between 41-50 years. Educational attainment among teachers varies, with a majority holding a Master's Degree with additional units, whereas most administrators possess a Doctoral Degree. In terms of service years, teachers are broadly distributed across different experience levels, with the majority having 11-15 years of service, while administrators generally have more experience, with most having 16-20 years of service.

2. Performance evaluations indicate a uniform 'Very Satisfactory' rating for all teachers and administrators, showing consistent performance across both groups. Participation in training and seminars is highest in areas like emotional intelligence and classroom management, suggesting these are areas of particular focus or need. The level of administrative and peer support is perceived positively by both teachers and administrators, though administrators report slightly higher satisfaction, especially in addressing concerns and facilitating professional development.

3. Regarding the learning environment, both groups agree that the physical environment, technology, and classroom size are supportive, though teachers express moderate agreement with the school's culture. Professional development opportunities

are generally seen as beneficial, with administrators expressing higher satisfaction, particularly in relevance and support for growth. Finally, recognition of productivity is viewed more positively by administrators, while teachers feel less recognized, indicating a potential area for improvement in recognizing and motivating teaching staff. Overall, while the data indicates a generally supportive and satisfactory educational environment, it also highlights areas such as gender balance, resource provision, and productivity recognition that could benefit from targeted improvements.

Conclusions

In conclusion, the study provides a comprehensive overview of the educational environment, highlighting several critical insights. The gender imbalance among teachers, particularly in younger age groups, alongside the predominance of female administrators, underscores the need for more gender diversity in educational leadership and teaching roles. The varying levels of educational attainment and years of service between teachers and administrators reflect a diverse workforce, but also suggest opportunities for further professional development, particularly among teachers seeking higher qualifications.

The uniform 'Very Satisfactory' performance ratings suggest a consistently high standard of work among both teachers and administrators, although the disparity in recognition of productivity between these groups indicates a need for more equitable acknowledgment of efforts across the board. The positive perception of administrative and peer support, as well as the physical and technological learning environment, demonstrates a solid foundation for educational success. However, the moderate satisfaction with school culture among teachers and their lower levels of recognition point to areas where institutional support could be enhanced.

Overall, the findings suggest that while the educational environment is largely effective and supportive, targeted improvements in gender diversity, professional recognition, and cultural inclusivity could further enhance the experience and effectiveness of both teachers and administrators. Addressing these areas would not only contribute to the personal and professional growth of educators but also support the continued development of a positive and productive learning environment for students.

Recommendations

The main goal of this study is to gain knowledge on the level of the extent of instruction related support in the identified schools in Trinidad, Bohol during the School Year 2022-2023 as Basis for Strategic Plan. It is recommended that the proposed Strategic Plan crafted shall be considered for implementation.

OUTPUT OF THE STUDY

This section contains Strategic Activities in based on the findings of the study entitled “**ENHANCING TEACHER PRODUCTIVITY THROUGH SCHOOL SUPPORTS**”. It serves as a proposal to the department of Education and local government units

Rationale

The proposal to the Department of Education and local government units for implementing strategic activities based on the findings of the study titled "Enhancing Teacher Productivity through School Supports" is grounded in the need to improve teacher productivity and create a supportive educational environment. The study's findings have shed light on crucial factors influencing teacher effectiveness, including administrative support, peer support, learning environment, professional development, recognition and rewards, and technology integration. Implementing strategic activities, we aim to address the identified issues, capitalize on the positive aspects, and foster a culture of continuous improvement within the educational system.

Firstly, addressing the identified issues, such as assessment pressures, limited peer support, and inadequate technology integration, is essential for improving teacher productivity. These strategic activities will provide targeted solutions, such as developing support systems to alleviate assessment pressures, implementing peer mentoring programs to enhance collaboration, and investing in technology resources and training to support effective integration.

Secondly, capitalizing on the positive aspects identified in the study, such as favorable ratings for administrative support, peer support, and the learning environment, is crucial for sustaining and enhancing teacher productivity. The proposed activities will focus on strengthening these areas further, ensuring that administrative support systems are responsive, fostering a strong sense of community and collaboration among teachers, and creating an optimal learning environment with adequate resources and technology infrastructure.

Thirdly, supporting teachers' professional development is vital for their continuous growth and increased productivity. The proposed activities include providing ongoing professional development opportunities that are relevant to teachers' needs, facilitating the sharing of best practices among teachers, and creating a supportive culture that values and supports teachers' growth as professionals. Additionally, recognizing and rewarding teachers' productivity is crucial for their motivation and job satisfaction. The proposed activities will establish transparent systems for evaluating and recognizing productivity, ensure fairness in the reward system, and develop mechanisms for regularly acknowledging teachers' accomplishments.

Ultimately, the rationale behind these strategic activities is to foster a supportive and empowering environment for teachers, as they play a critical role in delivering quality education to students. By addressing the identified issues, capitalizing on positive aspects, and providing necessary support and resources, we can enhance teacher

productivity and create a sustainable educational system that benefits both educators and learners. The collaboration between the Department of Education, local government units, teachers, and other stakeholders is essential for the successful implementation of these activities and the continuous improvement of the educational system.

Objectives

- Enhance Administrative Support
- Foster Peer Support and Collaboration
- Optimize the Learning Environment
- Enhance Professional Development Opportunities
- Improve Recognition and Rewards

Scheme of Implementation

The output of this study will be addressed to the department of education and identified schools for deliberation and possible implementation.

STRATEGIC PLAN

Objective 1: Enhance Administrative Support

Establish regular communication channels

Implement a system for open and transparent communication between teachers and administrators, such as regular staff meetings, suggestion boxes, and online platforms, to address concerns and provide timely feedback.

Develop a resource allocation plan

Ensure that administrators allocate necessary resources, such as instructional materials, technology equipment, and classroom supplies, in a fair and equitable manner to support teachers' job effectiveness.

Provide mentoring and coaching

Assign experienced administrators or senior teachers as mentors to provide guidance and support to new teachers, helping them navigate challenges and maximize their effectiveness in the classroom.

Conduct professional development for administrators

Offer training programs and workshops specifically designed for administrators to enhance their leadership and management skills, enabling them to better support and understand the needs of teachers.

Establish a teacher feedback system

Implement a structured feedback mechanism where teachers can provide input and suggestions to administrators regarding school policies, procedures, and support systems, ensuring their voices are heard and taken into consideration.

Objective 2: Foster Peer Support and Collaboration

Encourage collaborative planning and sharing of resources

Facilitate regular meetings and workshops that promote collaborative lesson planning, resource sharing, and the exchange of teaching strategies among teachers to enhance peer support.

Implement a buddy system

Pair new or less experienced teachers with experienced mentors who can provide guidance, advice, and support, fostering a strong sense of camaraderie and collaboration within the teaching community.

Establish professional learning communities

Create dedicated groups or communities within the school where teachers with common interests or specialties can come together to share experiences, discuss challenges, and collaborate on projects.

Organize peer observation and feedback sessions

Set up a structured system for teachers to observe each other's classes and provide constructive feedback, encouraging professional growth and the exchange of best practices.

Encourage joint professional development opportunities

Arrange workshops, seminars, or conferences where teachers can attend together, facilitating networking, collaboration, and shared learning experiences.

Objective 3: Optimize the Learning Environment

Invest in technology infrastructure: Ensure that the school has a robust and reliable technology infrastructure, including high-speed internet, up-to-date hardware and software, and interactive learning tools, to support effective instruction and student engagement.

Provide professional development on technology integration

Offer training and workshops for teachers to enhance their skills in utilizing technology effectively for instruction, including online platforms, multimedia resources, and digital assessment tools.

Create flexible learning spaces

Design classrooms and other learning areas that can be easily reconfigured to accommodate different instructional strategies and foster student-centered learning, allowing for collaboration and active participation.

Improve access to learning resources

Develop a comprehensive system for teachers to access a wide range of learning resources, including libraries, digital databases, and online platforms, ensuring they have the necessary materials to support their teaching.

Foster a positive and inclusive school culture

Promote a welcoming and inclusive environment where diversity is celebrated, bullying is not tolerated, and students feel safe and supported, creating a conducive atmosphere for teaching and learning.

Objective 4: Enhance Professional Development Opportunities

Conduct needs assessment surveys

Regularly assess the professional development needs and preferences of teachers to design targeted and relevant training programs that address their specific requirements.

Offer a variety of professional development formats

Provide a mix of in-person workshops, online courses, webinars, conferences, and collaborative learning opportunities to accommodate different learning styles and preferences.

Establish partnerships with educational institutions and experts

Collaborate with universities, education experts, and professional organizations to bring in external expertise, offer specialized training programs, and tap into a broader network of resources.

Encourage action research and reflective practice

Promote a culture of continuous learning by encouraging teachers to engage in action research projects and reflective practice, allowing them to evaluate and improve their instructional strategies.

Support teacher-led professional development

Provide opportunities for teachers to lead and facilitate professional development sessions, allowing them to share their expertise, showcase innovative practices, and contribute to the professional growth of their colleagues.

Objective 5: Improve Recognition and Rewards

Establish a recognition program

Create a formal system for acknowledging and celebrating teachers' achievements and contributions, such as "Teacher of the Month" awards, certificates of recognition, or public appreciation events.

Implement a performance-based evaluation process

Develop a transparent and fair performance evaluation system that recognizes and rewards teachers based on their instructional effectiveness, student outcomes, and professional growth.

Provide professional growth incentives

Offer financial incentives, such as salary increments or bonuses, to teachers who actively pursue professional development opportunities, earn additional qualifications, or demonstrate exceptional teaching practices.

Showcase teachers' success stories

Share success stories and exemplary practices of teachers through newsletters, school websites, or social media platforms, highlighting their achievements and inspiring others.

Involve teachers in decision-making processes

Ensure that teachers have a voice in decision-making processes that affect their work and professional growth, allowing them to contribute ideas and perspectives on recognition and reward systems.

Compliance with Ethical Standards

Any ethical concerns that could have risen throughout the study were resolved by securing necessary permits. Also, the researcher personally handed the research tools to the schools, with the assistance of the administrators, which included the informed consent form and questionnaires. Before data collection began, all research terms and conditions were fully disclosed to maintain transparency. Despite receiving clearance from the school principals and administrators, the researcher obtained informed consent from participants by individually requesting them to participate and providing thorough information about the study, including potential risks and benefits, as well as privacy safeguards. Each participant was asked to review and sign the informed consent form, indicating their comprehension and willingness to be involved in the study. It was optional to provide the participants' names, which were coded to preserve their identity. To safeguard data, further confidentiality measures were put in place, such as limiting access to physical and electronic resources. The study closely followed data privacy and research ethics guidelines, and participants were made aware of their freedom to withdraw from the study at any moment without facing consequences.

REFERENCES

Abolucion, J. I. M., & Bacio Jr, S. P. (2021) 21st Century Skill-Based Electronic Module For Elementary Social Studies: Analysis, Design, And Development.

Baroudi, S., Tamim, R., & Hojeij, Z. (2022). A quantitative investigation of intrinsic and extrinsic factors influencing teachers' job satisfaction in Lebanon. Leadership and policy in schools, 21(2), 127-146.

Baylan, S. (2018). Trend of performance in board licensure examination for professional

teachers in selected Philippine teacher education institutions: Policy recommendation. International Journal for Innovative Research in Multidisciplinary Field, 4(10), 334-340.
Chan, M. K., Sharkey, J. D., Lawrie, S. I., Arch, D. A., & Nylund-Gibson, K. (2021). Elementary school teacher well-being and supportive measures amid COVID-19: An exploratory study. School Psychology, 36(6), 533.
Constantinou, C., & Wijnen-Meijer, M. (2022). Student evaluations of teaching and the development of a comprehensive measure of teaching effectiveness for medical schools. BMC Medical Education, 22(1), 113.
Haug, B. S., & Mork, S. M. (2021). Taking 21st century skills from vision to classroom: What teachers highlight as supportive professional development in the light of new demands from educational reforms. Teaching and Teacher Education, 100, 103286.
Jourdan, D., Gray, N. J., Barry, M. M., Caffe, S., Cornu, C., Diagne, F., ... & Sawyer, S. M. (2021). Supporting every school to become a foundation for healthy lives. The lancet child & adolescent health, 5(4), 295-303.
Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). Executive summary How leadership influences student learning.
Mahoney, J. L., Weissberg, R. P., Greenberg, M. T., Dusenbury, L., Jagers, R. J., Niemi, K., ... & Yoder, N. (2021). Systemic social and emotional learning: Promoting educational success for all preschool to high school students. American Psychologist, 76(7), 1128.
Parojenog, R. C. (2020). Approaches in teaching literature employed by senior high school teachers. *IOER International Multidisciplinary Research Journal*, *2*(2), 52-58.
Sahito, Z., & Vaisanen, P. (2020). A literature review on teachers' job satisfaction in developing countries: Recommendations and solutions for the enhancement of the job. Review of Education, 8(1), 3-34.

APA Citation:

Bautista, C. M. (2024). ENHANCING TEACHER PRODUCTIVITY THROUGH SCHOOL SUPPORTS. Ignatian International Journal for Multidisciplinary Research, 2(8), 1637–1659. https://doi.org/10.5281/zenodo.13576492

cerisabautista64@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

EVALUATION OF THE ONE SAFE FUTURE (1SF) PROGRAM OR OPLAN LIKAS IN CAMARIN RESIDENCES 1, CALOOCAN CITY: A BASIS FOR THE DEVELOPMENT OF AN ACTION PLAN

Engr. Lea V. Evangelista, Dr. Raul Roland R. Sebastian

Polytechnic University of the Philippines, Manila, Philippines

https://doi.org/10.5281/zenodo.13207897

ABSTRACT

The study evaluated if the government's One Safe Future Program achieved its objective – providing safe, secure, affordable, and decent resettlement housing with basic services, facilities, and infrastructures to Informal Settler Families (ISFs) in Camarin Residences1, Caloocan City. It determined the extent of ISF's participation in the program's pre-, actual, and post-relocation phases and the relocatees' satisfaction levels in socioeconomic, environmental, institutional, and infrastructure aspects. The study gathered the issues encountered by the respondents and recommendations to improve their situation. The theoretical underpinning is "A Ladder of Citizen Participation" by Sherry R. Arnstein (1969), and New Public Management Theory by Osborne and Gaebler (1992). The concurrent triangulation design mixed methodology was employed. The instruments used were a researcher-made survey questionnaire and a focus group discussion with the implementers and beneficiaries. The results revealed that the extent of participation using the lens of Arnstein (1969) is in the 4th level or Consultation. Per Arnstein (1969), Consultation if not combined with other modes of participation, offers no assurance that citizen concerns and ideas will be considered. Since the relocation in 2015, there were still several lacking services and facilities on the site and the relocatees still face several problems. The action plan developed based on the results could be considered as a refinement to the set of strategies, policies, and programs of the government that would directly address the needs of the people and the problem of urban housing in Metro Manila to achieve inclusive growth, improved human development, and total community improvement.

Keywords: *Informal Settler, Citizen participation, Relocation, Resettlement Site, Urban Housing*

INTRODUCTION

Interrelated factors, including rapid population growth, rural-to-urban migration, inadequate affordable housing for the urban poor, weak governance, economic vulnerability, discrimination, marginalization, and displacement resulting from conflict, natural disasters, and climate change, present significant challenges to urban development and human settlements. These issues contribute to the proliferation of informal settlements (UN-Habitat, 2009, 2011, 2013). According to Williams, Costa, Sutherland, Celliers, and Scheffran (2019), uncontrolled urbanization is a key driver of these informal settlements. This phenomenon exacerbates the vulnerability of the urban poor, who are often situated in high-risk areas with substandard infrastructure and poor housing quality, making them particularly susceptible to the impacts of natural disasters (John R., 2020).

Informal settlers are individuals who lack security of tenure and face significant challenges in accessing basic services such as electricity, potable water, communication, transportation, and income-generating opportunities (Simiyu, Cairncross, & Swilling, 2019; Mensah, 2022). Additionally, they often have limited access to healthcare services (Palacios et al., 2022) and experience poor conditions in schools and health centers (Zulch, Musefuwa, & Yacim, 2019). Their housing is typically of low quality (Somvanshi, 2015) and is frequently located in geographically and environmentally hazardous areas (UN-Habitat, 2015), such as reclaimed landfills with polluted water (Somvanshi, 2015; Palacios et al., 2022) or near high-voltage towers. These conditions exacerbate the vulnerability of the urban poor, who are often situated in high-risk areas with substandard infrastructure and poor housing quality, making them particularly susceptible to the impacts of natural disasters (John R., 2020).

As the primary duty bearer and central actor in human development, the government is responsible for addressing the housing and shelter needs of its citizens, who are the rights holders. This entails ensuring that adequate, affordable, and secure housing is available, aligning with the fundamental rights and needs of the population.

In 2010, after the onslaught of Tropical Storm Ondoy in 2009, then-President Benigno S. Aquino III directed the creation of the Informal Settler Families-National Technical Working Group (ISF-NTWG) led by the Department of the Interior and Local Government (DILG) to ensure safe and flood-resilient permanent housing solutions for ISFs living in danger areas in the National Capital Region (NCR).

In 2011, the One Safe Future (1SF) Program also known as the Oplan LIKAS (Lumikas para Iwas Kalamidad at Sakit) was launched to relocate ISFs living in high-risk areas and along major waterways in Metro Manila. This initiative was implemented for five (5) years from 2011 to 2016 with a fifty billion (PhP 50B) fund to address the

requirements of ISFs living in danger areas to safe settlements. The 1SF Program included the provision of housing units, community facilities, and socio-economic, community support programs encompassing on-site, in-city, near-city, and off-city resettlement projects.

The study assessed the extent of participation of the affected ISFs and stakeholders throughout various phases of the Oplan LIKAS Program. This included the pre-relocation phase (initiation and planning), the actual relocation phase (implementation and monitoring), and the post-relocation phase (evaluation). These phases represent the core components of the project development cycle.

The study also evaluated the level of satisfaction among affected families regarding the implementation of the Oplan LIKAS Program, focusing on socioeconomic, environmental, institutional, and infrastructure aspects. To measure satisfaction, a researcher-developed survey questionnaire was administered, and Focus Group Discussions (FGDs) were conducted with key implementers and beneficiaries. These methods were employed to assess respondents' satisfaction with the program, identify areas of concern encountered by relocatees at resettlement sites, and gather suggestions and recommendations for improving their conditions.

Research Questions

1. What is the extent of participation of the affected ISFs in the pre-, actual, and post-relocation phases of the 1SF Program?
2. What is the level of satisfaction of the ISFs with the program's implementation in terms of the following variables:
    2.1 Socioeconomic Aspect;
    2.2 Environmental Aspect;
    2.3 Institutional Aspect; and
    2.4 Infrastructure Aspect?
3. What are the areas of concern that the respondents encountered at the resettlement site in terms of the following variables:
    3.1 Socioeconomic Aspect;
    3.2 Environmental Aspect;
    3.3 Institutional Aspect; and
    3.4 Infrastructure Aspect?
4. What are the recommendations of the respondents to address the issues and concerns they encountered at the resettlement site?
5. Based on the study's findings, what are the programs of action for the Enhanced Program on Relocation?

METHODOLOGY

The study utilized a mixed-methods approach, which integrates both quantitative and qualitative methodologies within a single research framework. This approach involves the collection and analysis of numerical data (quantitative) and narrative data (qualitative)

to provide a more comprehensive understanding of the research problem. By combining these methods, the study aims to capture the context and subjective experiences of participants while also allowing for broader generalization of the findings to a larger population (researchmethod.net).

In the study, data were analyzed using a concurrent triangulation design. Both quantitative and qualitative data were collected simultaneously and then compared to identify areas of agreement and discrepancy. This integration of findings aimed to provide a more holistic understanding of the research problem.

Quantitative data were collected using a researcher-designed survey questionnaire, while qualitative data were gathered through Focus Group Discussions (FGDs) with the program's key implementers and beneficiaries. To ensure the accuracy of the findings, the results were presented to the respondents for validation. Additionally, a document review was conducted to supplement the data collection process.

In the study, the researcher transcribed the FGDs with the key implementers and beneficiaries and applied a narrative analysis technique to distill interviews into a set of core narratives. In the first step, the narrative blocks of the transcribed data were inductively coded. The second step involved grouping the narratives with the same codes and noting their similarities and differences. The third step involved creating and nesting the codes according to the story structure framework. The fourth step involved delving into the story structures and collating them with each life event code. The similarities and differences were coded to further enrich the analysis. In the fifth step, the narrative blocks were broken into story structures, switched and read between the narrative blocks as a whole without losing sight of the overarching narrative, and dove into each story structure code and paid attention to how these relate across a life event. In the last step, the life-event structures were analyzed to come up with the core narratives.

The quantitative data were organized and categorized according to the phases of the relocation process, facilitating a more detailed analysis and presentation. The data were then presented in relation to the study's key variables: socioeconomic, environmental, infrastructure, and institutional aspects.

Population, Sample Size, and Sampling Technique

The study's total population comprised 883 families resettled in Camarin Residences 1 (CamRes 1), Barangay 175, Caloocan City. These families had previously lived along the Tullahan River, Estero de Maypajo, and other waterway tributaries, including the Caloocan-Navotas River, Casili, and Maligaya Creek. Using Slovin's Formula, 276 families from the CamRes1 resettlement site were selected as respondents.

Description of the Respondents

The respondents for this study included household heads, who are either male or female and typically serve as the primary income earners for their families. These

individuals are beneficiaries or awardees of the housing units provided through the resettlement program.

For the FGD, the participants included key members of the Caloocan City Inter-Agency Committee composed of the District Manager of the National Housing Authority (NHA), Bagong Silang, officials from Barangay 175, the Officer-in-Charge of the Housing and Resettlement Office (HARO)-formerly known as the Urban Poor and Affairs Office (UPAO), the Officer-in-Charge of the City Planning and Development Department (CPDD), the Action Officer of the City Social Welfare and Development Department (CSWDD), and representatives from the offices of the City Administrator and City Engineering.

Additionally, FGDs with beneficiaries included the Homeowners' Association (HOA) President from Buildings A to J of CamRes 1.

Instrumentation

The researcher utilized the following instruments in data collection: (1) a researcher-made survey questionnaire; (2) FGD with the program implementers; and (3) FGD with the beneficiaries.

With the assistance of the Homeowners' Association (HOA) officers, the researcher distributed the survey questionnaires to respondents from each building.

The survey questionnaire comprised four sections: (1) The first section examined the extent of affected families' participation in the pre-, actual, and post-relocation phases of the 1SF Program; (2) The second section assessed the level of satisfaction of the affected families with the program focusing on socioeconomic, environmental, institutional, and infrastructure aspects. It evaluated their level of satisfaction with the community facilities, social infrastructure, and basic services at the resettlement site; (3) The third section identified the challenges faced by relocatees at the resettlement site, specifically regarding socioeconomic, environmental, institutional, and infrastructure aspects. Respondents selected the most relevant answers from the provided options; and (4) the final part gathered the respondents' suggestions and recommendations for improving the program and addressing their concerns, directed at the government and other stakeholders involved in the 1SF Program.

RESULTS AND DISCUSSION

1. The extent of Participation of the Affected ISFs in the Pre-relocation, Actual relocation, and Post-relocation Phases of the 1SF Program

The survey results indicated that informal settler families (ISFs) and affected families attended the general assemblies organized by the Local Inter-Agency Committee (LIAC). All implementers confirmed that the ISFs actively participated in meetings where the

program and relocation processes were discussed. Additionally, it was reported that the National Housing Authority (NHA) facilitated field trips to various resettlement sites, including those in Cavite, Trece Martires, Pandi, and Norzagaray. Ultimately, the ISFs had the opportunity to select their preferred resettlement site.

Sherry R. Arnstein's (1969) Ladder of Citizen Participation categorizes activities such as consultation dialogues, meetings, and information dissemination using various platforms as forms of non-participation or Level 1 Manipulation, a course some use to substitute genuine participation. At this level, the government collects information and builds public relations, and rapport with the people to establish their participation in the program. Respondents recommended that the government should engage affected families in all stages of the program, with particular emphasis on their involvement during the planning process.

In accordance with Part I.1 of the ISF-NTWG Joint Memorandum Circular No. 01 Series of 2013, the relocation of informal settler families (ISFs) is to be carried out on-site, near-city, or in-city, in line with the People's Plan and ensuring adequate and genuine consultation with the families. In 2015, the LIAC conducted a three-day Relocation and Resettlement Action Plan (RRAP) formulation for ISFs living in structures within the three-meter easement and other legally defined danger areas of the city. During the RRAP formulation, the Civil Society Organizations (CSO) representatives presented their People's Plans for consideration and potential mainstreaming in the city's RRAP, provided they complied with city ordinances and policies.

According to Arnstein (1969), meetings or workshops often involve a select group of individuals who are deemed suitable to provide input on the plans. While these sessions allow some level of contribution from less privileged participants, the ultimate authority to evaluate and make final decisions remains with the powerholders. Arnstein (2019) further argues that consultation alone, without integrating other forms of participation, cannot ensure that citizen concerns and ideas are genuinely considered. When powerholders restrict input solely to this level, participation becomes a mere formality rather than a substantive process.

***Cooperative Arrangement and Collaborative Undertaking*.** In the implementation of the 1SF, or Oplan LIKAS Program, the LIAC, composed of the officials of the City of Caloocan, the officials of the barangay, and other functionaries, NGAs, and CSOs, collaborated and coordinated in pursuit of a successful implementation of the program.

***Engagements in Various Undertakings*.** The NHA facilitated house-tripping to several resettlement sites including Trece Martirez, Norzagaray, Pandi Bulacan, and CamRes1 allowing the people the opportunity to select their preferred location. Key implementers stated that they organized *Kumustahan* dialogue and general assemblies with the relocated families to assess their conditions at the resettlement site. These assemblies were conducted regularly and continue to be held to ensure ongoing support and address any emerging issues.

2. Level of Satisfaction with the Implementation of the 1SF Program in terms of Socioeconomic, Environmental, Institutional, and Infrastructure Aspects

The socioeconomic assessment of the relocatees in CamRes 1 yielded a weighted mean score of 2.71, reflecting a Satisfactory rating. This assessment revealed that 12 out of 18 essential services and facilities were available and accessible at the site. This included electricity, an elementary school, a high school, a police station, a barangay hall, a university, a hospital, a church, a health center, and a fire station. Additionally, the presence of roving police officers and barangay enforcers contributed to the overall assessment.

The environmental assessment of the relocatees in CamRes 1 resulted in a total weighted mean score of 2.47, which is categorized as Unsatisfactory. The data revealed that the respondents were unsatisfied with the Sewerage Treatment Plant (STP) in CamRes 1. Respondents shared that the STP's treatment of wastewater and sewage emitted a foul odor in the vicinity. Respondents reported that the STP's wastewater and sewage treatment processes emitted a persistent foul odor, which was perceived as a potential health hazard due to continuous exposure. Additionally, issues with garbage collection were noted: while each building is equipped with a garbage bin, its limited capacity leads to frequent overflow. The lack of waste segregation exacerbates the problem, causing further complaints from residents about unpleasant smells.

In terms of the Institutional aspect, the respondents stated that although they were organized and officially recognized within their building, the HOA lacked autonomy in decision-making. All decisions concerning the site shall be coursed through and coordinated with the LGU and/or the NHA. One of the principles of New Public Management (NPM) according to Osborne and Gaebler (1992) is decentralization, which localizes government power and grants more freedom to organizations or sectors. The aforementioned scenario maintains a hierarchical structure, commonly referred to as a bureaucratic version of conventional administration. This is in contrast to the concept of NPM, which focuses on the decentralization of power from rigid, hierarchical bureaucratic systems to flexible and dynamic managerial support systems. According to Gaebler and Osborne (1992), the NPM also restructures government organizations, dividing their sectors into smaller units and assigning responsibilities to those sectors.

In terms of Infrastructure Aspect, the gathered data resulted in a weighted mean of 2.31 indicating an Unsatisfactory rating. The respondents were satisfied with nine (9) out of 16 facilities present in the resettlement site including roads, streetlights, jeepneys, parking area, telephone lines, internet, basketball court, tricycle, and multipurpose hall. On the other hand, there were seven (7) out of 16 facilities that the respondents were dissatisfied with, specifically the evacuation center, the size of the unit, worn-out or broken fire hydrants, fire extinguishers, hoses within the building, inadequate lighting in the hallway, and the absence of the playground. According to Oplan LIKAS Operational Guidelines No. 1, Series of 2014, resettlement sites are required to include essential community facilities and social infrastructure. These include a church, playgrounds, a

multipurpose hall, adequate parking, access to the main road network, and an evacuation center.

The data indicated that on the day of the relocatees' transfer to the resettlement site, several essential facilities aimed at promoting the general welfare of the people were still lacking. All respondents reported the absence of the playground, and electricity in the covered court, chapel, and market at the site.

The primary aim of implementing the NPM is to secure better services for citizens. However, based on the results of the survey, several essential services and facilities were still missing when the affected families initially moved to the resettlement site. The relocatees felt that they were situated in a place far from their jobs, employment, and business, which brought additional burdens.

The relocatees' overall assessment of the services and facilities in CamRes1, covering socioeconomic, environmental, institutional, and infrastructure aspects, resulted in a weighted mean score of 2.46, or Unsatisfactory. According to the respondents, the displacement adversely affected their families and disrupted their previous way of life. To achieve sustainable development, it is crucial to ensure that people experience equitable and decent living conditions.

Based on the qualitative data collected from the FGD, the following analysis highlights the level of satisfaction of the respondents with the implementation of the 1SF program:

***Contentment*.** The key implementers emphasized that the families were uncontented with the government's ISF program. Mabilin (2014) stated that urban poor communities often resist relocation due to several factors, including limited employment opportunities, insufficient access to water and electricity, distance from educational institutions, and deficiencies in housing quality;

***Frustrations*.** During the general assemblies held two (2) years before the actual relocation, the LGU and NHA provided information to the informal settlers and affected families regarding the monthly amortization and the available services and facilities, including water and electricity. However, according to the respondents, the facilities discussed during the general assembly, such as the market, were not present at the time of relocation;

***Freedom of Choice*.** When asked to compare and given the opportunity to choose, the relocatees still preferred their previous dwellings despite their location in danger areas. Respondents indicated that life was more manageable there due to the availability of various livelihood opportunities and convenient access to essential services; and

***Appreciation*.** Conversely, some respondents expressed gratitude for their relocation. They noted that the move was beneficial as they had previously experienced frequent flooding in their former residences. Additionally, others appreciated the

relocation because it provided them with housing when they previously did not own a home.

3. Areas of Concern that the Respondents Encountered in the Resettlement Site in terms of Socioeconomic, Environmental, Institutional, and Infrastructure Aspect

Based on the gathered data on the concerns of the relocatees at the new site, the LGU and NHA stated that the focus of the Oplan LIKAS is to relocate families immediately from the waterways and danger areas to ensure their safety during disasters and calamities. The implementers, using the allocated funds and budget from the 50B fund, made a concerted effort to comply with the guidelines' provisions, especially those related to the post-relocation programs. The program set specific goals for the LIAC, including government agencies, NGOs, and People's Organizations (POs), to transfer all the targeted families to the new site. The transfer of the relocatees pushed successfully achieving 100 percent of the scheduled ISFs being relocated. The immediate goal was the relocation itself, followed by subsequent site improvements. According to the New Public Management principles outlined by Osborne and Gaebler (1992), the government is required to ensure that citizens have access to essential services and support facilities, thereby enhancing overall service quality and effectiveness.

Based on the qualitative data gathered from the FGD with implementers and beneficiaries, the following analysis outlines the areas and concerns related to the implementation of the 1SF program:

***Growing Population*.** The implementer stated that the transfer of families in the barangay resulted in a growing population which in turn increased the demand for services and facilities;

***Unaffordability and incapacity to pay the amortization*.** The beneficiaries have expressed that the amortization rates for the housing units are unaffordable. According to all FGD respondents, poverty and unemployment significantly hinder most relocatees from meeting the amortization payments. The respondents recommended recalculating the overdue amounts and considering rubbing it back to zero, as many residents with arrears face the risk of having their units cancelled. As noted by Simbolon, Aulia, and Fachrudin (2021), subsidized housing should align with the targets and needs of low-income individuals.;

***Community Support and Development*.** Based on the FGD with the implementer and the beneficiaries, there were several assistances provided to the relocatees in the form of financial and educational: scholarship and school supplies, manpower support, employment, livelihood, capital seeds, seminars, and skills training, processing of ISF documents, and the creation and organization of HOA; and

***Unsustainability*.** When inquired about the status of livelihood assistance, all respondents stated that it is no longer available, and they did not pursue a business or

find employment aligned with the skills they had acquired from livelihood training sessions and seminars. The pandemic in 2019 depleted their financial and livelihood support from the Department of Trade and Industry (DTI), Department of Labor and Employment (DOLE), and DILG, leaving them without the necessary budget to purchase essential ingredients or materials. Respondents expressed a desire for another opportunity to restart. This suggests that the families still lack empowerment. They have not developed a strong sense of ownership or self-reliance. Despite receiving start-up funds and skills training intended to facilitate income growth, they were unable to effectively manage and utilize these resources. According to Osborne and Gaebler (1992), New Public Management (NPM) seeks to empower citizens to become self-sufficient and improve their living conditions.

4. Recommendations of the Respondents to Address the Issues and Concerns they Encountered at the Resettlement Site

Based on the gathered data, the relocatees recommended the establishment of the following five (5) services and facilities at the CamRes1 resettlement site: 1) an individual water meter; 2) a lower amortization rate; 3) a safe sewerage treatment; 4) a market; and 5) functional CCTVs. These facilities received the most responses because relocatees consider it the most important to have or be improved at the resettlement site.

Osborne and Gaebler (1992) stated that in applying the NPM, the government shall adopt a private-sector style of management and forge partnerships with various stakeholders. This approach aims to facilitate the development and enhancement of resettlement sites, including the establishment of essential facilities.

Regarding livelihood and training programs recommended by the relocatees, the top preference is haircutting. This program is favored due to its minimal requirement for space and equipment; with basic tools such as scissors and a comb, relocatees can offer home services and earn a living. Massage or physical therapy ranks as the second-most popular livelihood program. Manicure/pedicure is the third-most recommended program, while soap-making and tailoring are fourth and fifth, respectively. Additionally, relocatees requested capital seed funding or initial support to start a business. They also requested an additional livelihood opportunity from the government.

Proposed Action Plan for the Enhanced Program on Relocation

Activities	Expected Output	Time frame	Target Participants	Resource	Sustainability Measures	Office Responsible
PRE-RELOCATION						
Workshop on the Formulation of Policy Guidelines on Relocation 1. Preparation of draft policy guidelines. 2. Identification of project goals and objectives through brainstorming and concept mapping	Policy Guidelines on Relocation	6 months	National Government Agencies (NGAs), Local Government Units (LGUs),	Logistics Manpower	Conduct quarterly meetings to monitor the status of the implementation of the program. Quarterly monitoring of the CSOs and	Department of the Interior and Local Government (DILG) Local Government Units (LGUs)

3. Preparation of project outline from start to finish 4. Presentation of the draft policy guidelines for comment and feedback from various stakeholders 5. Finalization and approval of the policy guidelines 6. Presentation of the final Policy Guidelines on Relocation			Civil Society Organizations (CSOs), Non-Government Organizations (NGOs), People's Organizations (PO), Informal Settler Families (ISFs)		ISFs in the implementation of the program as planned	
Creation of a Local Inter-Agency Committee (LIAC) composed of NGAs, LGUs, CSOs, NGOs, People's Organizations, and Informal Settler Families	Executive Order on the Creation of the LIAC	1 month	National Government Agencies (NGAs), Local Government Units (LGUs), Civil Society Organizations (CSOs), Informal Settler Families (ISFs)	Legislative Measure	Conduct of quarterly meeting Updating of the legal issuance, as necessary	Local Government Unit (LGU)
Identification of target and priority areas for relocation Tagging and Mapping of Structures	List of priority areas	3 months	National Government Agencies (NGAs), Local Government Units (LGUs)	Logistics Manpower	Regular updating of the list of priority areas Regular conduct of on-site inspection	Department of Environment and Natural Resources (DENR), Metro Manila Development Authority (MMDA)
Conduct of Situational Analysis	Situational Analysis Report	6 months	National Government Agencies, Local Government Units, Civil Society Organizations (CSOs), Non-Government Organizations (NGOs), People's Organizations (PO),	Logistics Manpower	Regular updating of the list of priority areas Regular conduct of on-site inspection Updating of LGU Data	Housing and Resettlement Office (HARO), City Social Welfare and Development Office (CSWDO)

			Informal Settler Families (ISFs)			
Conduct of Census of ISFs • Interview with the ISFs (Household Heads) • Occupancy Verification • Pre-qualification of families • Master Listing of Households • Submission and completion of documents/requirements of the beneficiaries	Master list of ISFs	6 months	Informal Settler Families (ISFs)	Logistics Manpower	Regular conduct of on-site inspection Preparation of Quarterly Report on the Status of the ISFs Updating of LGU Data	National Housing Authority (NHA), Housing and Resettlement Office (HARO)
Conduct of Consultation Dialogue with the affected ISFs for the identification of resettlement sites, housing options, financing scheme, and terms of payment	List of Households	3 months	Informal Settler Families (ISFs)	Logistics Manpower	Regular conduct of consultation dialogue	Housing and Resettlement Office (HARO), City Social Welfare and Development Office (CSWDO)
Conduct of field trips to the resettlement site and Information drives	Field Trips Terminal Report IEC Materials	3 months	Informal Settler Families (ISFs)	Logistics Manpower	Regular updating of available housing units	National Housing Authority (NHA), Housing and Resettlement Office (HARO
Preparation of lists of available jobs and employment matched to the qualifications of the ISFs	List of available jobs and employment	3 months	City Social Welfare and Development Office, Public Employment and Services Office (PESO)	Logistics Manpower	Regular Updating list of available jobs and employment	Public Employment and Services Office (PESO)
Forging partnerships with nearby commercial and business establishments, government officers to endorse the list of possible job seekers	Memorandum of Agreement	6 months	National Government Agencies (NGAs), Local Government Units (LGUs)	Logistics Manpower Legislation	Regular updating list of available jobs and employment	Public Employment and Services Office (PESO)
Conduct of Social Preparation • consultation dialogue with the affected ISFs • Interview per household Psychosocial counseling per household	Informed and empowered ISFs	6 months		Logistics Manpower	Conduct House Visitation Conduct or progress monitoring and referral to other agencies if needed	Housing and Resettlement Office (HARO), City Social Welfare and Development Office (CSWDO)

Conduct Self-Help Seminars and Training for the Affected Families **I.** Seminar on Values Formation **II.** Personal Development Course **III.** Self-Development Skills **IV.** Productivity **V.** Financial Literacy	Empowered ISFs	6 months	Informal Settler Families	Logistics Manpower	Regular conduct of dialogue with the ISFs Regular conduct of monitoring on the progress or improvement of the ISFs	City Social Welfare and Development Department (CSWDO), Public Employment and Services Office (PESO) of the LGU
Identification of available housing units with complete social services and facilities, or	Housing units with complete facilities	6 months	National Government Agencies (NGAs), Local Government Units (LGUs)	Logistics Manpower	Regular site inspection	National Housing Authority (NHA), Housing and Resettlement Office (HARO), City Engineering
Construction of new buildings/houses with complete social services and facilities	Housing units with complete facilities	3 years		Logistics Manpower	Regular conduct of progress monitoring	National Housing Authority (NHA), Housing and Resettlement Office (HARO), City Engineering
Workshop on the Formulation of the People's Plan	People's Plan	2 months	Civil Society Organizations (CSOs), Non-Government Organizations (NGOs), Informal Settler Families (ISFs)	Logistics Manpower	Regular conduct of progress monitoring Updating if necessary	Civil Society Organizations (CSOs)
Workshop on the Formulation of the Resettlement and Relocation Action Plan (RRAP) 1. Preparation of draft RRAP 2. Presentation of the draft RRAP for comments and feedback from various stakeholders 3. Mainstreaming or integration of People's Plan in the RRAP 4. Finalization of the RRAP 5. Presentation of the final RRAP	Resettlement and Relocation Action Plan	2 months	National Government Agencies, Local Government Units, Civil Society Organizations (CSOs), Non-Government Organizations (NGOs),	Logistics Manpower Legislation	Regular conduct of progress monitoring Updating if necessary	National Housing Authority (NHA), Housing and Resettlement Office (HARO) City Planning and Development Department (CPDD)

			People's Organizations (PO), Informal Settler Families (ISFs)			
Conduct of Pre-demolition Conference	PDC Report	1 month	National Government Agencies (NGAs), Local Government Units (LGUs)	Logistics Manpower Legislation	Regular conduct of on-site inspection Conduct of patrol in the cleared areas Turn-over to the barangay	National Housing Authority (NHA), Housing and Resettlement Office (HARO), Barangay
II. ACTUAL RELOCATION						
Setting up of Relocation Action Center (RAC)	Established RAC	2 weeks	National Government Agencies (NGAs), Local Government Units (LGUs (City and Barangay)	Logistics Manpower	Provision of logistics to the RAC	National Housing Authority (NHA), Housing and Resettlement Office (HARO)
Transfer of relocatees to the relocation sites ▪ Provision of assistance of the community leaders during the transfer; ▪ Distribution of food assistance ▪ Securing the belongings of the relocatees; ▪ Monitoring of transferred families (count, survey of immediate assistance)	100% transferred ISFs	3 months	National Government Agencies (NGAs), Local Government Units (City Barangay)	Logistics Manpower	Close monitoring of the status of the transfer Collaboration of various agencies in transit to the resettlement site	National Housing Authority (NHA), Housing and Resettlement Office (HARO), Barangay, Community Leaders, Volunteer, ISFs
Turn-over of the housing units to the relocatees	Relocatees provided with housing units List of relocatees with Housing Units	3 months	Relocatees	Manpower Legislative Measure	Regular monitoring of the relocatees Regular updating of the list of relocated families	National Housing Authority (NHA), Housing and Resettlement Office (HARO)
Documentation of the actual relocation	Report on Relocation	2 weeks	National Government Agencies (NGAs), Local Government Units	Manpower	Preparation of report immediately after the conclusion of the activity Report to the Local Chief Executive	Housing and Resettlement Office (HARO)

			Informal Settler Families (ISFs)			
III. POST RELOCATION PHASE						
Creation of Home Owners Association ▪ General HOA ▪ HOA per building/ Area	Organized HOA	1 month	Relocatees	Logistics Manpower	Accreditation to the LGU	National Housing Authority (NHA), Housing and Resettlement Office (HARO)
Conduct dialogue with the relocatees ▪ One week after the relocation ▪ Quarterly in the first year; ▪ Annual general assembly for three years	1. Post Activity Report 2. Situational Analysis 3. Comparative Analysis of the Living condition of the Households 4. List of households still living on the site	1 month	Relocatees	Logistics Manpower	LGU (HARO) and HOA	Housing and Resettlement Office (HARO)
Provision of livelihood to the relocatees unique to each household	Financially stable relocatees	6 months	Relocatees	Logistics Manpower		Public Employment Service Office (PESO), City Social Welfare and Development Department (CSWDO)
Conduct of capacity building for the relocatees: 1. Skills training 2. Livelihood seminars/ training 3. Microenterprise 4. Entrepreneurship	Skilled and trained relocatees	2 months	National Government Agencies (NGAs), Local Government Units Informal Settler Families (ISFs)	Logistics Manpower Legislation		Public Employment Service Office (PESO), Department of Labor and Employment (DOLE) Technical Education and Skills Development Agency (TESDA)
Conduct of annual job fair	List of hired relocatees	1 month	Relocatees, Private Companies	LGU in partnership with DOLE, TESDA and	Regular updating of the list of relocatees	Public Employment Service Office (PESO) Department of Labor and

						Employment (DOLE) Technical Education and Skills Development Agency (TESDA)
Conduct Results-based Monitoring and Evaluation (RBME) on the Status of the Relocatees, services, facilities, and livelihood in the resettlement site 5. Quarterly in the first year 6. Annual for three years	RBME Report	3 months	Relocatees	Logistics Manpower Legislation	Regular updating of the system Installation of a firewall to protect the system	Housing and Resettlement Office (HARO)
Development of a database containing the following information: I. Households II. Services and facilities III. Livelihood IV. Microenterprise/businesses	Database	6 months	System Developer	Logistics Manpower Legislation	Regular updating of the system Installation of a firewall to protect the system	Information and Technology Office (ITO)
Development of a website for the issues and concerns of the relocatees to be managed by the LGU and accessible by the NGAs	Website	6 months	System Developer	Logistics Manpower Legislation	Regular updating of the system Installation of a firewall to protect the system	Information and Technology Office (ITO)

Conclusions

Based on the findings of the study, the following conclusions were drawn:

Citizen participation, or citizen control, refers to the maximum feasible involvement of the citizens in a program and is the categorical term of citizen power. This study evaluated the extent of the affected families' participation in the three stages of relocation under the 1SF Program, or Oplan LIKAS. According to Sherry R. Arnstein's typology from "A Ladder of Citizen Participation" (1969), which outlines eight levels of participation, the affected families' involvement in implementing Oplan LIKAS can be categorized at the fourth level: Consultation. This level signifies a degree of tokenism, where powerholders allow the underprivileged to voice their opinions but retain the ultimate decision-making authority, as described by Arnstein (1969).

Tokenism is a "participatory" strategy that is best described as a token gesture or a meaningless attempt at involving citizens. According to Arnstein (1969), tokenism can take the form of information-only procedures or consultation processes that have minimal or no impact on changing the status quo. In Arnstein's typology of the Eight Ladders of Citizen

Participation, consultation is identified as the fourth level. The study indicates that consultation alone does not ensure that citizen concerns and ideas are genuinely considered. When powerholders restrict participation to this level, it can become a mere ceremonial act with little real influence.

The RRAP formulation invited the CSOs to participate in the potential mainstreaming of the People's Plan, involving a select group of individuals or LIAC members. Although the people were involved in the program's implementation, they lacked the authority to ensure that the LGU would consider their opinions, as the ultimate decision-making authority remained with the powerholders. According to Arnstein (1969), this level of participation does not guarantee that the power holders will take into account the citizens' concerns.

The methods employed by the government, such as information dissemination through news media, flyers, pamphlets, posters, consultation meetings, general assemblies, and Kumustahan dialogues, were just one-way communication or vehicles from the officials to the citizens. According to Arnstein (1969), restricting participation to this level results in no follow-through, which in turn prevents any change in the status quo. Consequently, the plan remains merely a blueprint, and its implementation may or may not occur. People held the belief that they had already gained power and were actively involved, yet those who perceived themselves as part of the process merely engaged in participation, serving as the program's driving force.

Arnstein (1969) noted that informing citizens about their rights, responsibilities, and options is a crucial step toward genuine citizen participation. The government provided information at the late stage of planning when it had already determined and laid down all the steps and procedures to undertake, leaving little room for negotiation. Implementing planning instruments is crucial for efficient resource allocation and maintaining environmental balance for sustainable urban development. (Nisa, Umilia, Rahmawati, and Samsura, 2023)

Upon measuring the level of satisfaction with the implementation of the 1SF Program since the relocation of the families to CamRes1 in 2015, the researcher found that while some of the plans and programs outlined in Operational Guidelines No. 01 S. 2014, also known as Guidelines in the Transfer of ISF from Danger Areas in the NCR, were successfully implemented, the majority were not.

However, despite the passage of almost a decade, the government still needed to establish other essential basic services and facilities. The findings indicate that the relocatees expressed dissatisfaction with their relocation site, citing various issues and concerns that the government needs to tackle.

The objective of the 1SF Program is to achieve inclusive growth, improved human development, and total community development; however, based on the results and findings of the research, it may be concluded that these aspects were not met. Generally, the families in CamRes1 continue to live below the poverty line, eagerly awaiting

government assistance. Still, the families are requesting assistance to meet their basic needs. According to Maslow's Hierarchy of Needs, if the basic needs remain unmet, we cannot meet the next hierarchy of needs.

Moreover, although for others, the housing units were affordable, some scholars relate affordability to income, where affordability is the relationship between relative price and income. These scholars include Stone (1994), Robinson, Scobie, and Hallinan (2006), and Ndubueze, Gan, and Hill (2009). In general, due to the loss of jobs, income, and inadequate jobs near the site, the majority of the family members were either jobless or unemployed. Consequently, they were unable to pay the amortization, as they had already budgeted their money for their subsistence.

This is one of the reasons why others leased or sold their units and went to Metro Manila with business centers, where they had a chance of finding jobs. According to Cadavid (2010), poverty recycling occurs when impoverished slum dwellers are unable to maintain their new living conditions, leading them to sell or rent their dwellings and return to the slums.

The results showed that although the relocatees are now living in a safer place than their previous dwellings in waterways and dangerous areas, the relocation had negative effects on the people's lives, including loss of income, displacement, changing schools, changing places of work, and alienation. The study concludes that the government should ensure the availability and completeness of all basic services and facilities at the resettlement site before relocating the ISF. This action will guarantee the fulfillment of the families' needs.

Recommendations

Based on the results of the conducted survey and focus group discussions with key implementers and beneficiaries, here are the recommendations.

The government is constantly advocating and promoting participatory governance, citizen engagement, and the whole-of-nation approach in all programs, projects, and activities, affirming that the citizens will be involved in the process, particularly the target beneficiaries or affected populace. However, the government missed the mark by not realizing the real definition and essence of participatory governance through other lenses.

Activities such as information dissemination campaigns, consultation dialogues, and meetings only provide a general understanding of the program's concept and façade, often using technical jargon that is difficult for ordinary people to comprehend. This is also a contributing factor to the government's inability to meet the objectives and expected output of certain programs, which often end in failure and ultimately result in a waste of government resources.

Multi-stakeholders, primarily the beneficiaries and affected populace, should participate in all stages of the development process, including planning, implementation,

monitoring, and evaluation. Participants should actively participate in the process, not just show up. The participants must produce a valuable output to integrate into the government's plan.

In the project development, it is recommended that the government engage the stakeholders, particularly the target beneficiaries and affected families, in identifying the goals and objectives, the expected outcome of the program, and the likelihood that it will be successful.

Most importantly, stakeholders will be involved in planning or preparing the project's outline from start to finish, concept mapping, brainstorming, and drawing the bigger picture of the project.

In the LGUs, accredited CSOs are operating in the locality, which could help in providing ideas, concepts, and designs. These groups could lay the groundwork for developing a more appropriate intervention that directly addresses the issues, concerns, and needs of the community.

The decision-makers should also base the policy guidelines and development plan on the situation reports and the evidence gathered during the situation analysis and evaluation process. The decision-makers could use it as a first tool for formulating policies and plans, methods and approaches, allocating resources, and drafting legislation.

The study highlights the need to formulate a resettlement program through in-depth research, strategic planning, institutional building, active participation from both sending and receiving communities, detailed preparation, execution in accordance with established policies and guidelines, and monitoring and evaluation of the program's output and impact.

The key players could use expectation mapping to determine the people's and government's perspectives on the project and the expected result. When thoughts and ideas align, they can see a unified big picture.

Subsequently, the group may also map the concerns to understand the risks that might arise during the program. This will ensure the fulfillment of the people's needs and desires. Resettlement planning should be comprehensive to achieve the goals and objectives. It is recommended to include both sending and receiving LGUs in the planning workshop to balance both parties' expectations. This approach ensures that the formulated plan benefits both groups, preventing discrimination and resource competition.

The data recommends using a grassroots, bottom-up approach to actively engage the target beneficiaries in all phases of project development. The 1SF, or Oplan LIKAS Program, utilized a top-down approach, involving community participation solely at the informing stage, as per Arnstein's (1969) ladder of citizen participation. The policy

guidelines, which form the foundation of every program, did not incorporate community participation.

In the implementation of the ISF Program, the main consideration is the prompt completion of the relocation based on the regulations and set standards. The number of relocated ISFs and the number of units provided became the measure of the program's success, rather than the fulfillment of the people's needs and their participation in the undertaking. In the execution of the plan, the stakeholders should play a vital role, not just as mere observers but as active partners. During the actual relocation process, community leaders may volunteer to assist their fellow relocatees.

To determine the program's impact, the government should continue to monitor and evaluate the relocatees situation. The government can utilize this information to establish a comparison between the living conditions of the relocated individuals before and after the move. This will help the decision-makers and powerholders take the necessary legislative actions and provide immediate interventions to address the issues and concerns of the people.

They can use results-based monitoring and evaluation (RBME) to analyze and evaluate the PPAs' outputs, outcomes, and impact. Apply this at all program stages to track performance and assess the project's long-term outcomes, not just its short-term ones. The result will serve as the basis for identifying areas for improvement to further enhance the government's future developmental projects, taking into account all sectoral aspects and stakeholders.

Additionally, the people will engage in monitoring the project and evaluate the integration of the agreements made during the initiation and planning phases. The CSOs, NGOs, POs, and beneficiaries shall keep track of whether the government’s projects achieve the intended purpose.

Further, to achieve inclusive growth, the beneficiaries shall be considered active partners in the development process. They should not be considered an audience where their signatures on the attendance sheets measure the success of the programs in attaining their purpose and objectives.

In general, before the national or local government proceeds with the relocation, they have to ensure that the basic services and facilities necessary for the promotion of the general welfare of the people are present, complete, and functional, and they shall continuously expand and modernize the facilities in the resettlement sites.

The government shall continuously expand and modernize the resettlement sites through e-governance by using information and communications technology in the resettlement programs. It will promote transparency, accountability, efficiency, and effectiveness in service delivery. The government should create a database to monitor and evaluate the condition of relocated families. The database could include information on the site's infrastructure, including its functional status, the number and demographics

of the relocated families, the availability of basic services and facilities in the community, the livelihoods of the people, and the provision of capacity-building programs. The NGA and the concerned LGU will be responsible for its management. Other stakeholders, such as NGOs, CSOs, and POs, may view the system to identify their entry points where they could help the government and the people. This would allow the government to prepare a comparative analysis of the panel of data to assess the people's living conditions.

The government may also develop a website as a platform for people to voice their concerns about the resettlement site, their conditions, and the necessary interventions to address these concerns. The government may use it to continuously track and monitor the status of the relocatees.

Compliance with Ethical Standards

For ethical considerations, the researchers obtained the informed consent of the respondents of the study, assured the strict confidentiality of the information, and that the identity would be protected. No conflict of interest exists in the conduct of the study, plagiarism was avoided, there was no bias in the interpretation of the findings and the results were used purely for research.

Acknowledgments

The study would not have been possible without the full support of the following:

To my family, I am deeply grateful, particularly to my husband, Teodoro T. Evangelista Jr., for his unwavering support, which has boosted my eagerness to finish my studies and assisted me during the field data collection;

To my sons, Timothy Louis and Tom Lawrence, who serve as my inspiration and were incredibly understanding when I was very busy studying;

To my adviser, Dr. Raul Roland R. Sebastian, for his unwavering support and for mentoring and coaching me on my research study;

To the officials of the City of Caloocan, LIAC members, officials of Barangay 175, and other participants during the conduct of the FGD with the Key Implementer;

To the HOA Officers for their participation in the conduct of FGD and for assisting me in the distribution and collection of the survey questionnaires and to the cooperative residents of CamRes1.

Most above all, I thank the Lord Almighty for giving me the wisdom and courage to finish my studies for my personal growth and the service of the Filipino people.

REFERENCES

Arnstein, S. R. (1969). A Ladder Of Citizen Participation. Journal of the American Institute of Planners, 35(4), 216–224. https://doi.org/10.1080/01944366908977225

Cadavid, P. R. (2010). Moving in–Selling Out: the outcomes of slum rehabilitation in Mumbai.
John, R. (2020). Flooding in Informal Settlements: Potentials and Limits for Household Adaptation in Dar es Salaam City, Tanzania. American Journal of Climate Change, 09(02), 68–86. https://doi.org/10.4236/ajcc.2020.92006
Palacios, A., Gabosi, J., Williams, C. R., & Rojas-Roque, C. (2022). Social vulnerability, exposure to environmental risk factors, and accessibility of healthcare services: Evidence from 2,000+ informal settlements in Argentina. Social Science & Medicine, 309, 115290. https://doi.org/10.1016/j.socscimed.2022.115290
Osborne, D. and Gaebler, T., Eds. (1992) Reinventing Government. How the Entrepreneurial Spirit Is Transforming the Public Sector. Penguin Books USA Inc., New York
Mabilin, M. (2014). Forced evictions, off-city relocation, and resistance: Ramifications of neo-liberal policies towards the Philippine urban poor.
Mensah, J. K. (2022b). Electricity and informal settlements: Towards achieving SDG 7 in developing countries. Energy Research and Social Science, 93, 102844. https://doi.org/10.1016/j.erss.2022.102844
Nisa, R. Q., Umilia, E., Rahmawati, D., & Samsura, D. a. A. (2023). How do Public Policies impact Housing Provision? An empirical study of housing in Surabaya, Indonesia. IOP Conference Series, 1186(1), 012012. https://doi.org/10.1088/1755-1315/1186/1/012012
Simiyu, S., Cairncross, S., & Swilling, M. (2019). Understanding Living Conditions and Deprivation in Informal Settlements of Kisumu, Kenya. *Urban Forum*, *30*(2), 223–241. https://doi.org/10.1007/s12132-018-9346-3
Simbolon, A. S. R., Aulia, D. N., & Fachrudin, H. T. (2021). Analysis of the residential space transformation of government-subsidized housing program. Arteks : Jurnal Teknik Arsitektur, 6(1), 105–118. https://doi.org/10.30822/arteks.v6i1.627
Somvanshi, A. (n.d.). Slums and the story of India's housing crisis. https://www.linkedin.com/pulse/slums-story-indias-housing-crisis-avikal-somvanshi
UN-Habitat (2009, 2011, 2013), The State of the World's Cities Report.
Williams, D. R., Costa, M., Sutherland, C., Celliers, L., & Scheffran, J. (2019, January 28). Vulnerability of informal settlements in the context of rapid urbanization and climate change. Environment and Urbanization.

APA Citation:

Evangelista, L. V., & Sebastian, R. R. R. (2024). EVALUATION OF THE ONE SAFE FUTURE (1SF) PROGRAM OR OPLAN LIKAS IN CAMARIN RESIDENCES 1, CALOOCAN CITY: A BASIS FOR THE DEVELOPMENT OF AN ACTION PLAN. Ignatian International Journal for Multidisciplinary Research, 2(8), 282–303. https://doi.org/10.5281/zenodo.13207897

Corresponding author: *leaevangelistaece@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

EXPLORING THE ENTREPRENEURIAL ACUMEN OF YOUNG WOMEN START-UP ENTREPRENEURS IN CALAMBA CITY, LAGUNA

Frances Nicole O. Sanchez, Dr. Marie Joy Q. Elomina

Colegio de San Juan de Letran-Calamba, Philippines

https://doi.org/10.5281/zenodo.13157301

ABSTRACT

This study explored the experiences of young women managing startups in Calamba City, Laguna. It sought to understand their backgrounds, the challenges they face, the opportunities they see, and the specific training they need. Ultimately, the goal is to develop a customized training program that empowers their entrepreneurial ventures. The researcher explored this phenomenon through a qualitative research method. The target population for this study was composed of young women entrepreneurs. The study sample consisted of eight (8) participants between the ages of 18 and 35. The key instrument of data collection in the study was semi-structured interviews. The researcher subsequently analyzed the collected data though thematic analysis. The findings reveal a common thread of innovativeness and resilience among these women. Despite facing hurdles like limited access to capital, difficulty adapting to the market, competition, operational challenges, and societal biases, many startups demonstrate promising performance and significant growth potential. The study also identified opportunities such as expanding market reach and room for substantial business expansion. The young women entrepreneurs expressed a strong desire for training programs tailored to their needs. They emphasized the importance of hands-on learning methods like workshops, group discussions, case studies, and individual mentorship to support their development. This research led to the creation of a comprehensive training plan that addresses the identified skill gaps. To further support the participants, the program will be complemented by a mentorship initiative. This comprehensive approach aims to equip young women entrepreneurs with the knowledge and skills they need to navigate the complexities of entrepreneurship, ultimately contributing to the growth and sustainability of their businesses in the competitive landscape.

Keywords: *young women entrepreneurs, start-up businesses, Calamba City, Laguna, opportunities and challenges, tailored training plan*

INTRODUCTION

Nature and Scope of the Problem Investigated

Many Filipinos are drawn to starting their own businesses, especially those who come from ordinary backgrounds and want to succeed despite challenges. These stories inspire countless others to become entrepreneurs for financial freedom. For many Filipinos, becoming an entrepreneur is a way to be independent, create new things, and prosper. A recent survey showed a strong entrepreneurial spirit among Filipinos, with 78% wanting to start their own businesses for financial reasons and to support themselves (Monzon, 2023).

Starting a business in the Philippines is not easy. There can be many challenges, from money problems to personal difficulties (Velasco et al., 2016). While many Filipinos believe they can be entrepreneurs, many don't have formal training. This highlights the need for programs to help and develop entrepreneurial skills (Velasco et al., 2016). Younger Filipinos, particularly Generation Z, are entering the entrepreneurial space with a fresh perspective. Their digital fluency, openness to new ideas, and comfort with risk-taking are fueling a new wave of business ventures (MoneySense, 2023). Women are increasingly taking the leap into entrepreneurship, demonstrating confidence in their abilities to launch and run successful businesses (Velasco et al., 2016).

In Calamba City, Laguna, young women entrepreneurs have exhibited remarkable resilience and adaptability, leveraging their entrepreneurial acumen to capitalize on emerging trends and meet evolving consumer demands. Supported by collaborative networks offering mentorship and funding avenues, these entrepreneurs have thrived in the face of adversity. The study of young women entrepreneurs holds a profound fascination for me, driven by a deep sense of admiration for their achievements. Their success stories evoke within me a desire to emulate their path in the future.

Young women entrepreneurs are making a big difference in the society. Their innovative ideas, business ventures, and unwavering dedication hold the potential to drive economic growth, spur technological advancements, and foster social progress. Moreover, the positive ripple effects of their entrepreneurial endeavors extend beyond economic realms, touching the lives of individuals within their communities. Motivated by the growing presence of young women in start-up entrepreneurship and a commitment to promoting diversity in the entrepreneurial landscape, the study embarked on a journey to explore the experiences of a select group of young women entrepreneurs in Calamba City, Laguna.

Research Objectives

Given the increasing number of young women in start-up entrepreneurship, the central aim of this study was to answer this question: What are the perspectives of these young women on managing start-up businesses?

The study sought to answer the following:

1. To determine the profile of start-up entrepreneurs in terms of:
    a. Entrepreneurial traits
    b. Existing operations management practices
    c. Current business performance
2. To describe the opportunities and challenges encountered by selected start-ups owned by young women in Calamba City, Laguna;
3. To identify specific training needs that are relevant to young women entrepreneurs, especially those in the early stage of sustaining their businesses; and
4. To develop a training plan that addresses the challenges and opportunities faced by young women entrepreneurs in Calamba City, Laguna.

Framework Of the Study

Theoretical Perspectives

The study was anchored on the following theories: Entrepreneurial Trait Theory, Resource-Based Theory, and Opportunity-Based Theory. These theories offer valuable insights into understanding oneself, identifying growth strategies, and improving business performance. The conceptual framework for this study incorporates various variables reflecting the objectives and theoretical foundations.

Firstly, the **Entrepreneurial Trait Theory** guides the examination of entrepreneurial traits such as risk-taking propensity, innovation, proactiveness, and resilience among start-up entrepreneurs in Calamba City, Laguna. These traits are crucial in shaping individuals' propensity to engage in entrepreneurial activities and influence their approach to business management.

Secondly, the **Resource-Based Theory** is reflected in the consideration of existing operations management practices, including production planning, inventory management, quality control, and logistics. This theory emphasizes the significance of internal resources and capabilities in gaining competitive advantage, highlighting the importance of operational efficiencies in start-up success.

Thirdly, the **Opportunity-Based Theory** informs the exploration of opportunities and challenges encountered by young women-owned start-ups in the area. Opportunities such as market gaps, emerging trends, and external environmental factors are examined alongside challenges such as barriers, obstacles, and risks, reflecting the dynamic interplay between external factors and entrepreneurial actions.

By integrating these theoretical foundations into the conceptual framework, the study provided a comprehensive understanding of the entrepreneurial landscape in Calamba City, Laguna, and identified specific training needs relevant to young women entrepreneurs in the early stages of sustaining their businesses to achieve growth.

The assessment of entrepreneurial learning among young women start-up entrepreneurs essentially serves as the bridge between understanding the current knowledge and skills possessed by these entrepreneurs to be able to design a targeted training program that can enhance their capabilities further. This strategic approach ensures that the training program directly addresses their learning gaps and equips them with practical tools and knowledge essential for success in their entrepreneurial endeavors.

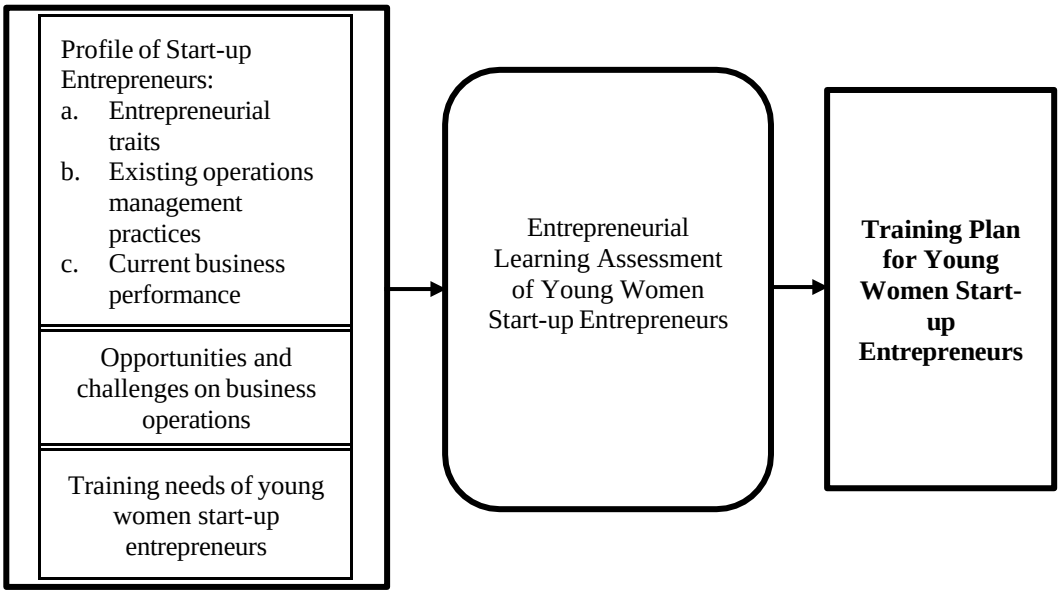


Figure 1. Research Paradigm

Philosophical Lens

Interpretivism asserts that reality is subjective, varied, and socially constructed, emphasizing that understanding someone's reality requires examining their unique experiences, shaped by historical and social perspectives. In studying start-up entrepreneurs, interpretive techniques are employed to characterize participants' profiles, focusing on their lived experiences, perceptions, and interpretations rather than solely on quantifiable data or objective realities. This approach is vital in exploring the complexities of entrepreneurial behavior, decision-making, and responses to challenges and opportunities, recognizing that these actions are influenced by individual perceptions and motivations.

For example, in a study of young women entrepreneurs in Calamba City, Laguna,

interpretivism would enable researchers to delve into how these entrepreneurs perceive and navigate the start-up landscape, uncovering insights into their traits, practices, and the contextual factors impacting their businesses. By embracing interpretivism's qualitative nature, using methods such as interviews and document analysis, researchers can capture the depth and intricacies of entrepreneurial experiences, offering valuable insights for both theory and practical support in fostering start-up success.

Scope and Limitations

The study focused on exploring the experiences of young women entrepreneurs in Calamba City, Laguna through a qualitative research method such as interviews. While the qualitative approach provided rich insights into the challenges and opportunities faced by these entrepreneurs, the sample size was limited to eight participants aged between 18 and 35. This narrow focus may restrict the generalizability of the findings to a broader population of young entrepreneurs in the area.

Additionally, the study aimed to provide in-depth insights rather than statistical generalizations, emphasizing the need for further research to encompass a more diverse range of perspectives and experiences. Despite these limitations, the study offers valuable insights and a foundation for future exploration and support for women entrepreneurs in Calamba City, Laguna.

Operational Definition of Terms

Start-up Entrepreneurship. As used in the study, it refers to business ventures which just opened and established with the goal of expansion and growth in Calamba City.
Start-up Entrepreneurs. They refer to those individuals who just established a business in Calamba City and are on the process of knowledge acquisition and orientation as far as business enterprise is concerned.
Training Program. This refers to the designed output that addresses training needs of start-up entrepreneurs in their business operations.
Women Entrepreneurship. This encompasses the activities that women entrepreneurs in Calamba City undertake from conceptualizing the business, establishing and coordinating its operations, mobilizing and managing resources, assuming risks, and navigating the economic uncertainties inherent in its operation.
Young Entrepreneurs. These are young adults in Calamba City, Laguna whose age ranges from 18-35 years old who initiated start-up businesses.

METHODOLOGY

Research Design

This qualitative study utilized a phenomenological design to explore the

experiences of eight young women entrepreneurs in Calamba City, Laguna. The aim was to gain insights into their entrepreneurial profiles, challenges, and training needs.

Research Setting

The study was conducted in Calamba City, Laguna, known for its growing start-up ecosystem and industrial presence within the CALABARZON region.

Participants

Purposive sampling was employed to select eight young women entrepreneurs aged 18 to 35, operating start-up businesses in Calamba City.

Instrumentation

Semi-structured interviews were conducted using an interview guide to collect data on entrepreneurial traits, operational challenges, and training needs.

Data Construction and Analysis

During the interviews, key terms were clarified to ensure participant understanding. Thematic analysis was then applied to the collected data to identify recurring patterns and themes related to the research objectives.

RESULTS AND DISCUSSION

Profile of Start-Up Entrepreneurs

Entrepreneurial Traits

The entrepreneurial traits and skills identified by the participants highlight key factors that contribute to entrepreneurial success in various industries. Their insights resonate with established concepts in entrepreneurship literature and reflect broader trends observed in entrepreneurial studies. Based on the themes that surfaced, the participants exhibited **innovativeness** and **resilience**. They mentioned words and phrases like **everything is unique**, **creative**, and **we always find ways to improve them**. Their focus on innovation and customer connection aligns with findings by Baron and Tang (2011), which highlight creativity as a critical factor for entrepreneurial success, particularly in consumer-centric industries. Many highlighted their ability to persevere through challenges and pivot their business strategies in response to changing circumstances. The words and phrases they frequently used were **flexible**, **adaptable**, **ability to adapt and persevere**, and **I don't know when to give up**. This is a critical attribute in entrepreneurship, as indicated by Bullough et al. (2014), who discuss the importance of resilience in navigating business challenges. Their emphasis on adaptability and perseverance is key to sustaining and growing a business in a

competitive market. The emphasis on not giving up and facing challenges head-on is indicative of the grit and resilience necessary for long-term success in entrepreneurship.

Operational Practices

The operational practices of the start-up ventures varied, but common strategies included leveraging digital platforms for marketing and sales, fostering customer relationships through personalized experiences, and implementing agile decision-making processes. In exploring the operational practices of various entrepreneurs, it becomes evident that customer service is foundational to their business strategies which stemmed to the key theme **establishing rapport with the customers**. The phrases used were **I talk to people**, **I take care of them**, **they become our friends**, **we get closer**, and **I listen to them**. Key Informant 5 even highlighted focusing on active listening and accepting feedback as key components of exceptional customer service. She believes that understanding and responding to customer needs are paramount for long-term success, echoing the principles of customer relationship management. She states, *"Yes... accepting feedback, I think. That's a skill that an owner should have."* This aligns with the customer-oriented strategy in business, which underscores the importance of understanding and responding to customer needs, a concept widely explored in customer relationship management literature (Payne and Frow, 2013).

Business Performance

Despite facing initial hurdles, the majority of participants reported positive business performance indicators, such as revenue growth, customer acquisition, and brand recognition. The common theme that surfaced among the participants was **rapid capital recovery**. They uttered phrases such as **we're doing well**, **quick return on investment**, **exponential growth**, **very good performance**, **above expectations**, **huge returns**, **fast recoup of investment**, **it's going well**, and **exceeded my expectations**. These businesses were established during the pandemic and such growth trajectory in the post-pandemic market is a testament to the businesses' ability to adapt and meet evolving customer needs. The participants' aspiration to continue this adaptive approach aligns with the strategic agility concept, which is essential for businesses to thrive in dynamic environments, as discussed by Doz and Kosonen (2010). The current business performance and future aspirations of these entrepreneurs reflect a dynamic and forward-looking approach in their respective fields. Each entrepreneur exhibits a unique perspective on business growth, operational efficiency, and customer engagement, which are fundamental components of successful business strategies. These statements indicate that the businesses mentioned are thriving, exceeding expectations, and maintaining financial stability, reflecting positive outcomes and achievements in their operations.

Opportunities and Challenges Encountered by Young Women Start-Up Entrepreneurs

Opportunities

The biggest opportunities identified by these entrepreneurs in the Calamba City market reflect their understanding of market trends, customer preferences, and the importance of strategic expansion and innovation. Based on the themes that surfaced, the participants identified opportunities such as **expanding market reach** and **business expansion**. They mentioned phrases like **to expand and reach more audiences**, **audience extension**, and **to reach a wider audience**. Most participants highlighted leveraging social media to reach a wider audience. This approach reflects the increasing importance of digital marketing and e-commerce in modern business strategies (Kotler & Keller, 2016). Moreover, Key Informant 2 underscored the importance of an online presence for business expansion. This reflects the strategic importance of digital platforms in expanding market reach and enhancing customer engagement (Chaffey & Ellis-Chadwick, 2019). They often used words and phrases such as **branch out to new locations**, **to be able to franchise**, and **franchising**. Franchising emerged as a prominent code, with several key informants recognizing it as a viable strategy for business growth. Franchising provides a structured way of expanding while mitigating risks, a strategy well-regarded in entrepreneurial literature (Segreto, 2022).

Challenges

The main challenges faced by these young women entrepreneurs in Calamba City, along with societal and cultural factors impacting their experiences, reflect a blend of external market conditions and internal business dynamics. Based on the accounts of the participants, the emerging themes were **dealing with business competitors** and **handling common business scams**. These challenges underscore the importance of market understanding, adaptability, and effective business management in the entrepreneurial landscape. The codes generated were **understanding customers**, **identifying customer preferences**, **imitative strategy**, **affordable pricing**, **e-commerce fraudsters**, and **advance-fee fraud**. Key Informant 3 highlights the challenge of introducing a unique cuisine to a market that may be unfamiliar with it. She focuses on expanding her restaurant by opening more branches, intending to blend Vietnamese and Filipino tastes. However, her goal highlights the challenge of maintaining authenticity while adapting to local tastes, a concept supported by the localization strategy in international business (Kotler & Keller, 2016). Additionally, the quote: *"So far, there are those who want to imitate us. Because even our logo has been copied."* suggests a cultural factor where copying successful businesses is seen as a viable strategy. This can be discouraging for young entrepreneurs who invest in creating unique brands and menus. Key Informant 4 addresses the challenges of stiff competition and managing fluctuating customer tastes. This reflects the dynamic nature of the marketplace and the need for continuous innovation and adaptability. Lastly, Key Informant 7 shared a clear encounter with unreliable suppliers which underscores the operational challenges many entrepreneurs face, resonating with the operational risk management strategies

discussed by Brigham and Ehrhardt (2013). Her proactive strategy of switching suppliers and maintaining a positive outlook exemplifies the resilience and adaptive problem-solving skills essential for entrepreneurs, as discussed by Bullough et al. (2014).

Training Needs That Are Relevant to Young Women Start-Up Entrepreneurs

Based on participants' feedback, key support methods identified were **business support groups**, **awareness campaigns for startups**, **workshops**, and **mentorship**. These entrepreneurs seek tailored training programs focusing on crucial areas like financial management, marketing, and networking. Mentorship and funding access were highlighted as critical resources for business growth and sustainability. Key Informant 5 emphasized the value of collaborative marketing efforts within women's groups to enhance business influence. The importance of experiential learning through workshops and mentorship programs was underscored by Key Informant 1 and Key Informant 3, emphasizing practical knowledge and continuous support for skill development and company expansion.

Research supports the effectiveness of experiential learning methods like workshops and mentorship in fostering entrepreneurial competencies and venture success, enhancing problem-solving skills, creativity, and adaptability, and fostering a sense of community among entrepreneurs. Integrating these methods into training programs can enhance support initiatives for women entrepreneurs.

Table 1. Training Plan for Young Women Entrepreneurs

Training Module	Objectives	Content	Methodology	Duration
1. Entrepreneurial Mindset and Resilience	Develop a growth mindset, resilience, and adaptability to overcome challenges in the entrepreneurial journey	• Understanding the importance of a growth mindset and resilience • Identifying personal strengths and areas for improvement • Developing strategies for coping with challenges and setbacks	• Interactive workshops • Group discussions • Personal reflection exercises	4 hours

Training Module	Objectives	Content	Methodology	Duration
2. Market Research and Analysis	Conduct market research, analyze market trends, and identify opportunities for business growth	• Understanding the importance of market research • Learning techniques for conducting market research and analysis • Identifying market opportunities and threats	• Lectures • Case studies • Group projects	6 hours
3. Financial Management for Entrepreneurs	Manage finances, budgeting, and financial planning for business success	• Understanding financial statements and reports • Developing a financial plan • Managing cash flow and budgeting	• Lectures • Group discussions • Practical exercises	6 hours
4. Marketing and Branding Strategies	Develop marketing and branding strategies to reach a wider audience and increase business visibility	• Understanding the importance of branding and marketing • Developing a marketing plan • Utilizing social media and online platforms for marketing	• Lectures • Group discussions • Practical exercises	6 hours
5. Business Strategy and Planning	Learn how to develop a strategic plan for business growth and expansion	• Understanding the importance of strategic planning • Developing a strategic plan for business growth • Identifying key performance indicators and monitoring progress	• Lectures • Group discussions • Practical exercises	6 hours
6. Daily Business Operations	Learn how to manage daily business operations, including administrative tasks, customer service, and HR	• Understanding the importance of daily business operations • Learning techniques for managing administrative tasks, customer service, and HR	• Lectures • Group discussions • Practical exercises	6 hours

Training Module	Objectives	Content	Methodology	Duration
		• Utilizing technology and tools for efficient business operations		
7. Passion and Personal Interest in Business	Explore how to leverage passion and personal interests in business to drive motivation and success	• Identifying personal passions and interests • Aligning business ideas with personal interests • Harnessing passion for business growth and sustainability	• Self-assessment exercises • Case studies • Group discussions	4 hours
8. Mentorship Program	Provide mentorship opportunities for young women entrepreneurs to receive personalized guidance and support from experienced entrepreneurs	• Pairing young women entrepreneurs with experienced mentors • Providing regular check-ins and feedback sessions • Giving practical guidance and support	• One-on-one mentorship • Group discussions • Practical exercises	12 hours (over 3 months)

The training plan is designed to provide young women entrepreneurs with the skills, knowledge, and support they need to succeed in their entrepreneurial journey. The training modules are based on the themes and codes identified from the key informants' statements. The training plan is designed to be flexible and adaptable, allowing for individualized learning and growth. The training modules can be customized to meet the specific needs and goals of each young woman entrepreneur, ensuring that they receive the support and guidance they need to thrive in their business ventures.

Summary of Findings

1. **Profile of Start-up Entrepreneurs:** Young women entrepreneurs in Calamba City exhibited traits of innovativeness and resilience, showcasing their ability to navigate challenges and capitalize on opportunities in the entrepreneurial landscape. Their diverse operational practices reflected a blend of traditional methods and technological advancements, highlighting their adaptability and strategic approach to business management.

2. **Opportunities and Challenges Encountered by Start-ups:** The entrepreneurs identified opportunities such as expanding market reach, leveraging social media for audience engagement, and exploring franchising as a growth strategy. Challenges included competition, business scams, and societal biases, emphasizing the importance of market understanding, adaptability, and effective business management in their entrepreneurial journey.

3. **Training Needs of Young Women Entrepreneurs:** The study underscored the training needs of young women entrepreneurs, emphasizing the necessity for tailored programs in financial management, marketing strategies, networking skills, mentorship, and funding access. Participants highlighted the value of hands-on learning methods like workshops, group discussions, case studies, and individual mentorship to enhance their entrepreneurial capabilities and support their business development.

4. **Development of a Training Plan:** A comprehensive training plan has been created for young women entrepreneurs in Calamba City, addressing their specific needs through modules on financial management, marketing, and personal interests. The program utilizes diverse methodologies to maximize effectiveness, considering time constraints and aiming to equip participants with the knowledge and skills for entrepreneurial success.

Conclusions

1. Young women entrepreneurs in Calamba City exhibit innovativeness and resilience indicating a promising entrepreneurial landscape in the region. Many start-ups have expanded successfully, demonstrating their growth potential despite operational management differences.

2. Young women entrepreneurs confront hurdles such as limited financial access, market adaptability, competitiveness, operational issues, and societal biases, despite opportunities like market demand for distinctive products/services and growth potential. Creating a helpful entrepreneurial environment requires addressing these difficulties.

3. The demand for customized training programs highlights the need to address skill gaps in financial management, marketing, networking, mentorship, and funding for young women entrepreneurs. They enjoy hands-on learning through workshops, group discussions, case studies, and mentorship, which can help them navigate entrepreneurship.

4. A customized training strategy for young women entrepreneurs in Calamba City is crucial for bridging skill shortages and promoting growth and sustainability. The training program includes modules on entrepreneurial mindset, market research, financial management, marketing strategies, business planning, daily operations, and leveraging personal interests, as well as a mentorship program. Multiple

methods accommodate diverse learning styles and time restrictions for optimal effectiveness and relevance.

Recommendations

This study provides valuable insights into young women entrepreneurs in Calamba City, but there's an opportunity to delve deeper and address these identified gaps through the following recommendations: **continuous learning opportunities**, **networking and collaboration**, **feedback and evaluation mechanisms**, **long-term career development plans**, and **future research**. The enhancement of women's entrepreneurship in Calamba City, Laguna requires a multifaceted approach involving education, practical support, research, and policy changes. By addressing these recommendations, there is potential to not only support women entrepreneurs but also to contribute to economic development and gender equality.

Compliance with Ethical Standards

High ethical standards were maintained throughout the duration of the study. To ensure strict adherence to ethical considerations, the following measures were implemented:

- Informed consent and assent were obtained from the respondents by clearly presenting to them their role in participating and allowing them to voluntarily sign the informed consent and assent form;
- The risk of harm to respondents was minimized by strictly adhering to safety protocols against the transmission of COVID-19 and other viruses;
- The confidentiality and anonymity of the respondents were safeguarded by preventing unauthorized access to their personal information and the collected responses. Therefore, real names were not revealed for security and privacy of the companies used;
- The research was conducted truthfully and honestly with the sole objective of doing research and without intending to deceive any respondents; and
- The respondents were afforded the right and freedom to withdraw from participating in the study if they feel uncomfortable or unwilling to continue.

REFERENCES

Baron, R. A., & Tang, J. (2011). The role of entrepreneurs in firm-level innovation: Joint effects of positive affect, creativity, and environmental dynamism. Journal of Business Venturing, 26(1), 49-60. https://www.sciencedirect.com/science/article/pii/S0883902609000603.

Brigham, E. F., & Ehrhardt, M. C. (2013). *Financial management: Theory and practice*. Cengage Learning.

Bullough, A., Renko, M., & Myatt, T. (2014). Danger zone entrepreneurs: The importance of resilience and self-efficacy for entrepreneurial intentions. Entrepreneurship Theory and Practice, 38(3), 473-499.

https://journals.sagepub.com/doi/abs/10.1111/etap.12006.
Chaffey, D., & Ellis-Chadwick, F. (2019). Digital Marketing. Pearson Education. https://www.pearson.com/en-gb/subject-catalog/p/digital-marketing/P200000003911/9781292241623.
Doz, Y. L., & Kosonen, M. (2010). Embedding Strategic Agility: A Leadership Agenda for Accelerating Business Model Renewal. Long Range Planning 43(s 2–3):370–382. https://doi.org/10.1016/j.lrp.2009.07.006.
Kotler, P., & Keller, K. L. (2016). Marketing Management. Pearson Education. https://www.edugonist.com/wp-content/uploads/2021/09/Marketing-Management-by-Philip-Kotler-15th-Edition.pdf.
MoneySense. (2023, March 30). *Millennials and gen zs: Redefining the future of entrepreneurship*. MoneySense Philippines. https://www.moneysense.com.ph/millennials-and-gen-zs-redefining-the-future-of-entrepreneurship/.
Monzon, A.M. (2023, May 26). 78% of Pinoys prefer to be entrepreneurs. INQUIRER.net. https://business.inquirer.net/402666/78-pinoys-prefer-to-be-entrepreneurs.
Payne, A., & Frow, P. (2013). Strategic Customer Management: Integrating Relationship Marketing and CRM. Cambridge University Press. https://doi.org/10.1017/CBO9781139057417.
Segreto, P. (2022, April 12). Opinions, Insights & Perspectives on Franchising. LinkedIn. https://www.linkedin.com/pulse/opinions-insights-perspectives-franchising-paul-segreto/.
Velasco, A., Castillo, P., Conchada, M., Gozun, B., Largoza, G., Perez, J., & Sarreal, E. (2016). Entrepreneurship in the Philippines: 2014 Report [Review of Entrepreneurship in the Philippines:2014 Report]. In Global Entrepreneurship Monitor (p.44). De La Salle University Publishing House. https://www.gemconsortium.org/report/gem-philippines-2014-report.

APA Citation:

Sanchez, F. N. O., & Elomina, M. J. Q. (2024). EXPLORING THE ENTREPRENEURIAL ACUMEN OF YOUNG WOMEN START-UP ENTREPRENEURS IN CALAMBA CITY, LAGUNA. Ignatian International Journal for Multidisciplinary Research, 2(8), 96–109. https://doi.org/10.5281/zenodo.13157301

sanchez_4200022@letran-calamba.edu.ph
jqelomina@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

FORMULATION OF CALAMANSI (*Microcarpa*) SOAP ENHANCED WITH BLUE TERNATE FLOWER (*Clitoria ternatea*)

Rebecca Ruiz-Apoy, LPT, MAIE

Cabatuan National High School, Isabela, Philippines

https://doi.org/10.5281/zenodo.13575132

ABSTRACT

This study explored the formulation and development of Calamansi *(Microcarpa)* Bath Soap enhanced with Blue Ternate Flower *(Clitoria ternatea)* extracts, utilizing three different treatments. An experimental design was employed, complemented by descriptive methods to evaluate consumer satisfaction. The study involved sensory evaluation by 30 participants across various age groups, assessing key attributes such as hardness, cleansing, lathering, conditioning, fragrance, and color. Results indicated that Treatment 1 was highly acceptable, particularly among teenagers, and demonstrated strong potential for commercial production. The soap was confirmed safe for use, showing no significant microbial presence, including Staphylococcus aureus and Escherichia coli. Based on these findings, recommendations were made to optimize product formulation, tailor marketing strategies, and conduct further research to enhance product appeal across different consumer segments. This research underscores the soap's market viability and highlights the importance of consumer-centered product development.

Keywords: *Calamansi Bath Soap, Blue Ternate Flower, Experimental Design, Consumer Satisfaction, Product Development*

INTRODUCTION

The increasing demand for natural and eco-friendly personal care products has led to the exploration of novel ingredients and formulations in the cosmetic industry. This

research investigates the development of calamansi soap enhanced with blue ternate flower extracts, aiming to harness the potential benefits of these botanical ingredients in soap production. Soap is a vital personal care product, essential for cleansing and maintaining the skin's hydrolipidic film, which is crucial for moisturizing and protecting the skin (Draelos, 2012). Mild soaps, in particular, are beneficial for dry and sensitive skin, as they clean without stripping away natural oils, leaving the skin feeling refreshed and soothed (Ananthapadmanabhan et al., 2004).

Bath soaps, available in both bar and liquid forms, are indispensable household necessities used daily by consumers (Ildefonso, 2018). They not only cleanse but also help in managing skin problems and maintaining hygiene by eradicating germs (Hodgson, 2015). Traditional soaps, however, often have a high pH level of 9 to 10, which can disrupt the skin's natural pH of 4 to 5, potentially leading to issues like acne and dryness (Ehlers et al., 2001). Thus, there is a growing interest in soaps made from fruits and vegetables, which offer additional benefits such as vitamins and antioxidants that rejuvenate, whiten, and moisturize the skin (Brinkman et al., 2021).

Calamansi, scientifically known as *Citrus microcarpa*, is a small citrus fruit native to Southeast Asia, renowned for its high vitamin C content and antioxidant properties (Algas Alker, 2022; Cheong et al., 2012). Calamansi juice is believed to have various health benefits, including soothing acidity, promoting collagen production, aiding in weight loss, and improving skin health by offering an ascorbic acid burst necessary for tissue development and repair (Tammisetti, 2019). Its chemical composition includes citric acid, which imparts its sour flavor, essential oils that provide aromatic qualities, and flavonoids known for their antioxidant capabilities (Cheong et al., 2012). Additionally, calamansi contains polyphenols with anti-inflammatory properties and moderate levels of tannins, which contribute to its slightly bitter taste (Shahidi & Ambigaipalan, 2015).

The blue ternate flower, *Clitoria ternatea*, is a vibrant flower found in tropical regions, recognized for its rich anthocyanin content, which provides a deep blue hue and potent antioxidant properties (Jain et al., 2013). Traditionally used in Southeast Asian cuisine to color and flavor dishes, the blue ternate flower is also known for its medicinal applications, including diuretic, antibacterial, anti-inflammatory, and antioxidant effects (Mukherjee et al., 2008). It contains bioactive compounds such as flavonoids, alkaloids, and triterpenoids, which contribute to its potential health benefits, including improved blood circulation, enhanced vision, and revitalized skin and hair (Dizon, 2014).

This study seeks to develop a "Blue-Mansi" bath soap, combining the beneficial properties of calamansi and blue ternate flower extracts. The abundance of calamansi in the Municipality of Aurora and its neighboring town of Cabatuan Isabela provides a sustainable source for this endeavor. The oversupply of calamansi often leads to wastage, making this initiative economically and environmentally viable (Bayani, 2020). Meanwhile, the blue ternate flower, though often overlooked, offers numerous health benefits and the potential for broader use in personal care products (Lim, 2016).

By incorporating these natural extracts into soap, the resulting product is anticipated to exhibit enhanced antioxidant, anti-inflammatory, and skin-nourishing

properties. This study also aims to assess the feasibility of the developed soap through sensory evaluation by potential consumers and laboratory testing for its antimicrobial properties, conducted by a government regulatory agency. The innovative Blue-Mansi bath soap represents a competitive alternative to high-priced commercial soaps, offering natural skincare benefits suitable for personal, commercial, and industrial use (Kumar & Bhardwaj, 2018).

Research Questions

This study aimed to develop calamansi bath soap enhanced with blue ternate flower extracts. Specifically, it sought to answer the following questions:

1. What are the processes involved in formulating Blue-Mansi bath soap in terms of the following treatments:
   a. Treatment 1: Using 20 ml calamansi extract, 20 ml blue ternate flower, 59 grams of caustic soda, 150 ml water, and 330 ml coconut oil.
   b. Treatment 2: Using 15 ml calamansi extract, 15 ml blue ternate flower, 59 grams of caustic soda, 150 ml water, and 330 ml coconut oil.
   c. Treatment 3: Using 10 ml calamansi extract, 10 ml blue ternate flower, 59 grams of caustic soda, 150 ml water, and 330 ml coconut oil.
2. What is the degree of consumer acceptability of calamansi bath soap enhanced with blue ternate flower extracts in three treatments in terms of:
   (a) hardness, (b) cleansing, (c) lathing, (d) conditioning, (e) fragrance, and (f) color?
3. Is there a significant difference in the general level of acceptability of the three treatments of calamansi bath soap enhanced with blue ternate flower extracts as perceived by the following group of respondents (a) teenagers, (b) adults, and (c) experts?
4. What is the antibacterial analysis of the calamansi bath soap enhanced with blue ternate flower extracts?

METHODOLOGY

Method of Research Used

The study used an experimental design. The experimental method is a systematic and scientific approach to research in which the researcher manipulates one or more variables, and controls and measures any change in other variables. Moreover, the descriptive method was also used since the respondents completed a survey questionnaire to find out the level of their satisfaction with the developed products.

Materials

The following tools, equipment, and ingredients shall be used during the conduct of the study. Preparatory tools, measuring tools, mixing tools, weighing tools, and curing tools and equipment are used during the conduct of the study as shown in the table below.

Table 1. Tools and equipment used in the development of calamansi bath soap enhanced with blue ternate flower extract

Description				
Preparatory Tools	Measuring Tools	Mixing Tools	Weighing Tools	Curing Tools
Pale	Measuring spoon	Wire whisk	Weighing scale	Curing Rack
Mixing Bowl	Measuring cup	Mixing bowls		Wax paper
Molder				
Hand gloves				

Ingredients

The table below shows the ingredients used in the making of Calamansi bath soap enhanced with blue ternate flower extracts.

Table 2. Ingredients used in developing blue-Mansi bath soap with three treatments

Ingredients	Measurement		
	Treatment 1	Treatment 2	Treatment 3
Caustic Soda	59 grams	59 grams	59 grams
Water	150 ml	150 ml	150 ml
Coconut Oil	330 ml	330 ml	330 ml
Calamansi Extract	20 ml	15 ml	10 ml
Blue Ternate Flower Extract	20 ml	15 ml	10 ml

Data Gathering Instruments

The instrument for data gathering was a score sheet using a quantitative analysis method to determine the acceptability of the products. The responses as to the level of acceptability of the calamansi bath soap enhanced with blue ternate flower extract in terms of *hardness, cleansing, lathing, conditioning, fragrance*, and *color* were determined with the use of a Five-point Likert scale as follows:

Table 3. Scale and Numerical Rating on the acceptability of the Blue-Mansi bath soap

Scale	Numerical Rating	Descriptive Rating
5	4.20 - 5.00	Highly Acceptable
4	3.40 – 4.19	Moderately Acceptable
3	2.60 – 3.39	Acceptable
2	1.80 – 2.59	Slightly Acceptable
1	1.00 – 1.79	Not Acceptable

Data Gathering Procedure

In compliance with research ethics, the researcher prepared a letter addressed to the Teacher III and the Senior High School Focal Person of Cabatuan National High School, Isabelo L. Visaya Jr., Head to seek permission for the conduct of the study as well as to float the evaluation/score sheet particularly designed for the study.

Samples were brought to the Department of Science and Technology (DOST) RO2, Tuguegarao City for microbial analysis.

Upon approval, the Research Aide personally distributed the soaps accordingly. The RA systematically grouped them and visited them for skin effects weekly regarding the experiences/feedback of the respondents. Results were all recorded in the score sheets

From the accomplished score sheets, the scores were tallied, classified, organized, and presented in a tabular form to facilitate in-depth analysis and interpretation of data.

Sensory Evaluation

The finished products were subjected to sensory evaluation. Thirty (30) evaluators from various age groups were selected and properly oriented on what and how to evaluate the products using a score code. The samples were given to the chosen evaluators for evaluation purposes.

Consequently, the evaluators tried the samples from each treatment. Data on the *hardness, cleansing, lathing, conditioning*, *fragrance*, and *color* of each developed product were collected and coded for statistical analysis.

The evaluations and comments were recorded into a designed scorecard. Visitations were done weekly (Monday morning) to record the skin effects and it was done in three weeks. It was suggested that the soap be used daily to ensure fair and just evaluation.

Data Gathering Analysis and Statistical Tools Used

All data were gathered through questionnaires and evaluation forms were administered to the evaluators. The variables were analyzed and interpreted through the Statistical Package for Social Science (SPSS).

RESULTS AND DISCUSSION

Product Development

The soap-making procedure used by Ildefonso (2018) was adapted in the formulation of Blue-Mansi soap. Measurements of caustic soda and coconut oil were same in her study “Development of Calamansi-based Bath Soap” to produce 6 at 100 grams bar. Modifications were made to the weighs to extracts as the researcher saw potentials of Blue Ternate flower in making bath soap. The procedure is listed below step by step.

Procedure

To create the soap, begin by dissolving 59 grams of caustic soda flakes in 147 grams of water, stirring continuously until the mixture is completely dissolved and has cooled. Next, add calamansi and blue ternate flower extract separately, continuing to stir the solution for 20 minutes. Once mixed, gradually incorporate 350ml of oil, ensuring to stir in a single direction for 45 minutes. After thorough mixing, pour the solution into molds and allow it to cool and harden for 24 hours. Following the solidification, remove the soap from the molds and let it age for 20 days to eliminate any potential irritation effects from the caustic soda. Once the aging process is complete, the soaps are ready for laboratory testing, distribution, and evaluation.

Through these stages of development, careful observation and analysis were done to come up with the Blue-Mansi Soap.

The following are the processes, procedures, and methods performed during the formulation of the product:

A. Lye Preparation

1. Measure Caustic Soda and Water
2. Dissolve Caustic Soda to Water
3. Leave Lye to cool within 24 hours

B. Blue Ternate Flower Preparation

1. Harvesting of fresh Blue Ternate Flowers in the morning

2. Wash thoroughly the Blue Ternate Flowers before extracting
3. Use a blender to extract the Blue Ternate Flowers

C. Calamansi Fruit Preparation

1. Harvesting Matured Calamansi
2. Wash thoroughly the harvested Matured Calamansi Fruit
3. Slicing the calamansi into halves.
4. Squeeze the calamansi fruit to extract, be sure to wash your hands before extracting.

D. Blue-Mansi Soap Preparation

1. Mix calamansi extract blue ternate flower extract and coconut oil in a mixing bowl.
2. Mix the solution for 5 minutes.
3. Pour the 206 grams of cooled lye then mix until dense or thickened, it could only be achieved by stirring continuously for 45 minutes.
4. When the mixture of blue-Mansi soap is already dense, pour it into the soap molder, then harden for 24 hours.
5. After 24 hours, remove it from the soap molder by unmolding it.
6. Cure for 20-30 days. The process will remove the irritation effects of caustic soda.

Consumer's Acceptability of Calamansi Bath Soap Enhanced with Blue Ternate Flower Extracts

Table 4. Degree of consumer's acceptability of calamansi bath soap enhanced with blue ternate flower extracts in three treatments (Treatment 1)

Respondents						
Evaluation Criteria	Teenagers	Description	Adult	Description	Expert	Description
Hardness	5.00	Highly Acceptable	4.70	Highly Acceptable	5.00	Highly Acceptable
Cleansing	5.00	Highly Acceptable	5.00	Highly Acceptable	4.60	Highly Acceptable
Lathing	4.90	Highly Acceptable	4.30	Moderately Acceptable	4.50	Highly Acceptable
Conditioning	5.00	Highly Acceptable	4.50	Highly Acceptable	4.70	Highly Acceptable
Fragrance	4.70	Highly Acceptable	3.90	Moderately Acceptable	4.00	Moderately Acceptable
Color	4.60	Highly Acceptable	4.60	Highly Acceptable	4.70	Highly Acceptable
Overall Mean	4.867	Highly Acceptable	4.5	Highly Acceptable	4.583	Highly Acceptable

As can be gleaned from the table, data suggests that the Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts in Treatment 1 was *highly acceptable* to the target consumer groups: teenagers, adults, and experts with an overall mean of 4.65.

In terms of hardness, the soap's hardness received an overall mean of 4.90 and was *highly acceptable* to all three groups, indicating that consumers find the soap's texture to be satisfactory.

With regard to cleansing, the soap's cleansing ability was *highly acceptable* to all three groups with a general mean of 4.87, implying that it effectively cleans the skin according to consumer expectations.

In the matter of lathering, while teenagers with a mean of 4.90 and experts with a mean of 4.50 found the lathering ability *highly acceptable*, adults rated it *moderately acceptable*. This suggests that the soap's lathering might be more preferred by younger users and experts, while adults have a slightly lower preference for this aspect.

As to conditioning, the soap's conditioning properties were *highly acceptable* to all three groups as shown by the overall mean of 4.73, indicating that it provides satisfactory moisturization and softness to the skin.

Regarding the fragrance, with a mean of 4.70, teenagers found the fragrance *highly acceptable*, while adults and experts rated it *moderately acceptable* with a mean of 4.5 and 4.583, respectively. This indicates that the scent of the soap may be more appealing to younger users compared to adults and experts.

In terms of color, with an overall mean of 4.63, the soap's color received *highly acceptable* ratings from all three groups, suggesting that consumers find the visual appearance of the soap appealing.

Overall, the Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts in Treatment 1 was well-received across various aspects by the target consumer groups. It demonstrates *high acceptability* in terms of hardness, cleansing, conditioning, color, and overall mean rating. However, there is a slight variation in preferences for lathering and fragrance among the different groups, with teenagers generally showing higher satisfaction in these areas compared to adults and experts. This information can be valuable for further product development and marketing strategies, considering the target audience's preferences and expectations.

Table 5. Degree of consumer's acceptability of calamansi bath soap enhanced with blue ternate flower extracts in three treatments (Treatment 2)

Respondents						
Evaluation Criteria	Teenagers	Description	Adult	Description	Expert	Description
Hardness	4.90	Highly Acceptable	4.30	Moderately Acceptable	4.80	Highly Acceptable
Cleansing	4.90	Highly Acceptable	4.50	Highly Acceptable	4.60	Highly Acceptable
Lathing	4.80	Highly Acceptable	3.90	Moderately Acceptable	4.30	Moderately Acceptable
Conditioning	5.00	Highly Acceptable	4.10	Moderately Acceptable	4.30	Moderately Acceptable
Fragrance	4.70	Highly Acceptable	3.80	Moderately Acceptable	4.20	Moderately Acceptable
Color	4.70	Highly Acceptable	4.00	Moderately Acceptable	4.30	Moderately Acceptable
Overall Mean	4.833	Highly Acceptable	4.1	Moderately Acceptable	4.17	Moderately Acceptable

As can be seen in the table, data for Treatment 2 suggests that the degree of consumer acceptability of Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts varies among different groups. With a general mean of 4.37, the product is *moderately.*

With regard to hardness, the soap's hardness was *highly acceptable* to teenagers and experts with a mean of 4.90 and 4.80, respectively. However, adults rated 4.30, thus, for them, it is *moderately acceptable.* This indicates that teenagers and experts find the soap's texture satisfactory, while adults have a slightly lower preference in terms of hardness.

As to cleansing, the soap's cleansing ability received *highly acceptable* ratings from all three groups as evidenced by a general mean of 4.67, suggesting that it effectively cleans the skin according to consumer expectations.

In terms of lathering, teenagers with a mean of 4.80 found the soap's lathering ability *highly acceptable*, while adults rated 3.90 and experts rated 4.30 showing that it is *moderately acceptable* for them. This implies that younger users and experts generally prefer the soap's lathering, while adults have a slightly lower preference in this aspect.

With reference to conditioning, the soap's conditioning properties were *highly acceptable* to teenagers as indicated by a mean of 5.00. However, having a mean of 4.10 and 4.30, respectively, adults and experts rated it *moderately acceptable*. This suggests that the soap provides satisfactory moisturization and softness to the skin according to teenagers and experts, but adults have a slightly lower preference in this regard.

Concerning fragrance, teenagers rated the soap's fragrance *highly acceptable* as shown by a mean of 4.70, while adults with a mean of 3.80, and experts with a mean of 4.20 rated it *moderately acceptable*. This indicates that the scent of the soap is more appealing to teenagers compared to adults and experts.

In respect to color, the soap's color received *highly acceptable* ratings from teenagers with a mean of 4.70, while adults and experts both having a mean of 4.30 rated it *moderately acceptable*. This suggests that teenagers and experts find the visual appearance of the soap appealing, while adults have a slightly lower preference in terms of color.

In general, the Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts in Treatment 2 is *highly acceptable* to teenagers, receiving high ratings across all evaluation criteria as exhibited by a mean of 4.833. However, adults and experts find the soap to be *moderately acceptable*. The soap performs well in terms of hardness, cleansing, lathering, conditioning, fragrance, color, and the overall mean rating according to teenagers. Adults and experts, on the other hand, have slightly lower ratings in several aspects, particularly in lathering, fragrance, and conditioning. This indicates that the soap may not fully meet the preferences and expectations of adults and experts compared to teenagers.

Table 6. Degree of consumer's acceptability of calamansi Bath Soap Enhanced with Blue Ternate Flower Extracts in Three Treatments (Treatment 3)

Respondents						
Evaluation Criteria	Teenagers	Description	Adult	Description	Expert	Description
Hardness	4.90	Highly Acceptable	4.00	Moderately Acceptable	4.60	Highly Acceptable
Cleansing	4.70	Highly Acceptable	4.10	Moderately Acceptable	4.50	Highly Acceptable
Lathering	4.60	Highly Acceptable	3.70	Moderately Acceptable	4.00	Moderately Acceptable
Conditioning	4.90	Highly Acceptable	3.70	Moderately Acceptable	4.40	Moderately Acceptable
Fragrance	4.80	Highly Acceptable	3.40	Moderately Acceptable	4.20	Moderately Acceptable
Color	4.70	Highly Acceptable	3.50	Moderately Acceptable	4.50	Highly Acceptable
Overall Mean	4.767	Highly Acceptable	3.733	Moderately Acceptable	4.367	Moderately Acceptable

The data for Treatment 3 suggests that the degree of consumer acceptability of Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts varies among different groups. With these, for the respondents, the product using Treatment 3 is *moderately acceptable* with a grand mean of 4.289.

As to its hardness, the soap was *highly acceptable* to teenagers with a mean of 4.90, and experts with a mean of 4.60. However, adults rated it *moderately acceptable* with a mean of 4.00. This indicates that teenagers and experts find the soap's texture satisfactory, while adults have a slightly lower preference in terms of hardness.

In terms of the soap's cleansing ability, it received *highly acceptable* ratings from teenagers having a mean of 4.70, and experts having a mean of 4.50. However, adults with a mean of 4.10 perceived it as *moderately acceptable*. This suggests that the soap effectively cleans the skin according to the expectations of teenagers and experts, but adults have a slightly lower satisfaction level in this aspect.

With regard to the soap's lathing, teenagers rated the soap's lathering ability with a mean of 4.60 which is *highly acceptable*, while adults and experts rated it moderately acceptable. This implies that younger users generally prefer the soap's lathering, while adults and experts have a slightly lower preference in this regard.

In terms of conditioning, the soap's conditioning properties were *highly acceptable* to teenagers as substantiated by a mean of 4.90, moderately acceptable to experts, and *moderately acceptable* to adults as showed by the means of 3.70 and 4.40, respectively. This suggests that the soap provides satisfactory moisturization and softness to the skin according to teenagers, but experts and adults have a slightly lower satisfaction level in this aspect.

As to fragrance, with a mean of 4.80, the soap's fragrance received *highly acceptable* ratings from teenagers, but it was rated *moderately acceptable* as shown by the means of 3.40 and 4.20, respectively by adults and experts. This indicates that the scent of the soap is more appealing to teenagers compared to adults and experts.

In terms of color, with a mean of 4.70, the soap's color received *highly acceptable* ratings from teenagers and experts with a mean of 4.50, but it was rated *moderately acceptable* by adults as shown by a mean of 3.50. This suggests that teenagers and experts find the visual appearance of the soap appealing, while adults have a slightly lower preference in terms of color.

Overall, the Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts in Treatment 3 is *highly acceptable* to teenagers, with high ratings across most evaluation criteria. However, adults and experts have lower ratings, indicating a *moderate level of acceptability* for these groups. The soap performs well in terms of hardness, cleansing, fragrance, and color according to teenagers. However, adults and experts have slightly lower ratings in several aspects, including hardness, cleansing, lathering, conditioning, fragrance, color, and the overall mean rating. This suggests that the soap may not fully meet the preferences and expectations of adults and experts compared to teenagers.

General Level of Acceptability of the Three Treatments of Calamansi Bath Soap Enhanced with Blue Ternate Flower Extracts as Perceived by Respondents

Table 7. Comparison in the general level of acceptability of the three treatments of calamansi bath soap enhanced with blue ternate flower extracts as perceived by the respondents

Treatment	F-Value	ρ-Value	Decision	Remarks
Treatment 1	2.3722	0.1273	Accept H_0	Not Significant
Treatment 2	17.8606	0.0001	Reject H_0	Significant
Treatment 3	34.9084	0.0000	Reject H_0	Significant

The table displays the comparison between Treatment 1 and the other treatments. Based on the data, it was found that there is no significant difference in the general level of acceptability. The p-value is greater than the significance level (usually 0.05), indicating that the difference is not statistically significant. In addition, the comparison between Treatment 2 and the other treatments shows that there is a significant difference in the general level of acceptability. The p-value is less than the significance level, indicating that the difference is statistically significant. Also, the comparison between Treatment 3 and the other treatments shows that there is a significant difference in the general level of acceptability. The p-value is less than the significance level, indicating that the difference is statistically significant.

The analysis shows that there is no significant difference in the general level of acceptability between Treatment 1 and the other treatments. This means that Treatment 1, which may represent the control or standard formulation of the soap, is perceived to have a similar level of acceptability as the other treatments.

Also, the analysis reveals a significant difference in the general level of acceptability between Treatment 2 and the other treatments. The lower p-value (less than the significance level) indicates that Treatment 2 has a distinct impact on the overall acceptability of the soap compared to Treatment 1 and Treatment 3. This suggests that Treatment 2, which likely involves specific enhancements or modifications to the soap, results in significantly different consumer perceptions and acceptability.

Similar to Treatment 2, the analysis demonstrates a significant difference in the general level of acceptability between Treatment 3 and the other treatments. The very low p-value indicates that Treatment 3 has a substantial impact on the overall acceptability of the soap compared to both Treatment 1 and Treatment 2. Treatment 3

likely introduces unique enhancements or changes that significantly affect how consumers perceive and accept the product.

Overall, the statistical analysis indicates that there is no significant difference in the general level of acceptability between Treatment 1 and the other treatments. However, there are significant differences in the general level of acceptability between Treatment 2 and Treatment 1, as well as between Treatment 3 and Treatment 1. This suggests that Treatment 2 and Treatment 3 have an impact on the overall acceptability of the Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts, while Treatment 1 does not significantly differ from the others. These findings suggest that specific modifications made in Treatment 2 and Treatment 3 result in distinct consumer perceptions and preferences, making them stand out from the control treatment (Treatment 1). Further investigation or analysis would be beneficial to identify the specific aspects or enhancements in Treatment 2 and Treatment 3 that contribute to their significant differences in acceptability.

Antibacterial Analysis of the Calamansi Bath Soap Enhanced with Blue Ternate Flower Extracts

The antibacterial analysis of Blue-Mansi soap is presented in Table 5. The data was obtained from reports analysis made by the Department of Science and Technology (DOST) Regional Office No.2 based in Tuguegarao City, Cagayan.

Table 8. Antimicrobial analysis of the calamansi bath soap enhanced with blue ternate flower extracts

Sample Code	Sample Description	ZONE INHIBITION (mm)	
		STAPHYLOCOCCUS AUREUS	ESCHERICHIA COLI
MIC-0645	Blue Ternate soap	10	7
NEGATIVE CONTROL: Distilled Water		6	6

Based on the report analysis, the test/calibration requested by the researcher is the antimicrobial susceptibility test with the following test methods namely; Staphylococcus Aureus and Escherichia Coli. According to the report analysis, the Blue Ternate soap is partially active in terms of Staphylococcus Aureus at 10 mm while Escherichia Coli is inactive at 7mm. This means that the Blue-Mansi soap is safe to use in terms of staphylococcus while it is inactive in *E.Coli*.

Conclusions

Based on the research findings, it can be concluded that Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts, across various treatments, shows strong potential for development and commercial production. The soap was generally well-received by evaluators across different age groups, exhibiting high levels of acceptability in critical aspects such as hardness, cleansing, lathering, conditioning, fragrance, and color. Treatment 1, in particular, stood out with the highest ratings, indicating its suitability for a broad consumer base. Additionally, the soap was confirmed to be safe for human use, as it showed no significant microbial presence, including *Staphylococcus aureus* and *Escherichia coli*. These findings underscore the product's viability in the market and its potential to meet consumer needs effectively while ensuring safety.

Recommendations

In light of the aforementioned conclusions, the study recommends the following:

1. Capitalize on the positive reception of the Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts in Treatment 1. Focus on maintaining high acceptability in terms of hardness, cleansing, conditioning, color, and overall mean rating. Consider conducting further research and development to optimize the soap's lathering and fragrance, taking into account the slight variation in preferences among different groups.

2. Recognize the variation in preferences among different target consumer groups. Tailor marketing strategies to highlight the aspects that resonate most with each group. For teenagers, emphasize the soap's lathering ability and fragrance, as they showed higher satisfaction in these areas. For adults and experts, emphasize the soap's overall effectiveness, conditioning properties, and natural ingredients.

3. Develop informative materials that communicate the unique benefits of the Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts to the target consumer groups. Highlight the natural ingredients, their skincare benefits, and the soap's ability to cleanse and condition the skin effectively. Address any concerns or questions consumers may have about the soap's lathering or fragrance to build trust and increase adoption.

4. Design packaging that appeals to the target consumer groups while communicating the soap's key attributes and benefits. Consider incorporating elements that convey a fresh and appealing scent for the teenage group. For adults and experts, emphasize the soap's natural and high-quality ingredients. Leverage the positive aspects highlighted in the findings, such as hardness, cleansing, conditioning, and color, in the packaging and branding materials.

5. Conduct additional investigation or analysis to identify the specific aspects or enhancements in Treatment 2 and Treatment 3 that contribute to their significant

differences in acceptability. This could involve conducting surveys, focus groups, or interviews to gather qualitative feedback from consumers. Understanding the specific modifications that made Treatment 2 and Treatment 3 stand out from Treatment 1 will provide valuable insights for product refinement and future development.

6. Based on the findings, consider incorporating the modifications or enhancements present in Treatment 2 and Treatment 3 into the overall formulation of the Calamansi Bath Soap enhanced with Blue Ternate Flower Extracts. This could help improve the overall acceptability of the soap and meet the preferences of the target consumer groups.

7. Leverage the significant differences in acceptability between Treatment 2 and Treatment 1, as well as between Treatment 3 and Treatment 1, in your marketing strategy. Highlight the specific aspects or enhancements that differentiate Treatment 2 and Treatment 3, emphasizing how they contribute to an enhanced user experience. Use this information to position Treatment 2 and Treatment 3 as unique and superior options compared to Treatment 1.

8. Based on the significant differences in acceptability between treatments, consider segmenting the target consumer groups to align with their preferences. Tailor marketing messages and product positioning to each segment, highlighting the treatment option that aligns with their preferences and expectations. This will allow you to better address the diverse needs and preferences of different consumer groups.

9. Keep track of consumer feedback and market trends to ensure ongoing product improvement and innovation. Regularly assess consumer perceptions and preferences through surveys, reviews, and other feedback channels. This will help you stay responsive to changing consumer demands and maintain a competitive edge in the market.

Compliance with Ethical Standards

The researcher adhered to ethical standards throughout the study, maintaining integrity, transparency, and respect for the participants' rights. Informed consent was obtained from all participants before the study, with measures in place to protect their well-being. There were no conflicts of interest, and plagiarism was strictly avoided. The findings were interpreted without bias, and the results were used exclusively for the study.

Acknowledgments

The researcher extends her deepest gratitude to all those who played a crucial role in the successful completion of her research. She is particularly thankful to the participants for their assistance, support, and collaboration. She also acknowledges the

invaluable guidance of her research adviser, the unwavering support of her colleagues at Cabatuan National High School, and the encouragement of her friends. Additionally, she is profoundly grateful for the love and care of her family. Lastly, she expresses her eternal gratitude to the Divine Creator for the gift of life and wisdom.

REFERENCES

Algas Alker, A. (2022). Calamansi: The Little Lime with Big Benefits. Journal of Citrus Research, 15(2), 87-94.

Ananthapadmanabhan, K. P., Moore, D. J., Subramanyan, K., Misra, M., & Meyer, F. (2004). Cleansing without compromise: The impact of cleansers on the skin barrier and the technology of mild cleansing. Dermatologic Therapy, 17(s1), 16-25.

Bayani, J. (2020). Sustainable Utilization of Calamansi in Isabela: An Economic and Environmental Perspective. Journal of Agricultural Economics and Development, 5(1), 45-53.

Brinkman, A. M., Sharma, R. K., & Sharma, V. (2021). Fruit and vegetable-based cosmeceuticals: A comprehensive review. *Journal of Cosmetic Dermatology, 20(2), 483-496.

Cheong, J. N., Tong, W. Y., Ong, G. K., & Khor, E. T. (2012). Calamansi (Citrus microcarpa) fruit: A mini review of its chemical composition and health benefits. Journal of Food Composition and Analysis, 28 (2), 119-128.

Dizon, J. (2014). The Untapped Potential of Blue Ternate Flower in Personal Care Products. Philippine Journal of Natural Sciences, 9(1), 23-31.

Draelos, Z. D. (2012). The Science Behind Skin Care: Cleansing. Dermatologic Clinics, 30(1), 1-8.

Ehlers, C., Ivens, U. I., Moller, M. L., Senderovitz, T., & Serup, J. (2001). The pH of the skin surface and its impact on the barrier function. Skin Research and Technology, 7(3), 159-165.

Hodgson, S. (2015). The Chemistry of Cleansing: An Overview of Soap and Detergent Ingredients. International Journal of Cosmetic Science, 37(5), 449-456.

Ildefonso, E. (2018). Bath Soaps: Formulations and Production Techniques. Philippine Journal of Chemical Engineering, 35(4), 56-67.

Jain, R., Mittal, P., Sharma, A., & Batra, A. (2013). Clitoria ternatea Linn: A Review on Its Ethnobotany, Phytochemical and Pharmacological Profile. Pharmacognosy Reviews, 7(14), 61.

Kumar, S., & Bhardwaj, R. (2018). Innovative Approaches in Herbal Soap Making: A Review. Journal of Medicinal Plants Research, 12(4), 55-62.

Lim, T. K. (2016). Edible Medicinal and Non-Medicinal Plants: Volume 12, Modified Stems, Roots, Bulbs. Springer.

Mukherjee, P. K., Kumar, V., Kumar, N. S., & Heinrich, M. (2008). The Ayurvedic medicine Clitoria ternatea: From traditional use to scientific assessment. Journal of Ethnopharmacology, 120(3), 291-301.

Shahidi, F., & Ambigaipalan, P. (2015). Phenolics and polyphenolics in foods, beverages and spices: Antioxidant activity and health effects – A review*. Journal of Functional Foods, 18, 820-897.

Tammisetti, M. (2019). Health Benefits of Calamansi Juice: A Review. Asian Journal of Clinical Nutrition, 11(1), 36-42.

APA Citation:

Ruiz-Apoy, R. (2024). FORMULATION OF CALAMANSI (Microcarpa) SOAP ENHANCED WITH BLUE TERNATE FLOWER (Clitoria ternatea). Ignatian International Journal for Multidisciplinary Research, 2(8), 1620–1636. https://doi.org/10.5281/zenodo.13575132

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

HAMON NG MAG-AARAL KAUGNAY SA PAGKATUTO AT PAGPAPAHALAGA NG PANITIKAN SA FILIPINO

Irish B. Espinosa, MAEd-Fil[1], Cristina P. Calisang, EdD[2]

[1]Mabato Provincial Community High School, Ayungon, Negros Oriental, Philippines
[2]Metro Dumaguete College, Dumaguete City, Negros Oriental, Philippines

https://doi.org/10.5281/zenodo.13310653

BUOD

Ang pananaliksik na ito ay naglalayong tuklasin ang mga hamong naranasan ng mga estudyante kaugnay sa pagkatuto at pagpapahalaga ng panitikan sa Filipino. Ginamit ang *stratified sampling technique* ng mananaliksik upang matukoy ang respondente na nagmula sa mga sekondaryang paaralan ng Una at Pangalawang Distrito ng Ayungon. May kabuoang 283 na respondente mula Baitang 9. *Validated* sarbey-kwestyoneyr ang instrumentong ginamit sa pangangalap ng mga datos. Para sa estadistikang tritment ng mga datos, ginamit ng mananaliksik ang *weighted mean, mean,* at *spearman's rank-order correlation.* Mula sa nakalap na datos, lumabas: (1) parehong "mataas" ang antas ng hamong nararanasan ng mga mag-aaral sa pagkatuto at pagpapahalaga ng panitikan sa Filipino; (2) "napakababa" at di-umabot sa inaasahan ang kabuoang markang nakuha ng mga mag-aaral sa ginawang pagsusuri sa maikling kuwento; (3) may signifikant na ugnayan ang baryabol kaugnay sa mataas na antas na naranasang hamon ng mag-aaral sa pagkatuto ng panitikan at ang antas na naranasang hamon ng mga estudyante kaugnay sa pagpapahalaga sa panitikan; (4) walang signifikant na ugnayan naman ang hamong nararanasan ng mga estudyante sa pagkatuto ng panitikan at ang performans ng mga estudyante sa pagsusuri ng maikling kuwento; (5) may signifikant at *inverse* na ugnayan sa pagitan ng mga hamong naranasan sa pagpapahalaga ng panitikan at ng performans ng estudyante sa pagsusuri ng maikling kuwento.

Keywords: *Pagkatuto, Pagpapahalaga, Performans, Panitikan*

INTRODUKSYON

Isa sa mga mahalagang pundasyon sa paglinang ng kaalaman ng isang estudyante ay ang pagkaroon ng sapat na kawilihang matuto sa anumang larang ng disiplina—ito man ay may kaugnayan sa Siyensya, Matematika, Kasaysayan, Wika, Panitikan, at iba pa. Sa nakaraang apat na taon ay sinubok ng pandemya ang sanlibutan at apektado nito ang edukasyon, na ilan sa mga dahilan ng naitalang *learning gap* ng mga estudyante. Bukod pa rito, nananatili rin ang Pilipinas sa may pinakamababang antas ng pagkatuto sa bahaging *East Asia* at *Pacific*, tinatayang nasa siyam (9) sa sampung (10) mga Pilipino ang hindi makabasa at makaunawa kahit sa mga payak na teksto at mga babasahing angkop sa edad sampu, ito ay ayon sa *World Bank* (WB) tungkol sa kalidad ng edukasyon sa buong mundo (Domingo, 2023). Kalakip sa ulat na ito, sa loob ng dalawampu't dalawang bansa, napag-alamang kadalasan sa mga nakaranas ng mababang antas ng pagkatuto sa mundo ay napapabilang sa mga rehiyong naninirahan sa rural kumpara sa mga rehiyong nasa urban o mas progresibong lugar.

Sa inilathalang artikulo ni De Vera (2022) na *Epekto ng Lockdown: Binanggit ng UNICEF ang mahinang kasanayan sa pagbasa ng mga estudyanteng Pilipino na isinagawa ng United Nations Children's Fund sa Pilipinas, Vietnam, Laos, Myanmar, at Malaysia, ang agwat sa pagkatuto* o *learning gap* sa Baitang 5 ay nagdagdag ng problema sa pagtuntong nila sa sekondarya dahil karamihan sa kanila ay nahihirapan sa pagbabasa, pagsusulat, at Matematika. Sa pagbalik sigla ng harapang klase, ilan sa problema ng guro ang ipaunawa sa estudyante ang nilalaman ng teksto lalo na sa larang ng pagtuturo ng wika at literatura. Sa pananaliksik nina Totto at Ramos (2021), napag-alamang may mababang performans ang mga estudyante sa pagbasa at pagsulat. Ang mga ito ay indikasyon na dapat may matatag na pundasyon ang mga mag-aaral pagdating sa literasi sa pagbasa at pagsulat. Batay sa layunin ng Departamento ng Edukasyon na makapagprodus ng estudyante na hindi lamang taglay ang kakayahang panlokal kung hindi pati na rin ang pandaigdigang kompetens (DepEd, 2019). Kaakibat dito ang pagpapatupad sa kurikulum na binigyang-tuon ang literaturang hango sa mga babasahing lokal, rehiyunal, pambansa at pandaigdigang panitikan. Ayon kay Delfin (2021), ang pagtuturo ng panitikan ay iilan sa mainam na pamamaraan upang yakapin ng estudyante ang wika, kultura at paniniwala. Kaakibat nito ay dapat maunawaang mabuti ng estudyante ang mga nakatagong kaisipan sa bawat literatura, ito man ay maikling kuwento, alamat, mga kuwentong bayan, mga tula at marami pang iba.

Ayon kay Badayos (mula kay Delfin, 2021), kailangang buhayin ang panitikan upang lubusang makapag-ugnay ang estudyante sa kaniyang kapaligiran. Hindi lamang simpleng matuto ang estudyante batay sa nilalaman ng panitikan, dapat ay humantong sa natatanging pagpapahalaga nito at pagsasabuhay. Sa pagkatuto at pagpapahalaga ng panitikan, binubuksan nito ang pagkakataon para sa estudyante na tumuklas nang malinang ang kanilang kakayahan sa pagbasa at pagsulat. Bagaman may mga pananaliksik na sumuri sa mga hamon na kinakaharap ng estudyante ukol sa akademik performans sa *Filipino*, subalit nakita ng mananaliksik na hindi ito nakatuon sa mga *learning gap.* Ang kasalukuyang pag-aaral ay nakasentro sa kakulangan (*gap*) kaugnay sa lawak ng pagkatuto at ng pagpapahalaga ng estudyante sa pagbasa at pagsulat ng

panitikan. Ito ang pinakamahalagang dahilan na sinaliksik ang suliraning ito dahil nakita ng mananaliksik sa kaniyang mga estudyante na pahapyaw na lamang ang kanilang pagpapahalaga sa mga panitikan.

Dagdag pa, ang mananaliksik, bilang guro ng wika at panitikan ay naglayong tuklasin ang mga suliranin ng mga estudyante kaugnay sa pagkatuto at pagpapahalaga sa panitikan. Nais din ng mananaliksik na matuklasan ang relasyon sa pagitan ng pagkatuto at pagpapahalaga sa performans ng estudyante sa pagsulat ng sariling maikling kuwento. Ang pagkatuto mula sa pagsusuri na ito ay magiging makabuluhan sa mga estudyante at mga guro bilang tagapaglinang at tagapagproseso ng kalidad na edukasyon.

PAGBANGGIT NG MGA SULIRANIN

Ang pag-aaral na ito ay isinagawa upang malaman ang hamon ng mga estudyante kaugnay sa lawak ng pagkatuto at pagpapahalaga ng panitikan sa Filipino.

Nilalayon din nitong sagutin ang mga sumusunod na katanungan:

1. Ano ang antas ng hamon ng mga estudyante kaugnay sa lawak ng pagkatuto sa panitikan sa Filipino batay sa mga sumusunod:
   1.1. Interes sa pagbasa;
   1.2. Pag-unawa sa binasang panitikan;
   1.3 Dulog na ginamit ng guro sa pagtuturo?
2. Ano ang antas ng hamon ng mga estudyante kaugnay sa lawak ng pagpapahalaga sa panitikan sa Filipino batay sa mga sumusunod:
   2.1. Interes sa malawak ng pagbabasa;
   2.2 Interes sa pagsulat;
   2.3 Sariling-kusa sa kritikal na pag-iisip;
   2.4 Pagpapahalaga sa panitikan;
   2.5 Kagustuhan sa pagpapahayag ng sarili?
3. Ano ang performans ng mga estudyante kaugnay sa pagsusuri ng maikling kuwento?
4. May signifikant na ugnayan ba sa pagitan ng hamon ng mga estudyante kaugnay sa pagkatuto at pagpapahalaga ng panitikan sa Filipino?
5. May signifikant na ugnayan ba sa pagitan ng performans ng mga estudyante sa pagsusuri ng maikling kuwento at ng hamon ng mga estudyante sa pagkatuto at pagpapahalaga ng panitikan sa Filipino?

METODOLOHIYA

Disenyo ng Pananaliksik

Ang pananaliksik na ito ay gumamit ng deskripitib-korelasyonal na pamamaraan. Ito ay deskriptib dahil inilalarawan dito ang mga hamon ng mga estudyante kaugnay sa

pagkatuto at pagpapahalaga ng panitikan sa Filipino. Korelasyonal naman ito dahil ang mga baryabol na kumatawan sa pag-aaral na ito ay inilarawan ang signifikant na ugnayan sa isa't isa.

Ang batayan sa pangangalap ng impormasyon ay isinagawa sa pamamagitan ng sarbey-kwestyoneyr. Ito ay maingat na ginawan ng pagsusuri nang sa ganoon ay matukoy ang lawak ng hamon ng estudyante kaugnay sa pagkatuto ng panitikan. Sinuri rin ang lawak ng hamon kaugnay ng pagpapahalaga ng mga estudyante sa panitikan at ang kanilang performans sa pagsulat ng sariling maikling kuwento.

Ang mga datos na nalikom ay ginawan ng interpretasyon batay sa mga hamon na kadalasang naranasan ng mga estudyante sa pagbabasa ng panitikan.

Respondente ng Pananaliksik

Ang mga respondente ng pananaliksik na ito ay ang mga piling estudyante sa Baitang 9 na pinili sa pamamagitan ng *stratified sampling technique* mula sa kabuoang populasyon. Kung saan inasahang nasa dalawang-katlo sa populasyon ng bawat paaralan ang magiging respondente sa pag-aaral na ito. Gamit ang *Slovin's formula*, ipinakita sa ibaba ang distribusyon ng bilang ng mga estudyante sa bawat paaralan:

Paaralan	Populasyon	Sampol
Ayungon National High School	309	113
Ayungon National High School-Carol-an Extension	50	18
Ayungon Science High School	17	10
Mabato Provincial Community High School	110	40
Tambo National High School	280	102
Kabuoan	**766**	**283**

Instrumento ng Pananaliksik

Ang mananaliksik ay gumamit ng sarbey-kwestyoneyr sa pagkalap ng mahalagang datos sa pag-aaral.

Sa unang bahagi, inilahad ng mananaliksik ang paksa at layunin sa pag-aaral sa pamamagitan ng pagpapahayag ng pahintulot. Ipinaliwanag nang malinaw ng mananaliksik na ang impormasyong nakuha ay mananatiling konfidensyal.

Ang mananaliksik ay sumangguni sa kaniyang tagapayo at ipinakita sa tatlong *external experts* na mga masterado sa larangan ng Filipino, upang masiguro ang baliditi ng nilalaman ng instrumento. Tiningnan ng *validators* ang mga *indicators* na nakasaad sa sarbey-kwestyoneyr. Ang mga puna at mungkahi ay isinaalang-alang ng mananaliksik upang mapabuti ang kabuoang nilalaman ng kwestyonyer.

Isinagawa rin ang *dry-run* para masiguro ang *reliability* ng instrumentong ginamit sa 30 na estudyante mula sa Baitang 9. Sinuri ang mga aytem gamit ang *Cronbach's*

Alpha Test. Ang naging resulta sa *Cronbach's Alpha Test* ay ang mga sumusunod batay sa iba't ibang aspekto: interes sa pagbasa=0.700; pag-unawa sa binasa=0.890; dulog na ginamit ng guro sa pagtuturo ng panitikan=0.745; interes sa malawakang pagbabasa=0.732; interes sa pagsulat=0.701; sariling kusa sa kritikal na pag-iisip=0.700; pagpapahalaga sa panitikan=0.711; kagustuhang ipahayag ang sarili=0.724. Batay sa resulta, lumabas na relayabol ang lahat ng aytem na isinama sa sarbey-kwestyoneyr.

Pamamaraan ng Pananaliksik

Pagkatapos ng paunang pagdepensa, isinialang-alang ng mananaliksik ang mga mungkahi ng mga miyembro ng panel. Sumulat ng liham ang mananaliksik upang humingi ng permiso mula sa superbisor ng Dibisyon ng Negros Oriental. Ang *endorsement* mula sa dibisyon ay ipinakita sa mga punong-guro ng mga paaralan at mga estudyante sa Baitang 9. Naging kaakibat ng mananaliksik ang ilang guro sa Filipino sa panahong isinagawa na ang sarbey. Nagtipon ang lahat ng estudyante na lumahok sa pagsagot sa sarbey-kwestyoneyr. Ang mga kwestyoneyr ay kinuha pagkatapos sagutin ng mga estudyante. Sa huli, ang nakalap na impormasyon ay ginawan ng *tally* ng mananaliksik gamit ang *MS Excel* at pagkatapos ay ginawan ng analisis at interpretasyon ang resulta.

RESULTA

Ipinakikita sa Talaan 1.1 na "mataas" ang antas ng hamong nararanasan ng mga estudyante pagdating sa kanilang interes sa pagbabasa.

Talaan 1.1

Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagkatuto sa Panitikan sa Filipino Batay sa Interes sa Pagbasa (n = 283)

Aytem	$w\bar{x}$	Berbal na Deskripsyon	Antas ng Hamon
1. Malalalim ang mga salitang ginamit sa akda kaya nangangailangan ng sapat na panahon at tamang pag-iisip.	3.98	Sumasang-ayon	Mataas
2. Pag-uugnay sa mga pangyayari sa binasang panitikan batay sa sariling karanasan at nakikita sa paligid.	3.86	Sumasang-ayon	Mataas
3. Masyadong mahahaba ang akdang kailangang basahin.	3.56	Sumasang-ayon	Mataas
4. Hindi ako masyadong pamilyar sa pagkakaiba sa mga uri ng panitikan at mga elemento nito.	3.23	Nag-aalinlangan	Katamtaman
Komposit	3.66	Sumasang-ayon	Mataas

Legend: Scale Berbal na Deskripsyon Antas ng Hamon

4.21 – 5.00	Lubos na Sumasang-ayon	Pinakamataas
3.41 – 4.20	Sumasang-ayon	Mataas
2.61 – 3.40	Nag-aalinlangan	Katamtaman
1.81 – 2.60	Hindi Sumasang-ayon	Mababa
1.00 – 2.60	Lubos na Hindi Sumasang-ayon	Napakababa

Ipinakikita sa Talaan 1.2 na “mataas” ang antas ng hamong nararanasan ng mga estudyante pagdating sa kanilang interes sa pagbabasa.

Talaan 1.2

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagkatuto sa Panitikan sa Filipino Batay sa ng Pag-unawa sa Binasa (n = 283)

Aytem	$w\bar{x}$	Berbal na Deskripsyon	Antas ng Hamon
1. Pag-unawa sa panitikan na gamit sa talakayan ang Wikang Filipino sa pagtuturo.	4.08	Sumasang-ayon	Mataas
2. Pakikilahok sa mga gawaing ibinibigay ng guro pagkatapos ng talakayan gaya ng paulit-ulit na pagsasadula.	3.96	Sumasang-ayon	Mataas
3. Pagbibigay ng sariling hinuha at saloobin sa akda batay sa aking nararansan.	3.95	Sumasang-ayon	Mataas
4. Pag-unawa sa kabuoang tema o paksa dahil sa haba sa akdang babasahin.	3.87	Sumasang-ayon	Mataas
5. Pagsusuri sa akda batay sa mga elemento.	3.84	Sumasang-ayon	Mataas
6. Pagpapakahulugan sa mga malalalim na salitang matatagpuan sa akda.	3.75	Sumasang-ayon	Mataas
7. Pag-uugnay sa mga pangyayari sa akda sa tunay na buhay batay sa mga simbolismong ginamit nito.	3.75	Sumasang-ayon	Mataas
Komposit	3.89	Sumasang-ayon	Mataas

Legend: Scale	**Berbal na Deskripsyon**	**Antas ng Hamon**
4.21 – 5.00	Lubos na Sumasang-ayon	Pinakamataas
3.41 – 4.20	Sumasang-ayon	Mataas
2.61 – 3.40	Nag-aalinlangan	Katamtaman
1.81 – 2.60	Hindi Sumasang-ayon	Mababa
1.00 – 2.60	Lubos na Hindi Sumasang-ayon	Napakababa

Nagpapakita ang Talaan 1.3 sa antas ng hamong nararanasan ng mga estudyante pagdating sa dulog o pamamaraang ginamit ng guro sa pagtuturo ng panitikan sa Filipino.

Talaan 1.3

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagkatuto sa Panitikan sa Filipino Batay sa Dulog na Ginamit ng Guro (n = 283)

Aytem	$w\bar{x}$	Berbal na Deskripsyon	Antas ng Hamon
1. Pagkukuwento sa akdang tinatalakay (*strory-telling*).	3 .98	Sumasang-ayon	Mataas
2. Paglahok sa pagsasadula at *simulation* na mga gawain.	3.70	Sumasang-ayon	Mataas
3. Paggamit ng *video* sa panonood ng akdang tinatalakay (*video presentation*).	3.69	Sumasang-ayon	Mataas
4. Dugtungang pagkukwento sa pagbabasa ng akdang tinatalakay.	3.62	Sumasang-ayon	Mataas
5. Paggamit ng *graphic organizer* sa pagtalakay ng akda.	3.48	Sumasang-ayon	Mataas
Komposit	3.69	Sumasang-ayon	Mataas

Legend: Scale	**Berbal na Deskripsyon**	**Antas ng Hamon**
4.21 – 5.00	Lubos na Sumasang-ayon	Pinakamataas
3.41 – 4.20	Sumasang-ayon	Mataas
2.61 – 3.40	Nag-aalinlangan	Katamtaman
1.81 – 2.60	Hindi Sumasang-ayon	Mababa
1.00 – 2.60	Lubos na Hindi Sumasang-ayon	Napakababa

Ipinakikita sa Talaan 2.1 na “mataas” ang antas ng hamong nararanasan ng mga estudyante pagdating sa kanilang interes sa malawakang pagbabasa.

Talaan 2.1

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa Interes sa Malawakang Pagbasa (n = 283)

Aytem	$w\bar{x}$	Berbal na Deskripsyon	Antas ng Hamon
1. Pagbasa nang may katatasan sa wikang Filipino gamit ang akda.	3.92	Sumasang-ayon	Mataas
2. Nauunawaan ang komplikadong daloy ng kuwento sa teksto dulot ng malikhaing imahinasyon ng may-akda.	3.78	Sumasang-ayon	Mataas
3. Nakababasa nang dalawang beses o paulit-ulit	3.76	Sumasang-ayon	Mataas
4. Nabibigyang-kahulugan ang mga mahihirap na salita at pahayag sa teksto.	3.71	Sumasang-ayon	Mataas
5. Mahahaba ang babasahing akda.	3.51	Sumasang-ayon	Mataas

Komposit	3.74	Sumasang-ayon	Mataas

Legend: Scale	Berbal na Deskripsyon	Antas ng Hamon
4.21 – 5.00	Lubos na Sumasang-ayon	Pinakamataas
3.41 – 4.20	Sumasang-ayon	Mataas
2.61 – 3.40	Nag-aalinlangan	Katamtaman
1.81 – 2.60	Hindi Sumasang-ayon	Mababa
1.00 – 2.60	Lubos na Hindi Sumasang-ayon	Napakababa

Nagpapakita ang Talaan 2.2 sa antas ng hamong nararanasan ng mga estudyante kaugnay sa kanilang interes sa pagsulat.

Talaan 2.2

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa Interes sa Pagsulat (n = 283)

Aytem	$w\bar{x}$	Berbal na Deskripsyon	Antas ng Hamon
1. Pagkakaroon ng kahandaan sa pagsulat sa kahit anumang uri ng panitikang ipapagawa ng guro.	3.86	Sumasang-ayon	Mataas
2. Naipapahayag ang sariling pananaw at saloobin sa pagsulat ng kuwento.	3.85	Sumasang-ayon	Mataas
3. Nagagamit ang mga tamang bantas sa pagsulat.	3.84	Sumasang-ayon	Mataas
4. Tamang-tamang nakasusulat gamit ang wastong baybay at angkop na salita.	3.81	Sumasang-ayon	Mataas
Komposit	3.84	Sumasang-ayon	Mataas

Legend: Scale	Berbal na Deskripsyon	Antas ng Hamon
4.21 – 5.00	Lubos na Sumasang-ayon	Pinakamataas
3.41 – 4.20	Sumasang-ayon	Mataas
2.61 – 3.40	Nag-aalinlangan	Katamtaman
1.81 – 2.60	Hindi Sumasang-ayon	Mababa
1.00 – 2.60	Lubos na Hindi Sumasang-ayon	Napakababa

Ipinakikita ng Talaan 2.3 na “mataas” ang antas ng hamong kinakaharap ng mga estudyante pagdating sa kanilang kasanayan sa kritikal na pag-iisip.

Talaan 2.3

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa Sariling Kusa sa Kritikal na Pag-iisip (n = 283)

Aytem	$w\bar{x}$	Berbal na Deskripsyon	Antas ng Hamon
1. Nasusuri ang nilalaman ng panitikang aking binasa.	3.77	Sumasang-ayon	Mataas
2. Nakalilikha ng tamang desisyon batay sa mga umiiral na paniniwala at kaugaliang matatagpuan sa teksto batay sa mga hamon ng buhay.	3.72	Sumasang-ayon	Mataas
3. Madaling nakagagawa ng sariling interpretasyon sa tekstong binasa.	3.59	Sumasang-ayon	Mataas
4. Naiiugnay ang dating karanasan sa mga piling pangyayari sa teksto sa unang basa pa lang.	3.55	Sumasang-ayon	Mataas
Komposit	3.66	Sumasang-ayon	Mataas

Legend:	**Scale**	**Berbal na Deskripsyon**	**Antas ng Hamon**
	4.21 – 5.00	Lubos na Sumasang-ayon	Pinakamataas
	3.41 – 4.20	Sumasang-ayon	Mataas
	2.61 – 3.40	Nag-aalinlangan	Katamtaman
	1.81 – 2.60	Hindi Sumasang-ayon	Mababa
	1.00 – 2.60	Lubos na Hindi Sumasang-ayon	Napakababa

Ipinakikita ng Talaan 2.4 ang antas ng hamon ng mga estudyante kaugnay sa kanilang kabuang pagpapahalaga ng panitikan sa Filipino.

Talaan 2.4

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa Kabuoang Pagpapahalaga (n = 283)

Aytem	$w\bar{x}$	Berbal na Deskripsyon	Antas ng Hamon
1. Interesado sa mga panibagong kaalaman dulot ng iba't ibang uri ng panitikan.	3.84	Sumasang-ayon	Mataas
2. Naglalaan ng panahon para sa pagbabasa.	3.80	Sumasang-ayon	Mataas
3. Nagagalak sa pagkakataong kilatisin at bigyang-pagpapahalaga ang akda.	3.66	Sumasang-ayon	Mataas
4. Naihahambing ang mga panitikang Pilipino sa malalimang paraan.	3.63	Sumasang-ayon	Mataas
Komposit	3.73	Sumasang-ayon	Mataas

Legend:	**Scale**	**Berbal na Deskripsyon**	**Antas ng Hamon**
	4.21 – 5.00	Lubos na Sumasang-ayon	Pinakamataas
	3.41 – 4.20	Sumasang-ayon	Mataas

2.61 – 3.40	Nag-aalinlangan	Katamtaman
1.81 – 2.60	Hindi Sumasang-ayon	Mababa
1.00 – 2.60	Lubos na Hindi Sumasang-ayon	Napakababa

Nagpapakita ang Talaan 2.5 na “mataas” ang antas ng hamong nararanasan ng mga estudyante sa kanilang kagustuhang ipahayag ang sarili.

Talaan 2.5

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa Kagustuhang Magpahayag ng Sarili (Pagsusuri) (n = 283)

Aytem	$w\bar{x}$	Berbal na Deskripsyon	Antas ng Hamon
1. Nakapagbibigay ng sariling paglalarawan sa mga tagpuan, tauhan, tunggalian at banghay sa teksto.	3.75	Sumasang-ayon	Mataas
2. Pamilyar sa tamang gamit ng wika sa pagsusuri ng akda.	3.73	Sumasang-ayon	Mataas
3. Nakagagawa ng agarang pagsusuri sa tekstong binasa.	3.63	Sumasang-ayon	Mataas
4. Nailalahad ang buod ng akda.	3.61	Sumasang-ayon	Mataas
5. Nakapagbibigay ng sariling interpretasyon sa mga talinghaga at mga simbolismong ginamit sa akda.	3.57	Sumasang-ayon	Mataas
6. Naiisa-isa ang mga nakapaloob na kultura at paniniwala mula sa akdang susuriin.	3.55	Sumasang-ayon	Mataas
Composite	3.64	Sumasang-ayon	Mataas

Legend: Scale Berbal na Deskripsyon Antas ng Hamon

Legend: Scale	**Berbal na Deskripsyon**	**Antas ng Hamon**
4.21 – 5.00	Lubos na Sumasang-ayon	Pinakamataas
3.41 – 4.20	Sumasang-ayon	Mataas
2.61 – 3.40	Nag-aalinlangan	Katamtaman
1.81 – 2.60	Hindi Sumasang-ayon	Mababa
1.00 – 2.60	Lubos na Hindi Sumasang-ayon	Napakababa

Ipinakikita ng Talaan 3 ang kabuoang perfromans ng mga estudyante sa pagsusuri ng maikling kuwento.

Talaan 3

Performans ng mga Estudyante Kaugnay sa Pagsusuri ng Maikling Kuwento (n = 283)

Marka	**Berbal na Deskripsyon**	**Frequency**	**Porsyento**
90 – 100	Namumukod-tangi	4	1.41%
85 – 89	Katangi-tangi	13	4.59%
80 – 84	Natatangi	15	5.30%

75 – 79	Katamtaman	27	9.54%
74 below	Di-umabot sa Inaasahan	224	79.15%
Total			

Mean = 70.54% (Di-umabot sa Inaasahan)

SD =6.68

Ipinakikita ng Talaan 4 ang signifikant na kaugnayan sa pagitan ng mga hamong nararanasan ng mga estudyante pagdating sa pagkatuto at pagpapahalaga ng panitikan sa Filipino.

Talaan 4

Kaugnayan sa Pagitan ng Hamon ng mga Estudyante Kaugnay sa Pagkatuto at Pagpapahalaga ng Panitikan sa Filipino (n=283)

Hamon kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa…	Hamon kaugnay sa Lawak ng Pagkatuto sa Panitikan sa Filipino		
	Interes sa pagbasa ng panitikan	Pag-unawa sa binasang panitikan	Dulog na ginamit ng guro sa pagtuturo ng panitikan
• Interes sa malawak ng pagbabasa	$r_s = 0.349$ p<.001 (significant)	$r_s = 0.614$ p<.001 (significant)	$r_s = 0.556$ p<.001 (significant)
• Interes sa pagsulat	$r_s = 0.289$ p<.001 (significant)	$r_s = 0.555$ p<.001 (significant)	$r_s = 0.547$ p<.001 (significant)
• Sariling-kusa sa kritikal na pag-iisip	$r_s = 0.321$ p<.001 (significant)	$r_s = 0.568$ p<.001 (significant)	$r_s = 0.547$ p<.001 (significant)
• Pagpapahalaga sa panitikan	$r_s = 0.305$ p<.001 (significant)	$r_s = 0.613$ p<.001 (significant)	$r_s = 0.568$ p<.001 (significant)
• Kagustuhan sa pagpapahayag sa sarili	$r_s = 0.311$ p<.001 (significant)	$r_s = 0.541$ p<.001 (significant)	$r_s = 0.568$ p<.001 (significant)

Nagpapakita ang Talaan 5 sa kaugnayan sa pagitan ng mga hamong nararanasan ng mga estudyante pagdating sa pagkatuto ng panitikan sa Filipino at ng kanilang kabuoang perfromans sa pagsusuri ng maikling kuwento.

Talaan 5.1
Kaugnayan sa Pagitan ng Performans ng mga Estudyante sa Pagsusuri ng Maikling Kwento at ng Hamon Kaugnay sa Pagkatuto ng Panitikan sa Filipino (n=283)

Variables Correlated to Performance	r_s	p	Decision	Remark
• Interes sa Pagbasa ng Panitikan	-0.115	0.052	Fail to reject H_{o2}	Not Significant
• Pag-unawa sa Binasang Panitikan	-0.092	0.124	Fail to reject H_{o2}	Not Significant
• Dulog na Ginagamit sa Pagtuturo ng Panitikan	-0.003	0.965	Fail to reject H_{o2}	Not Significant

Level of significance = 0.05

Ipinakikita Talaan 5 sa kaugnayan sa pagitan ng mga hamong nararanasan ng mga estudyante pagdating sa pagpapahalaga ng panitikan sa Filipino at ng kanilang kabuoang perfromans sa pagsusuri ng maikling kuwento.

Talaan 5.2
Kaugnayan sa Pagitan ng Performans ng mga Estudyante sa Pagsusuri ng Maikling Kwento at ng Hamon Kaugnay sa Pagpapahalaga ng Panitikan sa Filipino (n=283)

Variables Correlated to Performance	r_s	p	Decision	Remark
• Interes sa malawak ng pagbabasa	-0.178	0.003	Reject H_{o2}	Significant
• Interes sa pagsulat	-0.127	0.033	Reject H_{o2}	Significant
• Sariling-kusa sa kritikal na pag-iisip	-0.131	0.028	Reject H_{o2}	Significant
• Pagpapahalaga sa panitikan	-0.134	0.024	Reject H_{o2}	Significant
• Kagustuhan sa pagpapahayag sa sarili	-0.135	0.023	Reject H_{o2}	Significant

Level of significance = 0.05

DISKUSYON

Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagkatuto sa Panitikan sa Filipino Batay sa Interes sa Pagbasa

Ipinakikita sa Talaan 1.1 na “mataas” ang antas ng hamong nararanasan ng mga estudyante pagdating sa kanilang interes sa pagbabasa. Nangunguna sa hamon ng mga estudyante ang pagpapakahulugan sa malalim na salitang ginamit sa akda.

Nagpapahiwatig ito na ang mababang kaalaman sa bokabolaryo ay higit na nakaiimpluwensiya sa interes mayroon ang estudyante sa pagbabasa. Naaapektuhan rin nito ang kaniyang pamilyaridad sa akdang binabasa at ang kakayahang iugnay ang mga

pangyayari sa akda sa totoong pangyayari sa buhay. Resulta nito ang pagbaba ng tiwala sa sarili ng estudyante na magbasa.

Pinatunayan naman ito sa pananaliksik nina Gedik at Akyol (2022), kung matutugunan ang mga hamon sa pagbasa gaya ng motibasyon, pag-unawa, at bokabularyo ay uunlad ang kasanayan ng mga estudyante kung matatamo nila ang katatasan sa pagbasa.

Ayon naman pananaliksik ni Diwan (2020), ang kawalan ng interes sa pagbasa ay maituturing na hadlang sa akademikong pagganap ng isang estudyante sa loob ng klase. Nilimitahan nito ang kakayahan sa kritikal na pag-iisip at pag-unlad sa katatasan sa paggamit ng wika. Ito ay maaaring humantong sa hindi matagumpay na pagkamit ng mga estudyante sa antas sekondarya. Pinatunayan lamang ng resultang ito na mababa ang antas ng kawilihan sa pagbasa ng mga estudyante.

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagkatuto sa Panitikan sa Filipino Batay sa ng Pag-unawa sa Binasa

Ipinakikita sa Talaan 1.2 na “mataas” ang antas ng hamong nararanasan ng mga estudyante pagdating sa pag-unawa sa binasa. Ang kahalagahan ng kaalamang panwika ay nakatutulong upang may lubos na pag-unawa sa tekstong babasahin. Kaakibat nito ang pagbibigay ng makabuluhang kahulugan at interpretasyon sa mga pangyayari, kultura at paniniwalang nakapaloob sa teksto. Kung mababa ang antas ng hamon mayroon ang estudyante sa pag-unawa, tataas ang kanilang kumpiyansa sa sariling makilahok sa anumang gawaing ibibigay ng guro sa klase.

Sa pananaliksik nina Abdulrahman at Abu-Ayyash (2019), maituturing na pagsubok sa gamit ng pangalawang wika ang pagpapaunlad sa kakayahang linggwistika, komunikatibo at kakayahang makipag-ugnayan. Kung hindi bihasa sa gamit ng wika ang estudyante ay magdudulot ito nang hindi pag-unawa sa kabuoang nilalaman ng tekstong binasa.

Ang pagkatuto at pag-unawa sa binasang akda ay hindi lamang nalilimitahan sa pagsusuri, pagbibigay-hinuha, at pagpakahulugan sa mga malalalim na salita at talinghaga, kung hindi kinakailangan na angkin din ng estudyante ang kultural na kamalayan upang makaugnay siya sa mga pangyayaring nakapaloob sa akda. Ayon kina Delos Santos et al. (2024), natuklasan na ang kakulangan sa pag-aaral (*study habits*), mababang antas sa pag-unawa, at limitadong bokabularyo ang tatlong pangunahing salik na nakaaapekto sa pag-unawa ng mga estudyante.

Sa kabilang dako, nakaaapekto rin sa antas ng pag-unawa ng estudyante ang panloob na motibasyon ng mag-aaaral. Kabilang dito ang istilo ng pagbasa, sariling saloobin sa pagbasa at pisikal na kondisyon (Labrigas, 2022). Kung mababa ang antas ng motibasyon mayroon ang estudyante, resulta nito ang hindi aktibong pakikilahok sa mga gawaing ibibigay ng guro. Dagdag naman ni Rojas (2022), hindi lamang ang motibasyon ang salik na nakaaapekto sa pag-unawa, pati na rin ang kognitibong salik na

taglay ng estudyante. Lumalabas sa kaniyang pagsusuri na ang bokabularyo, tahanang kinalakihan at ang kultural na kaalaman ng estudyante ay direktang nakaaapekto sa antas ng pag-unawa ng estudyante. Kung kulang ang kultural na kaalaman ng estudyante, mahihirapan siyang iugnay ang mga pangyayari sa akdang babasahin.

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagkatuto sa Panitikan sa Filipino Batay sa Dulog na Ginamit ng Guro

Ipinapakita sa Talaan 1.3 na “mataas” ang antas ng hamon ng mga estudyante kaugnay sa dulog na ginamit ng guro sa pagtuturo. Nangunguna ang paggamit ng pagkukwento sa talakayan at panghuli ang paggamit ng *graphic organizer*. Mahihinuhang nahihirapan ang mga estudyante na matutuhan ang panitikan kung pagkukuwento ang gagamitin ng guro. Malaki ang papel na ginagampanan ng guro sa paggamit ng pagkukuwento bilang dulog sa pagtuturo. Dito nakasalalay ang pag-unawa ng mga estudyante sa akdang tatalakayin.

Sa pagsusuring ginawa nina Fikray at Habil (2022), lumalabas na kadalasan sa mga dulog na ginagamit ng mga guro sa pagtuturo ng ay ang *language model approach* at *cultural model.* Ito ay nakatuon sa mga saligang kaalamang pangwika at pampanitikang nararapat matutuhan ng isang estudyante. Ang *personal growth model* ay nakatuon sa gamit ng wika sa loob ng isang tiyak na konteksto ng kultura. Maiuugnay ang *language model approach* sa mga dulog na nabanggit gaya ng pagkukuwento, pagsasadula, *simulation*, at dugtungang pagkukwento habang ang paggamit ng *video presentation* at *graphic organizers* ay napabibilang sa *cultural model.*

Sa pagkatuto ng panitikan hindi lamang pag-unawa sa akda ang kasanayang nililinang ng guro, kasali na rin dito ang kasanayan sa pagsasalita. Kabaligtaran naman ito sa pag-aaral nina Khaerana at Nurdin (2018), ipinapahiwatig naman na ang pagkukuwento ay nakatutulong na pataasin ang kawastuhan at katatasan ng estudyante sa pagsasalita gamit ang wika.

Ang pagkukuwento, pagsasadula, panonood ng *video,* dugtungang pagkukuwento at ang paggamit ng *graphic organizers* ay nagbibigay-daan sa mga estudyante na iugnay at tumugon sa panitikang binasa kaugnay sa kanilang totoong karansan sa buhay.

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa Interes sa Malawakang Pagbasa

Ang Talaan 2.1 ay ipinakikita na “mataas” ang antas ng hamong nararanasan ng mga estudyante. Nangunguna sa mga hamong ito ang pagbasa nang may katatasan sa paggamit ng wikang Filipino($w\bar{x}$=3.92) habang may pinakamababang *weighted mean* na 3.51 naman ang hamon pagdating sa haba ng babasahing teksto. Ang kakulangan sa kaalamang pangwika ay nagpapababa sa pagnanais ng estudyante sa pagbabasa. Magdudulot ito ng kawalang-gana na unawain ang akdang babasahin, dagdag pa ang hamon pagdating sa pagpapagana ng imahinasyon.

Pinatunayan ito sa pagsusuring ginawa nina Zur et al. (2022), kung saan ilang salik na nakaapekto sa pagnanais ng estudyante na magbasa ay may mataas na antas sa sariling pagsisikap sa pagbabasa, panloob na motibasyon at ang pagpapalagay tungkol sa pagbabasa. Ilan sa mga dahilan na binanggit na nakapagpatataas ng motibasyon sa pagbabasa ay ang kagustuhang tumuklas ng panibagong kaalaman.

Dagdag pa nina Torppa et al. (2019), ang mga mabagal magbasa (*slow readers*) ay may mababang antas sa motibasyon pagdating sa pagbabasa. Habang ang mga nahihirapang magbasa (*struggling readers*) at umunawa ay lumalabas na may mababa antas ng interes sa pagkatuto. Kadalasan din sa kanila ay nakitaan ng mataas na antas ng pagka-*burnout*. Ito ay humahantong sa mababang kasiyahan sa pagbabasa kaysa mga karaniwang mambabasa (*typical readers*).

Sa kabuoan, marapat lamang na paunlarin ang kaalamang pangwika ng mga estudyante, nang sa ganoon ay tumaas ang antas ng kanilang panloob na motibasyon. Kung tataas ang kanilang motibasyon, tataas din ang antas ng kanilang interes sa pagbabasa.

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa Interes sa Pagsulat

Inilalarawan sa Talaan 2.2 ang “mataas” na antas ng hamong kinakaharap ng mga estudyante. Batay sa datos, nangunguna sa mga hamon ang kahandaan sa pagsulat *(w$\bar{x}$=3.86),* sinundan ng pagpapahayag sa sariling pananaw, paggamit ng tamang bantas, at wastong baybay ng mga salita. Ang kakulangan sa kahandaan sa pagsulat ay nagiging hadlang sa mga estudyante na ipahayag ang sariling saloobin o pananaw sa pagsulat. Magiging hamon sa mga estudyante ang wastong gamit ng mga salita at bantas, organisasyon at nilalaman ng tekstong kanilang isusulat.

Sinang-ayunan ito sa pag-aaral nina Toba et al. (2019), na kadalasan sa mga estudyante na nakararanas ng hamon sa pagsulat ay sa mga aspekto ng nilalaman, organisasyon, bokabularyo, gramatika at semantika. Idagdag pa ang mga personal na dahilan gaya ng kakulangan sa pagsasanay sa pagsulat, ang pagkabahala, pagkakaroon ng negatibong pananaw sa pagsulat at ang mababang motibasyon sa pagsulat.

Ayon naman kina Endah et al. (2018), lumalabas sa pagsusuri na ang interes sa pagbasa at pag-unawa sa mga kuwentong pantasya ay may positibong epekto sa kasanayan ng mga estudyante na makapagsulat ng mga kuwentong pantasya. Ibig sabihin, ang batayang kaalaman sa mga elementong nangingibabaw sa uri ng panitikan kaakibat ang pag-unawa ay nakatutulong upang tumaas ang interes ng estudyante na sumulat. Samakatuwid, ang antas ng interes ng estudyante sa pagsulat ay nakadepende sa matatag ang pundasyon ng kaalaman ng estudyante pagdating sa mga simulain sa pagsulat

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa Sariling Kusa sa Kritikal na Pag-iisip

Ipinakikita sa Talaan 2.3 ang “mataas” na antas ng hamon ng estudyante kaugnay sa lawak ng pagpapahalaga ng panitikan batay sa sariling kusa sa kritikal na pag-iisip. Nangunguna sa mga hamon ang pagsusuri ng nilalaman ng panitikan, kasunod ang paglikha ng desisyon, paggawa ng interpretasyon, at panghuli ang pag-uugnay sa dating karanasan.

Malaking hamon sa mga estudyante na paganahin ang kanilang kritikal na pag-iisip sa pagsusuri ng akdang binasa, na nag-apahiwatig ng kakulangan sa kasanayan. Sa pag-aaral nina Velayati et al. (2017), ang mababang kasanayan sa wika, pagpapakahulugan, at bokabularyo ay nagiging hadlang para paganahin ang kasanayan sa kritikal na pag-iisip ng mga estudyante. Nangangahulugan na ang batayang kaalaman sa wika ay susi upang ganap na masuri ang nilalaman ng teksto.

Sa pagsusuri ni Saleh (2019), kadalasan sa mga hamong nauugnay sa mga estudyante pagdating sa kritikal na pag-iisip ay ang kakulangan sa kaalaman ukol sa kritikal na pag-iisip, kakulangan sa sapat na oras, kakulangan sa mabisang komunikasyon at kasanayan sa paglutas ng problema (*problem-solving skills*). Dagdag pa ang salik mula sa tahanan na hindi nakatutulong sa paglikha ng malikhaing kaisipan kaakibat ang motibasyong nakukuha mula sa paligid. Sa kabuoan, kung mababa ang antas ng estudyante sa kasanayan sa kritikal na pag-iisip mataas din ang lawak ng hamong nararanasan ng estudyante.

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa Kabuoang Pagpapahalaga

Ang Talaan 2.4 ay nagpapakita sa “mataas” na antas ng hamong nararanasan ng mga estudyante kaugnay sa pagpapahalaga. Ipinahihiwatig ng resultang ito na ang pagtuklas ng panibagong kaalaman ay nakaiimpluwensiya sa pansariling interes ng estudyante sa pagpapahalaga.

Sa pag-aaral nina Tajoloso et al. (2023), inihayag sa datos na halos 55% ng estudyante sa Baitang 7 ang naiulat na paminsan-minsan lamang ang interes sa pagbabasa; 55% din ang naiulat na nasa 30 minuto hanggang isang oras lamang ang ginugugol sa pagbabasa dahil karamihan ng mga estudyante ay mas babad sa *Facebook, Tiktok* at pakikipag-*tex*t o pakikipag-*chat* araw-araw. Nabanggit din ang ilang hamong nakaaapekto sa interes sa pagbabasa ay mga gawaing-bahay, paglalaro ng mga *online games*, at panonood ng mga serye sa telebisyo o pelikula. Hindi maikakailang sa panahon ngayon, kadalasan sa mga inaatupag ng mga estudyante ay ang *gadget*. Hindi man napalitan ang tradisyunal na aklat bilang pangunahing kagamitan sa pagkatuto, subalit hindi rin maitatanggi ang impluwensiya ng makabagong teknolohiya sa kabuoang gawi ng mga estudyante.

Lumalabas sa isang pananaliksik na ang mga estudyante na nagbabasa ng mas mahirap na aklat ay hindi gaanong nagaganyak na basahin ang mga ito. Dagdag pa, ang pagsusuri sa pagitan ng isahang pagbabasa ng aklat ay direktang may ugnayan sa panloob na motibasyon ng mambabasa (Locher et al., 2019). Samakatuwid, kung ang estudyante ay may motibasyong magbasa para sa personal na pag-unlad at kasiyahan, mapapahalagahan niya ang alinmang akdang babasahin.

Mula sa datos, makikita na ang lahat ng hamong nararanasan ng mga estudyante kaugnay sa kabuoang pagpapahalaga ay may kinalaman pa rin sa salik ng interes sa pagbabasa. Kung malaking hamon sa mga estudyante na tumuklas ng panibagong kaalaman, bababa rin ang kanilang interes sa pagbabasa.

Ang Antas ng Hamon ng mga Estudyante Kaugnay sa Lawak ng Pagpapahalaga sa Panitikan sa Filipino Batay sa Kagustuhang Magpahayag ng Sarili

Ipinakikita sa Talaan 2.5 na “mataas” ang antas ng hamong nararanasan ng mga estudyante kaugnay sa kanilang kagustuhang ipahayag ang sarili. Naging hamon sa mga estudyante na magbigay ng sariling paglalahad, paglalarawan, pagsusuri, pagbibigay interpretasyon at pag-iisa-isa sa mga kultura at paniniwala sa tekstong babasahin. Ang mga ito ay nagiging hadlang sa kabuoang pagganap ng estudyante na ipahayag ang sarili sa klase, sa pasulat o pasalitang pamamaraan. Maaaring magdulot ito ng negatibong saloobin sa pagpapahayag, tulad ng di-pakikilahok sa mga gawain, mababa ang tiwala sa sarili, takot na magkamali, at ang pagkahiya.

Masasalamin ang pagpapahalaga sa panitikan sa pamamagitan ng pagsusuri sa nilalaman ng akda. Pinatunayan ni Alvandi (2019), na kinakailangang gamitin ang iba’t ibang teoryang pampanitikan sa pagsusuri ng panitikan. Sa kaniyang panayam sa apat na guro, nakikita ng mga guro ang pangangailangan sa paggamit teoryang pampanitikan kasabay ang literatura na kapwa benipisyal sa pag-unawa ng estudyante at sa kanilang paligid.

Sa pag-aaral nina Fakhroo at Bulaila (2021), ang integrasyon ng akdang pampanitikan ay nagpapabuti sa pagganap ng mga estudyante sa kanilang akademikong pagsulat. Nakitaan din ng positibong saloobin ang mga estudyante sa pagsulat. Subalit may mga hamong nararanasan ang estudyante sa pagsulat, kabilang na rito ang pagsulat ng introduksyon, katawan, kongklusyon sa mga akademikong gawain, paggamit ng mga kaugnay na salita, organisasyon ng ideya, at ang tamang gamit ng wika.

Ayon naman kina Mekonnen et al. (2022), inilalarawan sa kanilang pagsusuri na dapat bigyang-pansin ang kaangkupan ng akdang panitikang ibibigay sa mga estudyante. Kailangang isaalang-alang ang karanasang pampanitikan ng estudyante. kultural na kaalaman, kakayahan sa wika, at ang antas ng pag-unawa.

Ang paggabay ng guro sa proseso ng paggawa ng pagsusuri, pagsulat at ang paggamit ng angkop na akdang susuriin ay nakatutulong upang matagumpay na

maipahayag ng estudyante ang kanilang ideya. Dagdag pa ang mga serye ng pagsasanay sa pagsulat.

Performans ng mga Estudyante Kaugnay sa Pagsusuri ng Maikling Kuwento

Ang kabuoang performans ng mga estudyante ay nasa 70.54% o di-umabot sa inaasahan. May *standard deviation* itong 6.68. Ito ay katumbas sa mababa at di-umabot sa inaasahan kahit bumalik na sa harapang klase sa kasalukuyan. Sinasalamin pa rin nito ang puwang (*learning gap*) na umusbong kahit sa panahon na ng *new normal*. Sa pagsusuri sa mga kasagutan, hanggang sa pagkilala lamang ng tagpuan, tauhan at tunggaliang nangingibabaw sa akda ang kalimitang nasagutan. Nakaligtaan ng mga estudyante ang pagpapalalim ng kanilang interpretasyon, pagpapaliwanag at pagbibigay-hinuha batay sa nabasang maikling kuwento lalo na pagdating sa kabisaan ng panitikan sa isipan, damdamin at asal. Dagdag pa ang mababang antas ng katatasan ng estudyante sa gamit ng wika. Iilan lamang sa mga estudyante ang gumamit ng purong Filipino sa pagpapaliwanag.

Pinatotohanan ito ng resulta na inilabas ng *Programme for International Student Assessment* (2023), kung saan ang Pilipinas ay nakakuha ng humigit kumulang 120 puntos na mas mababa kaysa karaniwang marka sa pagtatayang ginawa noong 2022. Kung saan nasa 347 na puntos lamang ang nakuha ng Pilipinas para sa pagbabasa, kompara sa 476 *average* na puntos na nakuha ng mga bansang napapabilang sa *Organization for Economic Cooperation and Development* (OECD).

Ayon kina Ranque et al. (2024), inihayag na ang kahusayan ng mga estudyante sa paggamit ng wikang Filipino sa akademikong komunikasyon ay mataas. Sa pagtataya naman sa pagsulat at pagsasalita ay makikitaan lamang ng madalas na pagkilala sa *performance-based* na pagtataya lalo sa teknikal at akademikong pagsulat.

Dagdag pa nina Clinton et al. (2020), mas mataas ang markang nakuha ng mga estudyante sa pagbibigay-hinuha sa mga tekstong pasalaysay kaysa sa tekstong ekspositori o imformatib. Ipinapakita lamang nito na ang kakayahan ng estudyante sa pagsusuri ng alinmang teksto ay kinakailangan ng malalim na pag-unawa bago pa man magbigay ng kaukulang hinuha at interpretasyon. Sa ganitong paraan maiuugnay ng estudyante ang mga idea sa isang akda sa totoong nangyayari sa buhay.

Ugnayan sa Pagitan ng Hamon ng mga Estudyante kaugnay sa Pagkatuto at Pagpapahalaga ng Panitikan sa Filipino

Ipinakikita sa Talaan 4 ang *bivariate analysis* ukol sa kaugnayan ng hamon ng mga estudyante kaugnay sa pagkatuto at pagpapahalaga ng panitikan sa Filipino. Gamit ang *Spearman's Rank Order Correlation*, inilalahad na ang *p-values* ng lahat ng kapares na baryabol ay mas mababa sa *level of significance* (0.05).

Ang resultang ito ang nagpapahintulot sa pagtanggi sa *null hypothesis* na nagpapahiwatig na may signifikant na ugnayan sa pagitan ng mga baryabol na iniuugnay sa isa't isa. Ibig sabihin na ang mga estudyante na nakararanas ng "mataas" na antas ng hamon sa pagkatuto ng panitikan ay nakararanas din ng "mataas" na antas ng hamon sa

pagpapahalaga ng panitikan sa Filipino. Nagpapahiwatig lamang ito na apektado ang antas pagpapahalaga ng panitikan sa Filipino kung hindi rin ganoon katatag ang pundasyon ng kanilang pagkatuto. Ipinapakita nito ang ugnayan sa pagitan ng proseso ng pagkatuto at pagpapahalaga.

Natuklasan sa isang pagsusuri na may direktang ugnayan ang antas ng kawilihan sa pagbabasa at ang antas ng kawilihan sa pagkatuto ng estudyante sa pag-unawa sa pagbasa ng teksto (Lustyantie & Aprilia, 2020). Ang interes sa pagbasa at sariling pagganyak (*motivation*) ay nakaimpluwensiya sa tagumpay ng antas ng pag-unawa. Kung mataas ang kanilang interes, mas mahusay at matagumpay rin ang pag-unawa na mayroon ang estudyante.

Pinatotohanan naman ito sa pananaliksik nina Kurniati et al. (2023), na may positibong ugnayan sa pagitan ng interes sa pagbabasa at pag-unawa. Kung mababa ang interes ng estudyante sa pagbabasa, apektado nito ang kakayahan ng estudyante na unawain ang alinmang tekstong babasahin. Sa pananaliksik nina Hughes et al. (2021) lumalabas na ang tahasang pagtuturo ng pagbabasa at pagsulat ay nagpapahusay sa kakayahang sa pag-unawa sa pagbabasa ng mga estudyante. Maaaring pagsabayin ang paghasa sa kasanayan sa pagsulat at pagbasa nang hindi nalilimitahan ang paglinang ng literasi sa dalawang kasanayan. Sa pag-aaral naman ni Hafeez (2021), nadagdagan ang interes ng mga estudyante na makilahok sa klase pagkatapos lumahok ng mga guro sa palihan tungkol sa makabagong estratehiya sa pagtuturo. Nagpapahiwatig lamang ito na ang mga pagsasanay ng mga guro ay nakatutulong upang pumili ng mahusay at angkop na pamamaraan sa pagtuturo.

Sa kabuoan, magkabuhol ang pagkatuto at pagpapahalaga sa isa't isa. Marapat lamang matugunan ang mga hamong nararanasan ng mga estudyante sa pagakatuto nang sa ganoon ay tumaas ang antas ng kanilang pagpapahalaga.

Ugnayan sa Pagitan ng Performans ng mga Estudyante sa Pagsusuri ng Maikling Kuwento at ng Hamon ng mga Estudyante sa Pagkatuto ng Panitikan sa Filipino

Ipinakikita sa Talaan 5.1 ang pagkilala sa ugnayan sa pagitan ng hamon kaugnay sa pagkatuto ng panitikan sa Filipino at performans ng mga estudyante sa pagsusuri ng maikling kuwento. Lahat ng *p-values* ay mataas sa antas ng kahalagahan (0.05). Ipinakikita rin sa talaan na sa mga sumusunod na aspekto, walang signifikant na ugnayan sa pagitan ng performans ng mga estudyante sa pagsusuri ng maikling kuwento at hamon kaugnay sa pagkatuto ng panitikan sa Filipino ang: interes sa pagbasa ng panitikan ($p = 0.052 > \alpha = 0.050$); pag-unawa sa binasang panitikan ($p = 0.124 > \alpha = 0.050$) at; dulog na ginamit ng guro sa pagtuturo ng panitikan($p = 0.965 > \alpha = 0.050$). Sumasalamin ito na sa kabila ng mga hamong nararanasan ng mga estudyante sa pagkatuto ng panitikan sa Filipino ay hindi ito direktang maiuugnay sa performans ng mga estudyante sa pagsusuri ng maikling kuwento.

Iminumungkahi ng resultang ito na ang ibang salik gaya ng mga pamamaraan o metodo sa pagtuturo ng panitikan at pansariling interes ng mga estudyante sa panitikan ay maaaring mas mahalagang papel sa kanilang performans pagdating sa panitikan. Batay sa pag-aaral nina Adamma et al. (2018), ang pangganyak ay nakatutulong na

mapabuti ang akademikong performans ng mga estudyante at ang motibasyon na ito ay may pagkakaiba depende sa kasarian at akademikong pagganap ng estudyante.

Ugnayan sa Pagitan ng Performans ng mga Estudyante sa Pagsusuri ng Maikling Kuwento at ng Hamon ng mga Estudyante sa Pagpapahalaga ng Panitikan sa Filipino

Inilalarawan sa Talaan 5.2 na may signifikant na ugnayan sa pagitan ng pagpapahalaga ng panitikan sa Filipino at ang performans ng mga estudyante sa pagsusuri ng maikling kuwento. Lahat ng *p-values* ay mas mababa sa *level of significance* (0.05) at lahat ng *rs-values* ay negatibo. Nagpapakita ito na may signifikant at *inverse* na ugnayan sa pagitan ng limang hamon kaugnay sa antas ng pagpapahalaga ng panitikan sa Filipino at ang performans ng mga estudyante sa pagsusuri ng maikling kuwento. Nagpapahiwatig ito na kung nakararanas ng “mataas” na antas ng hamon sa pagpapahalaga ang mga estudyante, “mababa” rin ang kanilang performan sa pagsusuri.

Sa pananaliksik nina Aclinen at Olesio (2023), pagdating sa kasanayan sa pagbabasa, kadalasan sa hamong kinakaharap ng mga guro ay parehong mababa ang antas ng kasanayan sa pagbasa at pag-unawa mayroon ang mga estudyante. Iminungkahi naman ng mananaliksik na magaganyak ang estudyante sa pagbabasa sa pamamagitan ng estratehiyang sama-samang pagkatuto *(collaborative learning).* Lumalabas naman sa pagsusuri ni Nguyen (2022), na ang integratibong pagtuturo ng pagbasa at pagsulat sa mga aralin tungkol sa pagsulat ay mayroong positibong epekto sa bahagi ng mga estudyante patungkol sa wika, oragnisasyon, nilalaman, matagumpay na komunikasyon at pagsusuri. Sa ganitong paraan mas tataas ang interes ng estudyante sa pagsusulat, hindi lamang para maipasa ang alinmang gawain ng guro kung hindi bilang pagpapahalaga na rin sa bisa ng panitikan.

Sa kabuoang pagpapahalaga at ang kagustuhan sa pagpapahayag sa sarili sa pamamagitan ng pagsusuri, ipinapakita mula sa datos na may signifikant na ugnayan ito sa performans ng mga estudyante sa pagsusuri. Pinatotohanan ito sa resulta sa pagsusuri ni Magulod (2018), kung saan may katamtamang antas ang kabuoang pagpapahalaga sa pampanitikan ng mga estudyante. Ngunit salungat naman ito sa antas ng kasanayan sa pagpapahalagang pampanitikan gaya lamang pagkilala sa mga umiiral na pananaw, kakayahang magbigay ng sariling hatol batay sa teksto, pagkilala sa mga pilosipiya lutang sa teksto, at kakayahang igunay ang akda sa totoong pangyayari sa buhay.

Kongklusyon

Malinaw na ang mga estudyante ay nahaharap sa malalaking hamon sa pagkatuto at pagpapahalaga ng panitikan sa Filipino, na nagdudulot ng negatibong epekto sa kanilang performans, partikular na sa pagsusuri ng maikling kuwento. Ang mababang marka ng karamihan sa mga estudyante, na di-umabot sa inaasahang antas, ay nagpapakita ng kakulangan sa kasanayan sa kritikal na pag-iisip na inaasahan sa Baitang 9. Ang mga hamong ito ay may kaugnayan sa kanilang interes, kasanayan sa pagbasa at pagsulat, at kakayahan sa pagproseso ng impormasyon. Upang mapabuti ang kanilang pagganap, mahalagang tugunan ang mga hamong ito sa pamamagitan ng mga angkop

na estratehiya sa pagtuturo. Sa ganitong paraan, mapapataas ang antas ng interes at positibong saloobin ng mga estudyante sa pagkatuto at pagpapahalaga ng panitikang Filipino, na magreresulta sa mas mataas na antas ng kasanayan at pag-unawa.

Rekomendasyon

Batay sa mga natuklasan ng pag-aaral na ito, inirerekomenda ng mananaliksik para sa mga mag-aaral, guro, punong-guro at superbisor ng Filipino, at sa susunod na mananaliksik ang mga sumusunod:

1. **Para sa mga Mag-aaral**. Paunlarin ang kasanayan sa pagbasa, pagsulat, kritikal na pag-iisip at maging aktibo sa pakikilahok sa iba't ibang gawain sa paaralan.

2. **Para sa mga Guro.** Lumahok sa *seminar*, *workshop* at iba pang gawain na magpalalawak ng kaalaman sa konteksto ng mga akdang pampanitikan at mga epektibong estratehiya sa pagtuturo**.**

3. **Para sa mga Punong-guro at mga Superbisor ng Filipino**. Siguraduhing may regular na suporta ang mga guro na lumahok sa mga palihan alinsunod sa kanilang sabjek na itinuturo.

4. **Para sa Susunod na Mananaliksik.** Magsagawa ng pananaliksik at ikumpara ang mga resulta ng pag-aaral sa iba't ibang antas ng edukasyon (elementarya, sekondarya, at tersyarya) upang makita ang mga pagbabago sa antas ng pagpapahalaga at pagkatuto ng panitikan sa bawat yugto ng edukasyon.

Etikal na Konsiderasyon

Ipinakita ng mananaliksik ang mga kailangang etikal na konsiderasyon sa pagsagawa ng pag-aaral. Tiniyak ng mananaliksik na mananatiling konfidensyal ang mga kasagutan ng mga respondente. Ang pagsasaalang-alang sa dignidad at pribadong punto ng mga respondente ay pinahalagahan ng mananaliksik.

Ang mananaliksik ay sumunod din sa mga protokol ayon sa mga etikang itinakda ng *Ethics Committee* ng Foundation University. Isang malawakang konsultasyon ang isinagawa sa pagpili sa paksa para sa pananaliksik. Ang pagpili nito ay batay sa mga *research* agendang isunusulong hindi lamang ng institusyon pati na rin ang mga itinakda ng Departamento ng Edukasyon. Humingi rin ng pahintulot ang mananaliksik mula sa tagapangasiwa ng Dibisyon ng Negros Oriental, tagamasid ng distrito, punong-guro at mga guro ng kinauukulang paaralan.

Pasasalamat

Taos-pusong pinasasalamatan ng mananaliksik ang mga indibiduwal na tumulong, sumuporta at naging bahagi upang matagumpay na maisakatuparan ang pananaliksik na ito. Mainit na pasasalamat ang ipinaparating ng mananaliksik sa sumusunod:

Unang-una, sa Poong Maykapal, para sa lakas at kapanatagang-loob para sa pagtagumpay ng pananaliksik na ito.

Dr. Cristina P. Calisang, propesor sa Filipino sa Graduwadong Paaralan ng Unibersidad ng Foundation at tagapayo ng mananaliksik, sa walang sawang paggabay at pagsuporta, paggugol ng panahon sa pagrebisa ng manuskrito para sa pagtagumpay ng pag-aaral na ito.

Dr. Maria Chona Z. Futalan, *statistician* ng mananaliksik, sa pagwawasto, pag-aanalisa at pagsisiyasat sa mga nakalap na datos at pagbabahagi na kaalamang istadistika.

Dr. Romario P. Ybañez, Dekano ng paaralang Graduwado,sa pagbigay-pahintulot sa mananaliksik na isagawa ang pag-aaral na ito at bilang isa sa mga panelista.

Sa lupon ng mga panelista: Dr. Erlinda N. Calumpang, *Program Chairperson*, G. Shem Don C. Fabila, *Content Specialist-External*, Dr. Felipe B. Sullera Jr., *Content Specialist-Internal,* sa pagbahagi ng kanilang komento at mungkahi para mas mapabuti ang pananaliksik na ito.

G. Shem Don C. Fabila, G. Kendrick Kitane at Bb. Ritchel Elnar, mga *validator* ng mananaliksik, sa kanilang mga mungkahi upang i-*validate* ang sarbey-kwestyoneyr na ginamit sa pananaliksik na ito.

Dr. Neri C. Ojastro, CESO V, *Schools Division Superintendent ng* Dibisyon ng Negros Oriental; Gng. Monica B. Maxino, MAEd, *Public School District Supervisor* ng Bindoy 2 District; Gng. Zenaida D. Tulabing, Punong-guro ng Demetrio L. Alviola National High School, kasama si Gng. Riza Vailoces, isa sa mga tagapayo ng Baitang 9-Seksyon Yakal. Taos-pusong nagpapasalamat ang mananaliksik sa kanilang pagpahintulot na isagawa ang *dry-run.*

Dr. Adela P. Araula, *Public School District Supervisor* ng Ayungon 1 District; G. Besmark R. Babor, *School Teacher-In-Charge* ng Mabato Provincial Community High School; G. Reynaldo D. Pastor, Punong-guro ng Ayungon National High School, kasama ang ilang guro sa Filipino na sina Bb. Odette A. Faburada at G. Larry Faburada; Gng. Agnes T. Taub, Punong-guro ng Ayungon Science High School, kasama si Gng. Mary Jane E. Eluna, guro sa Filipino 9; Dr. Hazel E. Argoncillo, *Public School District Supervisor* ng Ayungon 2 District; Gng. Chastine R. Carale, Punong-guro ng Tambo National High School; Gng. Jocelyn B. Guardario, *Head Teacher* ng Ayungon National High School-Carol-an Extension, sa kanilang pagbigay pahintulot na isagawa ang pangangalap ng datos sa pag-aaral na ito sa mga piling mag-aaral mula sa Baitang 9.

Gng. Gay Buhat at Gng. Patrea B. Montesor, salamat sa inyong tulong mula sa simula hanggang sa mapagtagumpayan ng mananaliksik ang tesis na ito.

Sa mga respondente, sa paglalaan ng oras sa pagsagot sa isinagawang pag-aaral.

Iniaalay ng mananaliksik ang tesis na ito sa kaniyang mga magulang na sina Roselyn B. Espinosa at sa yumao niyang ama na si Alberto A. Espinosa; sa kaniyang mga kapatid na sina Aris B. Espinosa at Kent Russel B. Espinosa; at kay Joemar A. Manojo.

SANGGUNIAN

Abdulrahman, N. C., & Abu-Ayyash, E. a. S. (2019). Linguistic competence, Communicative Competence and Interactional Competence. International Journal of Computer and Technology, 19, 7537–7552. https://doi.org/10.24297/ijct.v19i0.8505

Aclinen, Z. M., & Olesio, M. (2023b). ANTAS NG KASANAYAN SA PAG-UNAWA SA PAGBASA NG MGA MAG-AARAL SA GRADE 8. Cognizance Journal, 3(12), 319–345. https://doi.org/10.47760/cognizance.2023.v03i12.024

Adamma, O. N., Ekwutosim, O. P., & Unamba, E. C. (2018). Influence of extrinsic and intrinsic motivation on pupils academic performance in mathematics. Zenodo (CERN European Organization for Nuclear Research). https://doi.org/10.5281/zenodo.1405857

Alvandi, N. (2019). Literary Theory in Upper Secondary School: Should it be used before higher education? Jonkoping University School of Education and Communication. http://www.diva-portal.org/smash/record.jsf?pid=diva2:1326288

Clinton, V., Taylor, T., Bajpayee, S. et al. 2020. Inferential comprehension differences between narrative and expository texts: a systematic review and meta analysis. Read Writ 33, 2223–2248 (2020). https://doi.org/10.1007/s11145-020-10044-2

Delfin, ELino S. 2021. Ang guro, ang wika, ang panitikan, ang asignaturang Filipino sa panahon ng pandemya. Kinuha mula sa: https://www.studocu.com/ph/document/ateneo-de-zamboangauniversity/jurisprudence/ang-guro-ang-wika-ang-panitikanat-ang-asignatrang-filipino-sa-panahonng-pandemya/26314382

Delos Santos, Lea S. et al. 2024. Mga salik na nakaapekto sa antas ng pag-unawa sa pagbasa. American Journal of Humanities and Social Sciences Research. Vol. 8-Issue 03. https://www.researchgate.net/publication/379833102_MGA_SALIK_NA_NAKAAAPEKTO_SA_ANTAS_NG_PAG-_UNAWA_SA_PAGBASA_NG_MGA_MAG-AARAL_SA_JUNIOR_HIGH_SCHOOL

De Vera, B. O. (2022, April 1). Lockdown’s impact: Unicef cites poor reading skills among PH kids | Inquirer News. Retrieved from https://newsinfo.inquirer.net/1576573/lockdowns-impact-unicef-cites-poor-reading-skills-among-ph-kids

Domingo, R. W. (2023, September 22). PH ‘learning poverty’ still among region’s worst | Inquirer News. Retrieved from https://newsinfo.inquirer.net/1835164/ph-learning-poverty-still-among-regions-

worst#:~:text=In%20the%202023%20WB%20report,New%20Guinea%2C%20Tonga%20and%20Tuvalu.
Department OF Education. 2019. K-12 Gabay pangkurikulum sa Filipino. https://www.deped.gov.ph/wp-content/uploads/2019/01/Filipino-CG.pdf
Diwan, S. K. (2020). Reading Habits and its Impact on Students Academic Performance: Case Study. SciSpace - Paper. https://typeset.io/papers/reading-habits-and-its-impact-on-students-academic-2q6smj867lb
Endah, S., Effendi, H., & Asri, Y. (2018). The contribution of reading interest on literature and reading comprehension toward students' ability in writing fantasy story. International Conferences on Education, Social Sciences and Technology. https://doi.org/10.29210/20181137
Fakhroo, F. T., & Bulaila, A. M. (2021). Effects of Integrating Literary Texts in Enhancing the Quality of Academic Writing of University Students in Bahrain. International Journal of English Linguistics, 11(1), 213. https://doi.org/10.5539/ijel.v11n1p213
Fikray, F. M., & Habil, H. (2022). The Implementation of Literature Teaching Approaches in the ESL Classroom: A Systematic review. LSP International, 9(1), 149–165. https://doi.org/10.11113/lspi.v9.18595
Gedik, O., & Akyol, H. (2022). Reading Difficulty and Development of fluent reading Skills: an Action Research. International Journal of Progressive Education, 18(1), 22–41. https://doi.org/10.29329/ijpe.2022.426.2
Hafeez, M. (2021). Impact of teacher's training on interest and academic achievements of students by multiple teaching methods. Pedagogical Research, 6(3), em0102. https://doi.org/10.29333/pr/11088
Hughes, T. G., Q. Scales, R., & Scales, W. D. (2021). Writing for Comprehension: How does Writing Influence Informational Reading Comprehension in the Elementary Classroom? Literacy Practice and Research, 46(2), 3. https://doi.org/10.25148/lpr.009639
Kagawaran ng Edukasyon. 2019. K to 12 Gabay Pangkurikulum sa Filipino (Baitang 1-10) https://www.deped.gov.ph/wp-content/uploads/2019/01/Filipino-CG.pdf
Kurniati, R., Daud, A., & Masyhur, M. (2023). Reading Interest and Reading Comprehension Ability: The Correlational Study in Secondary Education. Journal of Education, Language Innovation, and Applied Linguistics, 2(1), 41–50. https://doi.org/10.37058/jelita.v2i1.6547
Labrigas, M. A. (2022). Factors affecting reading Comprehension in Cebuano and English Language Texts. International Journal of English, Literature and Social Science, 7(4), 110–120. https://doi.org/10.22161/ijels.74.17
Locher, F. M., Becker, S., & Pfost, M. (2019). The Relation Between Students' Intrinsic Reading Motivation and Book Reading in Recreational and School Contexts. AERA Open, 5(2), 233285841985204. https://doi.org/10.1177/2332858419852041
Lustyantie, Ninuk at Aprilia, Fitria. 2020. Reading Interest and Achievement Motivation: A Study inan EFL Conte. TESOL International Journal. Vol. 15-No. 4. https://files.eric.ed.gov/fulltext/EJ1329504.pdf
Mekonnen, Y. S., Tegegne, Y. D., & Wubie, D. B. (2022). Evaluating the Suitability of Literary Texts in Grade 10 English Text Book for Language Classrooms.

European Online Journal of Natural and Social Sciences 2022, 11(3), 1805–3602. https://european-science.com/eojnss/article/download/6313/2958
Nguyen, C. T. (2022). EFL students' perceptions of the effects of the integration of reading and writing on their writing skills. Journal of Language Teaching and Research, 13(6), 1177–1187. https://doi.org/10.17507/jltr.1306.05
Nguyễn, T. T. H. (2022). The effects of reading habits on writing performance: a case study at Van Lang University. International Journal of TESOL & Education, 2(4), 105–133. https://doi.org/10.54855/ijte.22247
Nicolas, R. M. A., & Nicolas, A. (2021). Mga Hamon ng Mga Guro sa Filipino sa Barasoain Memorial Integrated School sa Pagtuturo ng Wika at. . . ResearchGate. Retrieved from: https://www.researchgate.net/publication/356913613_Mga_Hamon_ng_Mga_Guro_sa_Filipino_sa_Barasoain_Memorial_Integrated_School_sa_Pagtuturo_ng_Wika_at_Panitikan_sa_Panahon_ng_Pandemya
Organization for Economic Cooperation ang Development. 2023. Programme for International Student Assessment 2022 Results. Retrieved from: https://www.oecd.org/publication/pisa-2022-results/ https://gpseducation.oecd.org/CountryProfile?primaryCountry=PHL&treshold=5&topic=PI#:~:text=In%20reading%20literacy%2C%20the%20main,30%20points%20higher%20for%20girls).
Pagpapahalaga sa Panitikang Filipino. (n.d.). Retrieved from https://www.scribd.com/presentation/536922699/PAGPAPAHALAGA-SA-PANITIKANG-FILIPINO
PISA 2022 Assessment and Analytical Framework. (2023). In Programme for international student assessment/Internationale Schulleistungsstudie. https://doi.org/10.1787/dfe0bf9c-en
Ranque, K. M. I., Liwanan, R. B., Nieva, L. J. D. S., & Bernal, A. I. S. (2024). Students' Proficiency in Using Filipino Language in Academic Communication. International Journal of Innovative Research in Multidisciplinary Education, 03(03). https://doi.org/10.58806/ijirme.2024.v3i3n08
Red Model of Critical Thinking. n.d. Retrieved from: https://www.airuniversity.af.edu/LinkClick.aspx?fileticket=y4oFCKRrMKI%3D&portalid=10#:~:text=The%20Watson%20Glaser%20critical%20thinking,RED%20model%20of%20critical%20thinking%3A&text=Recognize%20assumptions.,provided%20to%20back%20it%20up.
Rojas, H. H. (2022). Factors affecting reading comprehemsion among grade 5 pupils in Poo Elementary School. IJARIIE, 8(5), ISSN(O)-2395-4396. http://ijariie.com/AdminUploadPdf/Factors_Affecting_Reading_Comprehension_among_Grade_5_Pupils_in_Poo_Elementary_School_ijariie18224.pdf
Saleh, S. E. (2019). Critical thinking as a 21st century skill:Conceptions, implementation at challenges in the EFL classroom. Zenodo (CERN European Organization for Nuclear Research). https://doi.org/10.5281/zenodo.2542838
St Aldilah Khaerana, A., & Nurdin, N. N. (2018). THE EFFECTIVENESS OF STORY TELLING AND STORY READING METHODS IN TEACHING SPEAKING. Eternal (English, Teaching, Learning & Research Journal), 4(2), 181. https://doi.org/10.24252/eternal.v42.2018.a4

Sullera, F. (2020). Lawak ng Pagpapahalaga ng mga Estudyante sa Asignaturang Filipino Kaugnay ng Kanilang Akademik Performans. https://doi.org/10.5281/zenodo.4396108

Toba, R., Noor, W. N., & Sanu, L. O. (2019). The current issues of Indonesian EFL students' writing skills: ability, problem, and reason in writing comparison and contrast essay. DINAMIKA ILMU, 57–73. https://doi.org/10.21093/di.v19i1.1506

Tajoloso, Teresita D. et al. 2023. Filipino high school students' reading engagement and interest during the pandemic: Implications for addressing the needs of struggling readers. The Seybold Report DOI 10.17605/OSF.IO/9SZ52 https://admin369.seyboldreport.org/file/V18I07A191_9SZ52-azkL20gI29Ufymn.pdf

Torppa, M., Vasalampi, K., Eklund, K., Sulkunen, S., & Niemi, P. (2019). Reading comprehension difficulty is often distinct from difficulty in reading fluency and accompanied with problems in motivation and school well-being. Educational Psychology, 40(1), 62–81. https://doi.org/10.1080/01443410.2019.1670334

Totto, P., & Ramos, A. B. (2021). Reading and writing performance of senior high school students. International Journal of English Language Studies, 3(9), 09–22. https://doi.org/10.32996/ijels.2021.3.9.2

Velayati, N., Muslem, A., Fitriani, S. S., & Samad, I. A. (2017). An exploration of students' difficulties in using critical thinking skills in reading. Al Ta'lim/Jurnal Al-Ta'lim, 24(3), 195–206. https://doi.org/10.15548/jt.v24i3.298

Zur, S., Zur, S., Hestiana, H., & M, Z. (2022). Students' interest in reading English texts. KnE Social Sciences, 148–157. https://doi.org/10.18502/kss.v7i8.10733

APA Citation:

Espinosa, I. B., & Calisang, C. P. (2024). HAMON NG MAG-AARAL KAUGNAY SA PAGKATUTO AT PAGPAPAHALAGA NG PANITIKAN SA FILIPINO. Ignatian International Journal for Multidisciplinary Research, 2(8), 767–792. https://doi.org/10.5281/zenodo.13310653

irish.espinosa001@deped.gov.ph
calisang.cristina@mdci.edu.ph

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

HUMAN RESOURCE PROGRAM IMPLEMENTATION, MOTIVATING STRATEGIES, AND EMPLOYEE PERFORMANCE IN THE GOLDENHIGH-GARMENTS MANUFACTURING CORPORATION: BASIS FOR ENHANCED PROGRAM

Stephen Paulo T. Recinto, MBA

Laguna College of Business and Arts, Calamba City, Laguna, Philippines

https://doi.org/10.5281/zenodo.13292553

ABSTRACT

The study assessed the HR program implementation of The Goldenhigh-Garments Manufacturing Corporation and its relationship to the utilization of moderating strategies and employee performance to develop an enhanced program. Surveys were conducted to collect quantitative data from the employees, focusing on HR program implementation dimensions such as ability, motivation, and opportunity, as well as motivating strategies including intrinsic and extrinsic motivators. Additionally, the survey also focused on performance dimensions such as productivity and quality output. The data were statistically processed using weighted mean, Likert-scale, and Pearson Product Moment Correlation Coefficient to quantify the impact. This study used the quantitative descriptive-correlational method approach. The respondents were the employees of The Goldenhigh-Garments Manufacturing Corporation. The findings revealed that the HR program implementation of the company in terms of ability, motivation, and opportunity was fully implemented with a general assessment of 3.81, 3.84, and 3.88 respectively. Moreover, there was no significant difference in the assessment of the heads and staff as to the level of HR program implementation with an obtained probability values of 0.860, 0.361, and 0.656. Additionally, the employees were highly performing in terms of productivity and output quality with a general assessment of 3.89 and 3.94 respectively, and the former determined that the amount of extrinsic motivators in the program was extremely motivating. Based on these findings, an enhanced program was proposed encompassing overall employee development strategies, skill-performance-centric program, capacity planning, and workflow management. The implementation of the enhanced program in the future was expected to optimize employee performance. Overall, this study provided valuable insights into enhancing the HR program with the ultimate goal of improving the employee performance of the company.

Keywords: *Human resource program implementation, Employee performance, Motivating strategies*

INTRODUCTION

Organizations not only focus on economic gain but also dwell on their internal corporate social responsibility toward their employees. As Akther et al. (2020) reiterated, employees were viewed as strategic resources that gave businesses a competitive edge. The majority of companies encountered people problems, which involved problems with productivity, efficiency, performance, and relationships of their employees. This was caused by poor implementation of Human Resource Management Programs. Effective implementation of these programs was substantially vital for any organization. Having poor programs impeded the fulfillment of the organization's objectives and goals. Moreover, it affected its overall financial position and competitive advantage.

As such, Djurovic (2020) stated that approximately 13,600 employees from 34 countries were surveyed and the results show that India tops the list with 89% satisfied employees. This high number of satisfied employees translated into the growing economy of India. India has transpired as one of the fastest-growing economies in the world and was anticipated to be part of the top economy after 10 years.

Additionally, India's GDP stood at US$ 694.93 billion and was continuously increasing. Furthermore, according to McKinsey Global Institute, as cited by India Brand Equity Foundation (2021), the government of India increased its employment growth and created a more sustainable job setting to be highly competitive. While Lloyd and Thoman (2019) mentioned that it was a fact that an engaged workforce performing well and satisfied employees would lead to increased revenue for the company. These positive effects on the organization consequently benefited the economy of the whole country.

On the contrary, in the Philippines, there has been an increasing number of Filipinos leaving the country and looking for work abroad. According to the Philippine Statistics Authority (2020), as of 2019, there were an estimated 2.2 million OFWs, and this was increasing yearly. CNN (2020) reiterated that the main reason why Filipinos want to work abroad is because of better career opportunities. This was the reason why Philippine companies made sure to give importance to their employees. Azeez (2019) mentioned that good salaries and wages, proper benefits, job security, and career opportunities must be considered in its business operations. Satisfying the needs of the local workforce decreased the possibility of the workers leaving the country. Furthermore, Donthu (2022) mentioned that employees who were committed to the company and were happy with their jobs were unlikely to exhibit poor performance and were often very productive.

This study focused on a clothing manufacturing company located in the Province of Batangas. The GoldenHigh-Garments Manufacturing Corporation has been in the industry for 45 years. It started its operations in 1977 as E&E Needlecrafts employing

approximately 1000 employees up to the year 2001. In 2004, it changed its name to Gee Line Garments International Corporation which employed approximately 600 employees. The decrease in the number of employees was attributed to the increasing number of competitors. Currently, the business changed its name to The GoldenHigh-Garments Manufacturing Corporation due to the transition to second-generation family owners. Presently, the company has 101 employees. The drastic decline in the workforce was attributed to the decline in the garments manufacturing industry of the country.

In addition, the researcher is currently the Chief Operating Officer of the company. The management of the company was passed on to him from the first generation and it is his obligation to strengthen the position of the company in the industry. The former decided to focus the study on the company's human resource aspect as he finds it a vital factor for the success of the business. The remaining employees of the company were the loyal ones who had been in the company for more than 20 years. The business is labor-intensive, and this is the reason why the company must ensure the proper treatment of employees to stay competitive in the industry. The study looked into the company's Human Resource Programs and practices to see if they were effective in promoting job satisfaction and increased job performance. Increased job satisfaction and performance can lead to job loyalty and commitment. This loyalty and commitment can be the main factor that would slow down the decrease in the number of employees in the organization.

Moreover, the employees are valuable assets of any organization. They are the heart of the company. Without them, the company would not function. Therefore, efforts to improve human resource management programs should be made. When the management manages its employees properly, it will positively cultivate an individual's attitude, mindset, contentment, engagement, and commitment to the organization. Which in turn can increase productivity and organizational effectiveness. According to Inayat and Khan (2021), satisfied employees had higher effectiveness and efficiency compared to dissatisfied ones, consequently increasing the organization's competitive advantage. In today's fast-moving and highly competitive world, enhanced efficiency and effectiveness are keys to surviving and competing. This is where effective implementation of Human Resource Management Programs and practices comes in because these employee work engagements, value orientations, and associations greatly affect the productivity of any organization.

The review of the literature and studies that are pertinent to the suggested research study are presented in this chapter. Since the scope of the study centered on the satisfaction of The Goldenhigh-Garments Manufacturing Corporation employees, the researcher pushed for the study promoting the Human Resource Programs of the company. However, the researcher searched and discovered that good studies have consistently been done on employee satisfaction and human resource programs by different individuals and institutions.

Implementation of Human Resource Programs

Several pertinent studies were developed to define and explain the significance of the effective and efficient implementation of Human Resource Programs in companies. The researchers initiated these studies since they saw a substantial link between Human Resource Programs and overall employee satisfaction. The impact of the programs on the employees was the decision criteria if the implementation was effective.

Correspondingly, Akther et al. (2020) reiterated that Human Resource Management literature was created as a result of the extensive research interest in the workplace and employees. Employees were perceived as strategic resources that gave businesses a competitive edge. The recent explosion in Human Resource Management study suggested that it had become a topic of interest to academics, researchers, and business professionals. One conference paper on people training in the field marked the beginning of the human resource management journey in 1981, but as of February 2020, a total of 1802 papers had been published and were indexed in the Scopus database.

In addition, Olasoji (2019) stated the concept of Human Resources Management developed as an independent concept in the middle of the 80s as a reasonable continuation of personnel management. Human resources were a vital aspect of progress, according to many authors. The ability to grow, move, and manage other elements was controlled by Human Resources Management. The difficulties in organizational performance in Human Resource Management emerged from a very varied range of businesses and industries. Due to the business environment's fast transformation, there were different issues in managing the human resources of any company. Numerous obstacles or changes were happening quickly that influenced Human Resource Management toward organizational efficiency in a wide-ranging variation of concerns due to the shifting economy as well as local and worldwide developments. Moreover, there were external factors that existed that hindered the overall efficiency and effectiveness of any company. Other issues that Human Resource Management faced were industrial and employee relations, workplace diversity, retention and succession plan, recruitment process, and accessibility of skilled workers and technology.

In the same way, Liu et al. (2020**)** claimed that the primary roles of Human Resource Management in an organization were to attract talents and meet their staffing needs to ensure smooth business flow. The HR function's sole responsibility in a traditional business is to maintain the workforce to satisfy output targets. This changed to one that is employee-focused as the business operations continue to evolve. Current businesses consider their employees as assets of the company. Consequently, Human Resource Management has focused on creating and sustaining an engaged, informed, progressive, and career-oriented workforce. Organizations in the modern era had realized how important staff development was to the overall success of the business. Employees were strategically developed into business assets through effective human resource programs. It concentrated on high-performance work structures that fostered employee competence, fidelity, and efficiency to provide a competitive edge. The

organization was better able to compete and flourish in the cutthroat business world by having devoted personnel.

Similarly, Al-Jedaiah and Albdareen (2020) mentioned that the foundation that defined how successful a company was was its human resources. The degree to which these resources were able to effectively exercise control over the various activities was determined by the depth and strength of the Human Resource Management. The needs of the business were identified through strategic planning for human resources, which also linked the HR strategy to the overarching organizational strategy. To achieve the company's aim in the markets, the strategy implemented identified the needs of the organization and advanced hand in hand with the organizational strategy. Additionally, the HR strategy outlined additional organizational requirements that aid in managing HR, such as the necessary experiences and training to enhance organizational skills. The success of the human resource strategy was beneficial to the overall organizational performance.

Additionally, Asis-Castro and Edralin (2020) emphasized that the most vital part of any company is its employees. They were essential in attaining the company's goals, vision, and mission. Human Resource Management needed to enforce Human Resource Programs that increased employee satisfaction and retention. These programs encapsulated recruitment, training, salary, reward, health and safety, and work-life balance. Moreover, the organization's Human Resource Programs displayed how much it values its people. Companies saw the intrinsic value of each employee and incorporated humanistic sustainability programs in dealing with them. By doing this, it guaranteed the welfare of every employee, and it created meaningful work for them. Additionally, this brought out a positive impact on the employees like happiness, trust, respect, recognition, emotional and mental stability, and overall well-being.

Furthermore, Fenech et al. (2019) reiterated that the performance of the organization was the primary concern of Human Resource Management. It was also emphasized that the purpose of Human Resource Programs was a solution for business problems concerning workforce effectiveness. Managing human resources was a strategic advantage for businesses that helped to increase the company's competitive edge. The senior management continued to view human resources as a drain on the business's budget until Human Resource Management reformed to administer the human resource department effectively. Human Resource Management in the digital era was more diversified and people-oriented, with the obligation of forming interesting, demanding positions to keep the young workforce involved in their work. The conventional methods that human resource responsibilities were handled in organizations were called into question by digital transformation. The digital revolution had further consequences for the purpose, capabilities, and competencies of Human Resource Programs. Therefore, digitization had an impact on Human Resource Management beyond simply making everyday administrative responsibilities simpler. The Human Resource Programs, which include planning, recruiting and selection, performance management, and incentive management, were made easier by the use of technology. However, these factors also increased the responsibilities placed on the human resource function, which

made sure that the organization's human capital was in connection with the strategic needs of the digital era.

Moreover, Bua and Margherita (2021) explained that Human Resource Management faces different challenges in the manufacturing industry. Nowadays, manufacturing organizations have adopted Industry 4.0 technologies – robots, the internet, and big data. This adaption to change strategies was beneficial to the company since it increased production, lessened manufacturing costs, and created new products to be offered in the market. But these changes also had an impact on the workforce. With this technological adoption, the human workforce was being obliged to have a human-machine interaction. The function of Human Resource Management was to provide Human Resource Programs to establish an advantageous condition for employee development. The Human Resource Programs included practices that helped the workforce manage the new technologies. Moreover, these programs aimed to provide a higher level of technological knowledge, competencies, and capabilities, enjoyable working conditions, and greater self-development for increased job efficiency.

Therefore, Koster (2019) mentioned that innovative Human Resource Programs are very relevant in today's increasing global competition. This changing business environment entailed that the employees must continuously improve their skills, knowledge, and ability to perform effectively and efficiently. Innovative Human Resource Programs included equal treatment of employees, human capital investment, sustainable employability, incentive system, monetary incentives, decentralization, and autonomy. These programs contributed to organizational performance as they increased the performance, satisfaction, and loyalty of the workforce. Moreover, the programs adapted to different trends. These trends included social, technological, economic, political, environmental, and demographic trends. If human resource programs were conceptualized under these trends, then the employees would be directed toward the organizational goals. This strategy was well shown by 2003 research by Agarwala. 14 distinct Human Resource program domains were identified, including ones related to hiring processes, compensation schemes, and career growth. The basic theoretical tenet in this body of work was that, if Human Resources Policies and Programs were combined into bundles or systems, they improved business performance by raising employee engagement, performance, and commitment.

Specifically, Dvorakova (2020) deduced that sustainable Human Resource Management was the contemporary approach to managing employees. The Human Resource Practices and Programs not only focused on short-term employee development, restoration, and renewal. Having sustainable Human Resource Programs developed a maintainable working environment and in the long run, attained sustainable organizational goals. Moreover, to be sustainable, Human Resource Programs incorporated and correlated social and environmental concerns in their programs. This means that the management not only took into consideration their economic gain, but most importantly they promoted a balance between profit, environment, relationship with the community, and relationship with the whole company workforce. It was important that companies not negate the possible negative effects of their programs on the environment

and community. It was the moral obligation of organizations to operate ethically and to have a positive impact on all stakeholders.

In addition, Ramaraju (2019) noted that the foundation of Human Resource Programs was the definition of philosophical orientation, which aided in the focus of an organization's long-term, visionary concept. Management's outlooks and assumptions about people, which included their character, needs, worth, and work style, were at the central point of human resource philosophy. The treatment of individuals and the management's conception of its Human Resource Programs were thus determined by these ideas and presumptions. The programs were designed to handle individuals using one of three approaches: the humanistic approach, the machine approach, or the commodity approach. In the commodity approach, people were viewed as a good that could be bought or traded for a price, just like it was in the old slave practice. A human was regarded as an element or part of the machine that may be fitted like any other part of the machine. Both of these methods viewed persons as physiologically evident human beings. An individual was viewed as a human being with physiological characteristics in a humanistic approach.

Importantly, Ujma et al. (2019) cited that the foundations of the Ability, Motivation, and Opportunity (AMO) Theory were first found in Vroom's writings, where he asserted that both ability and motivation influenced performance. This method, however, ignored the impact of the outside world and concentrated entirely on individual traits. The opportunity factor, which reflected the working environment, equipment, supplies, leader behaviors, procedures, and time, was added by Blumberg and Pringle to this model. Individual performance, according to these writers, was a function of capacity (C, or abilities), willingness (W, or motivation), and opportunity (O). Suppose that P = f(O x C x W), then performance (P) requires the presence of all three factors. A low level of any of these characteristics also had a significant negative impact on how well each individual performed.

Moreover, the Ability, Motivation, and Opportunity (AMO) theory has focused on assisting with the selection of Human Resource Programs that promote employee and organizational performance. Appropriate program selection was crucial for the deliberate modeling of employee abilities (i.e., selection, hiring, and training), motivations (i.e., performance-related pay), and opportunities to act (i.e., highlighting teamwork, or suggestion practices).

Furthermore, the three categories of Human Resource Programs were skill, motivation, and empowerment strengthening programs. The first goal of skill-enhancement programs was to raise knowledge, aptitude, and skill levels among employees so they could do their jobs effectively. Second, techniques that increased motivation were developed to guide employee behavior toward organizational goals by employing the right combination of inducements. Among these techniques were those related to performance management, pay, incentives, and rewards. Lastly, developing employee autonomy, participation in decision-making, raising employee accountability,

and providing feedback mechanisms were the main focuses of empowerment-enhancing techniques.

Motivating Strategies

People were primarily interested in motivation, or the ability to persuade oneself or others to do action. Managers face challenges in inspiring the employees, and employees themselves find it difficult to muster the willpower to persevere through life's and work's obligations. External factors like reward systems, grades, evaluations, or the opinions they think others may have of them frequently influence people. However, people were also often driven from within by innate passions, curiosities, deep-seated beliefs, or caring feelings. These internal drives fueled passions, creativity, and persistent work even when they were not always acknowledged or encouraged by others.

Hence, Salikhova (2020) cited that according to the Self-Determination Theory (SDT), both intrinsic and extrinsic motivators change and influence employees' performance. This theory proposed three basic psychological needs—autonomy, competence, and relatedness—as intrinsic motivators. Employees worked because they found them to be fascinating, entertaining, significant, or valuable. First, autonomy was the idea that one had free will and was voluntarily approving their action. Second, competence was the state of having mastered a task and being successful in it. Third, the urge to feel related to and a part of a group was referred to as relatedness. Furthermore, extrinsic motivators included the employee's social nature. Employees worked to get a reward or avoid punishment. It is also cited that numerous studies had demonstrated that both intrinsic motivators and the more self-determined types of extrinsic motivators contributed to both engagement and optimal job performance of the employees.

Supporting this, Rosli et al. (2022) asserted that the Self-Determination Theory led to the initial identification of the three fundamental needs of autonomy, competence, and relatedness based on their usefulness in integrating empirical research on the influence of interpersonal contexts and environmental occurrences on intrinsic motivation and the internalization of extrinsic motivation. These demands were critical for optimum motivation and general wellbeing, according to a later study. Vitality and need satisfaction were tightly associated, whereas motivational tiredness and need frustration were opposites. Depending on their performance, employees frequently responded to how much autonomy, competence, and relatedness they experience at work. More studies have shown that when basic needs aren't addressed, employees respond in predictable ways. Others made an effort to make up for what was lacking, as seen in their motivations for pursuing wealth, power, addictive diversions, or hostility as a result of need-frustrating. Others attempted to fill the void, as seen by their pursuit of riches, power, addictive vices, or anger as a result of need-frustrating.

Employee Performance

How well a person performed the tasks and obligations of their position was considered employee performance. For every organization, having vastly productive employees was important since they aided the organization reach its full potential. On the other hand, a business' success may be hindered and suffer if its employees perform poorly. Employee performance has generated significant attention and discussion in recent studies as a result of its expanding significance.

Due to this, Bashir et al. (2020) noted that an individual's degree of effectiveness in fulfilling their duties and capacity to achieve their goals served as an example of their overall job performance. The efficiency of the workforce was judged by how successfully a person carried out their responsibilities and other work-related tasks. The performance of a job was measured by the outcomes or effects of a certain work function or group of activities over a predetermined time frame. Since it was thought that these variables impacted organizational behavior or human resources practices rather than serving as a cause or determinant, employee performance was frequently the dependent variable in any empirical study.

To emphasize, Oyibo (2020) explained that employees were the company's most important asset and played a key role in performing organizational tasks and accomplishing organizational goals. How to maximize employee performance, though, was a dilemma for any organization. "The level of success of employees in performing their duties and responsibilities" was the definition of employee performance. Because employee performance was critical to evaluating whether organizational objectives were met, businesses searched for strategies to motivate their staff to perform at the top of their game.

Additionally, Inayat and Khan (2021) presented a research study that focused on the effect of job satisfaction on employees' job performance in different organizations in Peshawar, Pakistan. They concluded that satisfied employees had higher effectiveness and efficiency compared to dissatisfied ones, consequently increasing the organization's competitive advantage. Additionally, the study showed a positive relationship between work quality and job satisfaction. Most of the satisfied employees were relatively more competent, skillful, and committed at work. Because of the positive effect of employee satisfaction, the company gave the employees opportunities for personal advancement such as good salaries and wages, participation in decision-making, and increasing organizational participation. Moreover, the company focused on the employees' interpersonal relationships, workplace safety, incentives and rewards, and job security. Due to the economic and political stability in the region, it was the important role of the company to keep their employees motivated and satisfied in the current business setting.

Specifically, Ramos-Villagrasa et al. (2019) claimed that the most important factor in Human Resource Management was job performance. Its evaluation and analysis were crucial for many organizational procedures like hiring, paying, rewarding, or training

employees. Job performance was a paradigm that involved actions that employees may influence and that supported organizational goals. Task performance, contextual performance, and unproductive work behavior were the three essential areas of job performance. Together, these elements offered a comparatively systematic and economical process for evaluating total work performance. The first one was task performance, which was defined as "actions that influence the production of a good or service," followed by contextual performance, which was "actions that influence the goals of the company by aiding its social and psychological environment," and thirdly, counterproductive to work behavior, which was defined as "voluntary actions that harm the wellbeing of the company."

Moreover, according to Nuryanti et al. (2020), the crisis in employee performance was one of the most significant problems facing the management of any organization. The low intensity and unachievable work targets were caused by the subpar performance of human resources. Each worker performed in a way that accurately represented their role within the company. Employee creativity was limited, and as a result of subpar performance, work was completed in an inadequate amount and quality.

Supporting this claim, Aslan et al. (2021) reiterated that the conformity to carry out a duty within the terms of a contract between an employer and an employee was known as task performance. It was possible to define task performance as a person’s capacity to efficiently do his or her tasks and obligations of the relevant function as outlined in the job description. In other words, it concerned how properly and successfully employees carried out their duties. Therefore, how well a person does his or her duties affects all aspects of the organization, including production, efficiency, and productivity. Task performance, in the eyes of the employee, was defined as behavior that was "expected, evaluated, and rewarded."

Correspondingly, Ertikin (2020) claimed that to thrive against changing environments, emerging technologies, and escalating competition, companies must be robust and adaptable. Employees were therefore immediately impacted by these processes that firms must deal with. To put it another way, maintaining standards was necessary for firms to prosper in the current competitive business climate. The best performance of employees within the standards was crucial to achieving high productivity in businesses. The term "performance" meant a notion that following a planned action was acquired and decided the outcome either statistically or qualitatively. Another definition of performance is that it is the specification of the quantity and quality of the planned goal that the individual or group conducting the activity can obtain.

With this in mind, Nugroho et al. (2021) explained that businesses and organizations need competent staff to advance. Employee output has revealed a person's capacity for work. When an employee had done high-caliber work that helped achieve every leader's task, this was referred to as performing well. The ability of an employee to complete their work by the deadline was another sign of their performance. Employee performance stems from the quality and quantity attained by an employee in carrying out his or her activities following the responsibilities assigned and it could reach

any aim set out by the firm. Each company had a high expectation of employee performance since the success of an organization cannot be divorced from the effectiveness of its workforce.

Moreover, Bienkowska and Tworek (2020) explained that the nature of today's jobs and the workplace are dynamic as a result of the changing and dynamic environment in which modern companies operate. Given that modern workers were the primary organizational resource defining the potential for sustainable development, it was necessary to reevaluate expectations for them. It was clear that employee intellectual capital enhanced organizational sustainability. Employees concentrated on making changes to be able to use their dynamic capacities to contribute to the organization's sustainable development. Therefore, contemporary firms viewed their workforce as a collection of fixed resources and developed the new competencies that were required for their effective performance of duties at a specific position. One of the essential elements required for attaining sustainable development in any modern business was the capacity of workers to adapt flexibly to changes in the environment, especially those that influence job performance. This combination of resources and flexibility was created as a result. To function effectively in today's dynamic and diverse world, "workers need to be increasingly adaptable, versatile, and tolerant of uncertainty."

In addition, Baskaran et al. (2020) stated that very little study had been done on how the use of technology in a company affected employee job performance and created job insecurity. Some researchers, however, discovered a connection between these features. Organizational policies and programs were altered as an effect of the adoption of new technologies. In the majority of organizations, the difficulties they encountered were brought on by modern technology, industry competitiveness, increased staff productivity, and new management and leadership. Numerous studies have demonstrated that improving staff attitudes and behaviors improves company performance.

Subsequently, Ong et al. (20202) explained that in many nations throughout the world, job satisfaction has been a well-sought topic. A person's degree of job satisfaction often determines how well they perform at work. A high degree of employee job satisfaction improved organizational performance. Researchers tended to be more motivated and eager to put in more effort when performing their jobs if they were happy with their present work. Employee attitude, loyalty, support, and devotion to the company may all be influenced by job satisfaction.

Correlation Studies between Human Resource Programs, Motivating Strategies, and Employee Performance

The function of effective implementation of Human Resource Programs was to positively cultivate and realize the potential of the employees – to increase their performance and consequently help aid the organization reach its goals. Therefore, it involved the formation of a people-centric Human Resource Program to improve employees' skills and quality and increase employee motivation and satisfaction.

To explain, Al-Tit (2020) showed that human resource programs had a favorable impact on the various facets of employee performance as a result of the creation of positive job satisfaction. This was supported by empirical evidence about the trilateral relationships between human resource programs, working environment, and job performance. The numerous facets of employee performance were tied to human resource programs. It specifically used the Ability, Motivation, and Opportunity framework. The idea that the use of human resource programs was meant to boost employee performance may be viewed as a composition of three elements, including programs that boost opportunities, motivation, and skill development. Analysts further argued, drawing on the social exchange concept, that when companies engage in various HR programs, which were likely to be seen by employees as a show of the company's commitment to them, employees responded in ways that supported business goals. Workers saw corporate initiatives like skill-, motivation-, and opportunity-enhancing programs as proof of the organization's commitment or support. Employees reciprocated by demonstrating a good attitude and improved performance that aided in the accomplishment of corporate objectives.

To expound, Tansel (2022) explained that while improved employee performance necessitated even more work, improved organizational performance indicated that attempts were being made to attain goals. Employee performance was one of the key factors that significantly influenced organizational success. Organizations have a significant impact on improving employee performance by offering efficient and effective human resource programs. In addition, management standards for assessing job performance were essential for improving employee performance since they demonstrated how actual performance relates to standards. The productivity of workers was impacted by both their internal and external work satisfaction. If the workforce were satisfied with both their occupations and their employer, they would be more strongly motivated to work hard to achieve the company's objectives.

Additionally, Tunio (2021) mentioned that people weighed their efforts to complete a job against the benefits related to the task assigned to them. They picked the tasks that satisfied the equation or those that offered more advantages or rewards. Therefore, the company's Human Resource Programs involved offering incentives following a person's expectations who was exerting a great deal of effort to complete a certain work. They were aware that their company appreciated the work they put in. Employees who were aware of potential connections between confident task outcomes would promote an individual’s future attitudes and improve overall job performance.

Moreover, Donthu (2022) stated that many companies were struggling greatly in the current global environment to increase employee work satisfaction and, as a result, to strengthen their organizational commitment to obtain a competitive edge and maintain retention of their employees. The potential advantages for both people and organizations spurred a great deal of interest in organizational concepts that relate to attitude and behavior, such as organizational commitment, work satisfaction, and job performance. Employees who were committed to the company and were happy with their jobs were unlikely to exhibit poor performance and were often very productive. Companies

that achieved industry success were aware of how crucial employee retention was to maintaining market leadership and expanding their customer base. Employee satisfaction generally increased because they believed they were being compensated appropriately for the task they had completed. To achieve this, companies ensured that rewards given to employees were both true contributions to the business and consistent with the Human Resource Programs. Higher job satisfaction made employees more valuable because they felt that the company valued them in the long run and rewarded them for their hard work. As a result, they were more committed to the company, had greater retention rates, and were efficient with their overall job performance.

To support this, Andri et al. (2021) reiterated that any organization needs experienced, talented, and highly devoted staff for business operations to function smoothly. Due to competition, every business tries to retain as much of its workforce as possible. Employee performance determines whether an organization succeeds or fails since the employees are a company's most valuable asset. Therefore, a key component of human resource management was guaranteeing employee happiness and overall job satisfaction. When creating its programs, the management took into account elements like leadership, rewards, pay, skill development, career growth, and recognition. The inclusion of these elements in human resource programs led to longer-term employee retention and higher levels of employee satisfaction.

In addition, Thirusanku and Singh (2021) reiterated that organizational culture is the collection of common values, viewpoints, and beliefs that all employees share. The company's workplace culture was considered solid when the vast majority of its employees decided to adhere to the same principles. In conclusion, a robust and successful culture that aligned the company's aims with those of every individual worker would probably be able to attract workers who would collaborate to achieve organizational objectives.

However, Dumaguing (2022) restated the fact that a significant amount of research on employee performance has been done by academics from all around the world. Disengagement was discovered to be connected with characteristics that were both personal and professional. If workers felt they had adequate time for their personal lives, they were more likely to be satisfied with their occupations. They consequently developed greater motivation, engagement, and dedication to their work, which eventually increased output.

Importantly, Nor and Abdullah (2020) stated that the ability-enhancing practices, motivation-enhancing practices, and opportunity-enhancing practices (AMO) model of the human resource management of companies had been connected to the overall employee performance. The study showed that enhancing an employee's capacity, motivating them to produce high-quality work, and expanding their opportunities to interact with management produce favorable results for comprehending their preferences and helping them to reach the organizational goals in the workplace.

Synthesis

The literature reviews mentioned showed a great causal relationship between Human Resource Programs and employee job performance. As specified in the study of Akther et al. (2020) and Asis-Castro and Edralin (2020), employees are the strategic resources and assets of any organization. Without them, the organization would not function. They also mentioned that the employees were one of the factors that gave businesses a competitive advantage. Because of these claims, other scholars and business professionals have supported the belief that organizations must focus on the total human development of their employees as discussed by Liu et al. (2020), Al-Jedaiah and Albdareen (2020), Fenech et al. (2019), Bua and Margherita (2021), and Koster (2019).

Some studies about the importance of Human Resource Programs were pointed out by Andri et al. (2021). Moreover, Dvorakova (2020), Ramaraju (2019), Al-Tit (2020), Oyibo (2020), Ong et al. (2020), and Tansel (2022) revealed that Human Resource Programs were tools to motivate and help holistically develop employees. They also mentioned that motivated employees were more likely to be satisfied at work and contribute to their overall performance. To add to this, studies by Donthu (2022), Aslan et al. (2021), Ertikin (2020). Nuryanti et al. (2020), Dumaguing (2022), and Tunio (2021) stated that employees work and do the tasks that satisfied them or those that offered more advantages or rewards. Additionally, Bashir et al. (2020) noted that an individual's degree of effectiveness in fulfilling their duties served as an example of their job performance in the organization. To support this, Salikhova (2020) and Rosli et al. (2022) pointed out that numerous studies have demonstrated that both intrinsic motivators and the more self-determined types of extrinsic motivators contributed to both engagement and optimal job performance of the employees. In addition, Thirusanku and Singh (2021) reiterated that the company's organizational culture was considered solid when the vast majority of its employees decided to adhere to the same principles. However, there were also challenges that businesses faced with their human resources. Olasoji (2019), Bienkowska and Tworek (2020), and Baskaran et al. (2020) discussed that businesses need to be strong and flexible due to shifting circumstances, new technology, and intensifying competition. These procedures that businesses must cope with thus had an immediate effect on their employees. To put it another way, upholding standards was essential for businesses to thrive in the present business environment.

To conclude, according to Inayat and Khan (2021), Ramos-Villagrasa et al. (2019), Nor and Abdullah (2020), and Nugroho et al. (2021), there was a significant relationship between the level of implementation of Human Resource Programs and level of employee performance in businesses. Additionally, according to Ujma et al. (2019), appropriate program selection was crucial for the deliberate shaping of employee abilities. Ability, Motivation, and Opportunity (AMO) helped the selection of Human Resource Programs that promoted employee and organizational performance. It was challenging for any business to craft an effective and people-centric Human Resource Programs. However, for their business to grow and compete in the industry, the management must focus on the total human development of their employees through its Human Resource Programs.

The study on the “Implementation of the Human Resource Program, Utilization of the Motivating Strategies of The Goldenhigh-Garments Manufacturing Corporation and Employees Performance” contributes to the literature by offering detailed insights, characterizing influential factors, posing practical recommendations, addressing gaps, and potentially progressing research methodologies. It adds depth to the understanding of employee performance in a specific context, informing the development of an enhanced human resource program. The study’s findings had rational implications for improving and expanding human resource programs and stimulating further research in this area.

The study effectively addressed key gaps in the existing literature on the implementation of human resource programs, utilization of motivating strategies, and employee performance. Through a thorough review of relevant research, the study made significant contributions by bridging the following gaps. Firstly, the study provided a comprehensive understanding of human resource program implementation by synthesizing diverse perspectives from the literature. It explored various factors affecting the proper implementation of human resource programs, including ability, motivation, and opportunity that the latter offered. By examining these factors, the study enhanced our knowledge of how to improve the human resource program of The Goldenhigh-Garments Manufacturing Corporation.

Secondly, the study filled a gap in our understanding of the utilization of motivating strategies by reviewing and analyzing a range of studies. It identified the dimensions of extrinsic motivators and intrinsic motivators as vital contributors to motivating strategies. This exploration shed light on the specific factors that influence the company’s motivating strategies it has offered its employees.

Lastly, the study offered a thorough understanding of employee performance by synthesizing diverse perspectives from the literature. It explored key performance indicators that measured employee performance effectively, including productivity and output quality. This evaluation, sheds light on the specific indicators that influence employee performance, deepening our understanding of performance in this context.

In summary, the study’s comprehensive review of the literature and empirical research successfully filled important gaps in the understanding of human resource program implementation, motivating strategies utilization, and employee performance. By bridging these gaps, the study offers valuable insights into improving human resource program implementation and employee performance within The Goldenhigh-Garments Manufacturing Corporation and similar businesses in the industry.

Research Questions

The primary goal of the study was to identify how the Human Resource Programs of The Goldenhigh-Garments Manufacturing Corporation were implemented and how the employees responded through their job performance. To achieve a high level of employee performance, the company determined the important factors that were crucial in

effectively increasing job performance. This research specifically answered the following questions:

1. What is the implementation level of the human resource program of The GoldenHigh-Garments Manufacturing Corporation as assessed by its employees in terms of:
    1.1 Ability,
    1.2 Motivation, and
    1.3 Opportunity?

2. Is there a significant difference between the assessment of the heads and employees as to the level of human resource program implementation of The GoldenHigh-Garments Manufacturing Corporation?

3. What is the performance level of the employees of The GoldenHigh-Garments Manufacturing Corporation in terms of:
    3.1 Productivity, and
    3.2 Output Quality?

4. What is the utilization level of the motivating strategies of the human resource program of The GoldenHigh-Garments Manufacturing Corporation in terms of:
    4.1 Intrinsic Motivators, and
    4.2 Extrinsic Motivators?

5. Is there a significant relationship between the level of implementation of the human resource program and the level of performance of the employees of The GoldenHigh-Garments Manufacturing Corporation?

6. Is there a significant relationship between the level of implementation of the human resource program and the level of utilization of the motivating strategies of The GoldenHigh-Garments Manufacturing Corporation?

7. Based on the findings of the study, what enhanced program may be proposed?

METHODOLOGY

Research Design

This study used a quantitative method with an emphasis on the descriptive-correlational method of research in defining the correlation between the implementation of Human Resource Programs of The Goldenhigh-Garments Manufacturing Corporation as the independent variable and the level of employee performance as the dependent variable. The descriptive analysis was used as the study described, showed, and summarized the current level and standing of the variables. Moreover, correlational

analysis was also used as the study investigated and measured the causal relationships between the two variables using statistical data and tools.

According to Asenahabi (2019), the characteristic of the descriptive-correlational research method was to depict what was acquired in the data gathered via questionnaires and statistical treatment. It was likewise utilized to define profiles, frequency distribution, attributes of individuals, situations, experiences, and the causal relationships between variables.

Research Locale

The research was conducted at The Goldenhigh-Garments Manufacturing Corporation in Barangay Poblacion, Padre Garcia, Batangas. Since the researcher works for The Goldenhigh-Garments Manufacturing Corporation, the company was chosen as the locale of the study.

Population and Sampling

In this research, the stratified random sampling method was used in choosing the paralleling number of respondents. Nguyen et al. (2019) stated that the SRS, or stratified random sampling, was most effective when the population was divided into "strata" or smaller subgroups. A per-stratum sample was selected utilizing uniform random sampling from each stratum. The stratified random sample was made by conjoining all per-stratum samples. The population of The Goldenhigh-Garments Manufacturing Corporation was divided into three groups – supervisors, quality controllers, and production operators. Therefore, the stratified random sampling was the most appropriate sampling technique to be used.

The sampling was established with a margin of error of 0.05, and a confidence level of 0.95, determined through the experienced knowledge of the researcher's statistician using the G*Power. Of the 101 population of The Goldenhigh-Garments Manufacturing Corporation, a total of 96 (95% of their total employees) were chosen as respondents of this study.

Respondents of the Study

The respondents of the study were the employees of The Goldenhigh-Garments Manufacturing Corporation for the fiscal year 2023.

Table A

Respondents of the Study

TYPE OF RESPONDENTS	FREQUENCY	PERCENTAGE
Supervisor	5	5.21%

Production Operators	91	94.79%
Total	96	100.00%

The group of respondents consisted of five (5) supervisors, which was 5.21% of the total respondents, and seventy-three (91) production operators, which was 94.79% of the total respondents with a total of ninety-six (96) respondents.

Instrument

A researcher-made questionnaire was the instrument utilized in acquiring the primary data from each of the respondents. The questionnaire consisted of three (3) parts including multiple questions for each variable. The first section evaluated the implementation of the Human Resource Programs of The Goldenhigh-Garments Manufacturing Corporation in terms of ability, motivation, and opportunity. The second evaluated the level of motivating strategies of The Goldenhigh-Garments Manufacturing Corporation to their employees in terms of intrinsic motivators and extrinsic motivators. The third established the level of employee performance in terms of Productivity and Output Quality.

Mean-score Interval and Verbal Interpretation on the Level of Implementation of the Human Resource Program of The GoldenHigh-Garments Manufacturing Corporation

Ranges of Mean	Rating	Categorical Response	Verbal Interpretation
3.25 – 4.00	4	Very Satisfied	Fully Implemented
2.50 – 3.24	3	Satisfied	Implemented
1.75 – 2.49	2	Dissatisfied	Partially Implemented
1.00 – 1.74	1	Very Dissatisfied	Not Implemented

Mean-score Interval and Verbal Interpretation on the Level of Employee Performance of The GoldenHigh-Garments Manufacturing Corporation

Ranges of Mean	Rating	Categorical Response	Verbal Interpretation
3.25 – 4.00	4	Very Satisfied	Very Good
2.50 – 3.24	3	Satisfied	Good
1.75 – 2.49	2	Dissatisfied	Fair
1.00 – 1.74	1	Very Dissatisfied	Poor

Mean-score Interval and Verbal Interpretation on the Level of Motivating Strategies of the Human Resource Program of The GoldenHigh-Garments Manufacturing Corporation

Ranges of Mean	Rating	Categorical Response	Verbal Interpretation
3.25 – 4.00	4	Very Satisfied	Fully Utilized
2.50 – 3.24	3	Satisfied	Utilized
1.75 – 2.49	2	Dissatisfied	Partially Utilized
1.00 – 1.74	1	Very Dissatisfied	Not Utilized

To formulate precise answers and assess the quantitative value of the variable being assessed, a four-point Likert scale was utilized. The researcher's perspective and the following interpretation below were used to better clarify how the Likert scale was used in the study.

Validation of the Instrument

The instruments were initially tested on 10 employees not counted in the group of respondents. Validity was presumably the most crucial element in the design of any instrument used to assess research outcomes. Validating the instrument, the researcher consulted the instruments related to the study with the statistician for the researcher, Dean, Research Director, and professors of LCBA. They committed their time and efforts to take into account all the important problems that needed to be discussed and clarified during the research process. The computation determined that Lawshe's Content Validity Ratio attained the desirable standard of 1.0 based on percentage relevance. As a result, the scale's content validity has been well attained.

Furthermore, the reliability and consistency of the instrument's internal data were evaluated using Cronbach's Alpha Coefficient. The Cronbach's Alpha Coefficient indicates the extent to which items within scale or subscale are interrelated.

Data Gathering Procedure

The data gathering was conducted mainly on the survey questionnaire fulfilled and answered by the respondents. This survey questionnaire functioned as the research instrument and primary source of data for the study. To test the accuracy, validity, and reliability of the instrument used it is approved and validated by the Dean, Research Director, adviser, statistician, and professors. After the approval and validation of the instrument, the researcher mailed a letter directed to the Vice President of Human Resources requesting consent to collect data, through electronic mail, from the target respondents. Afterward, the data gathered from the instrument were then checked, tabulated, and submitted to the researcher's statistician. The former's assistance and guidance were utilized while the data were analyzed and interpreted to arrive at answers to the study's problem statement and hypothesis.

Scope and Delimitation

The scope of the study focused on evaluating the implementation of the human resource program of The Goldenhigh-Garments Manufacturing Corporation in terms of ability, motivation, and opportunity. Moreover, it also examined the utilization of the motivating strategies the company provided its employees in terms of intrinsic motivators and extrinsic motivators. Additionally, it also assessed the performance level of the employees in terms of productivity and output quality.

The research design of the study was a descriptive correlational approach using a quantitative design. Furthermore, the data-gathering processes were restricted

essentially to the primary data that was collected from the respondents of the study and the related literature. There were limited studies evaluating the implementation of the human resource program of The Goldenhigh-Garments Manufacturing Corporation. Hence, the resources of information were projected to be inadequate.

The respondents of the study were also limited to the heads and staff of The Goldenhigh-Garments Manufacturing Corporation. The study was conducted during the 1st and 2nd semesters of the academic year 2023-2024.

RESULTS

Research Question 1: What is the implementation level of the human resource management program of The GoldenHigh-Garments Manufacturing Corporation as assessed by its employees?

1.1 Ability

Table 1.1

Level of Implementation of Human Resource Management Program of The GoldenHigh-Garments Manufacturing in terms of Ability

Indicators	Heads		Staff		Composite	
The company programs	$\bar{X}$	VI	$\bar{X}$	VI	$\bar{X}$	VI
1. promote workplace diversity and against workplace discrimination. (Ang mga programa ay nagtataguyod ng pagkakaiba-iba at laban sa diskriminasyon sa trabaho.)	3.80	FI	3.77	FI	3.79	FI
2. make sure that the job assignment is at the level of the abilities of the employees. (Tinitiyak ng mga programa na ang pagtatalaga ng trabaho ay nasa antas ng kakayahan ng mga empleyado.)	3.60	FI	3.80	FI	3.70	FI
3. respect the competence of each employee. (Iginagalang ng mga programa ang kakayahan ng bawat empleyado.)	4.00	FI	3.89	FI	3.95	FI
General Assessment	3.80	FI	3.82	FI	3.81	FI

Legend: 3.25-4.00 Fully Implemented (FI) 2.50-3.24 Implemented (I)
1.75-2.49 Partially Implemented (PI) 1.00-1.74 Not Implemented (NI)

1.2 Motivation

Table 1.2
Level of Implementation of Human Resource Management Program of The GoldenHigh-Garments Manufacturing in terms of Motivation

Indicators	Heads		Staff		Composite	
The company programs	$\bar{X}$	VI	$\bar{X}$	VI	$\bar{X}$	VI
1. provide higher salaries compared to the industry average. (Ang mga programa ay nagbibigay ng mas mataas na suweldo kumpara sa ibang kumpanya.)	3.60	FI	3.77	FI	3.69	FI
2. provide better company-initiated benefits compared to other industry players. (Ang mga programa ay nagbibigay ng mas mahusay na mga benepisyo na pinasimulan ng kumpanya kumpara sa iba pang mga kumpanya.)	3.80	FI	3.79	FI	3.80	FI
3. give importance to the mental, emotional, and physical wellbeing of the employees. (Ang mga programa ay nagbibigay ng kahalagahan sa mental, emosyonal, at pisikal na kagalingan ng mga empleyado.)	3.80	FI	3.91	FI	3.86	FI
4. give rewards to employees who excels in their job performance. (Ang mga programa ay nagbibigay ng mga gantimpala sa mga empleyado na mahusay sa kanilang pagganap sa trabaho.)	3.80	FI	3.89	FI	3.85	FI
5. give punishment to employees with poor job performance. (Ang mga programa ay nagbibigay ng parusa sa mga empleyadong may mahinang pagganap sa trabaho.)	3.80	FI	3.90	FI	3.85	FI
6. include performance evaluation of employees. (Kasama sa mga programa ang pagsusuri sa pagtratrabaho ng mga empleyado.)	4.00	FI	4.00	FI	4.00	FI
General Assessment	3.80	FI	3.88	FI	3.84	FI

Legend: 3.25-4.00 Fully Implemented (FI) 2.50-3.24 Implemented (I)
1.75-2.49 Partially Implemented (PI) 1.00-1.74 Not Implemented (NI)

1.3 Opportunity

Table 1.3
Level of Implementation of Human Resource Management Program of The GoldenHigh-Garments Manufacturing in terms of Opportunity

Indicators	Heads		Staff		Composite	
The company programs	$\bar{X}$	VI	$\bar{X}$	VI	$\bar{X}$	VI
1. provide the opportunity to improve the employee's skills and knowledge in the course of his or her work. (Ang mga programa ay nagbibigay ng pagkakataon na mapabuti ang mga kasanayan at	3.80	FI	3.91	FI	3.86	FI

kaalaman ng empleyado sa kurso ng kanyang trabaho.)						
2. provide an opportunity for the employee to advance his or her career. (Ang mga programa ay nagbibigay ng pagkakataon para sa empleyado na isulong ang kanyang karera.)	3.60	FI	3.85	FI	3.73	FI
3. give the employees to undergo training programs for their knowledge and skills advancement. (Ang mga programa ay nagbibigay sa mga empleyado na sumailalim sa mga programa sa pagsasanay para sa maisulong ang kanilang kaalaman at kasanayan.)	4.00	FI	4.00	FI	4.00	FI
4. promote autonomy to the employees. (Ang mga programa ay nagtataguyod ng awtonomiya sa mga empleyado.)	4.00	FI	3.89	FI	3.95	FI
5. promote teamwork and workplace camaraderie. (Ang mga programa ay nagtataguyod ng pagtutulungan at pakikipagkaibigan sa trabaho.)	4.00	FI	3.96	FI	3.98	FI
6. promote employee feedback and constructive criticisms. (Ang mga programa ay nagtataguyod ng feedback ng empleyado at magandang pagtanggap sa kritisismo.)	3.80	FI	3.97	FI	3.89	FI
7. provide an opportunity to increase knowledge through educational assistance. (Ang mga programa ay nagbibigay ng pagkakataon upang madagdagan ang kaalaman sa pamamagitan ng tulong na pang-edukasyon.)	3.80	FI	3.78	FI	3.79	FI
General Assessment	3.86	FI	3.91	FI	3.88	FI

Legend: 3.25-4.00 Fully Implemented (FI) 2.50-3.24 Implemented (I) 1.75-2.49 Partially Implemented (PI) 1.00-1.74 Not Implemented (NI)

Research Question 2: Is there a significant difference between the assessment of the heads and employees as to the level of human resource program implementation of The GoldenHigh-Garments Manufacturing Corporation?

Table 2

Test of Significant Difference Between the Assessment of the Heads and Staff as to the Level of Human Resource Program Implementation of The Golden High-Garments Manufacturing Corporation

Variables	T test	P value	Remarks	Decision
Ability	.177	.860	Not Significant	Accept Ho
Motivation	.919	.361	Not Significant	Accept Ho
Opportunity	.961	.656	Not Significant	Accept Ho

Research Question 3: What is the performance level of the employees of The GoldenHigh-Garments Manufacturing Corporation?

3.1 Productivity

Table 3.1

Performance Level of the Employees of The GoldenHigh-Garments Manufacturing in terms of Productivity

Indicators	Heads		Staff		Composite	
The employees	**X**	**VI**	**X**	**VI**	**X**	**VI**
1. reach the hourly production output assigned to them. (Naabot ng mga empleyado ang oras-oras na produksyon na output na itinalaga sa kanila.)	4.00	VG	3.84	VG	3.92	VG
2. have a low absenteeism rate. (Ang mga empleyado ay may mababang antas ng pagliban.)	4.00	VG	3.82	VG	3.91	VG
3. reach the required cycle time to finish an operation of the of the production process. (Naabot ng mga empleyado ang kinakailangang bilis upang matapos ang isang operasyon ng proseso ng produksyon.)	4.00	VG	3.79	VG	3.90	VG
4. exceed the required hourly production assigned to them. (Nalalampasan ng mga empleyado ang oras-oras na produksuon na output na itinilaga sa kanila.)	4.00	VG	3.80	VG	3.90	VG
5. are required to have an overtime to finish the required output for the day. (Ang mga empleyado ay kinakailangang magkaroon ng overtime upang matapos ang output na itinalaga sa kanila.)	3.80	VG	3.80	VG	3.80	VG
General Assessment	3.96	VG	3.81	VG	3.89	VG

Legend: 3.25-4.00 Very Good (VG) 2.50-3.24 Good (G) 1.75-2.49 Fair (F) 1.00-1.74 Poor (P)

3.2 Output Quality

Table 3.2

Performance Level of the Employees of The GoldenHigh-Garments Manufacturing in terms of Output Quality

Indicators	Heads		Staff		Composite	
The employees	**X**	**VI**	**X**	**VI**	**X**	**VI**
1. in-line inspection defect rate is within company standards. (Ang antas ng depekto ng in-line na inspeksyon ng mga empleyado ay nasa mga pamantayan ng kumpanya.)	4.00	VG	3.80	VG	3.90	VG
2. final inspection output defect rate is within company standards. (Ang antas ng depekto ng final na inspeksyon ng mga empleyado ay nasa mga pamantayan ng kumpanya.)	4.00	VG	3.93	VG	3.97	VG
3. Right First Time rate is within company standards. (Ang antas ng Right First Time ng mga	4.00	VG	3.89	VG	3.95	VG

empleyado ay nasa loob ng pamantayan ng kumpanya.)						
General Assessment	4.00	VG	3.87	VG	3.94	VG

Legend: 3.25-4.00 Very Good (VG) 2.50-3.24 Good (G) 1.75-2.49 Fair (F) 1.00-1.74 Poor (P)

Research Question 4: What is the level of utilization of motivating strategies of the human resource program of The GoldenHigh-Garments Manufacturing Corporation?

4.1 Intrinsic Motivators

Table 4.1

Utilization Level of Motivating Strategies of the Human Resource Program of The GoldenHigh-Garments Manufacturing in terms of Intrinsic Motivators

Indicators	Heads		Staff		Composite	
The employees	$\overline{X}$	VI	$\overline{X}$	VI	$\overline{X}$	VI
1. are committed and loyal to the company. (Ang mga empleyado ay nakatuon at tapat sa kumpanya.)	4.00	FU	3.86	FU	3.93	FU
2. feel accountable with the job they do. (Pakiramdam ng mga empleyado ay may pananagutan sila sa trabahong kanilang ginagawa.)	4.00	FU	3.88	FU	3.94	FU
3. enjoy doing the job assigned to them. (Ang mga empleyado ay nasisiyahan sa paggawa ng trabahong itinalaga sa kanila.)	3.80	FU	3.81	FU	3.81	FU
4. are not burnout with their responsibilities. (Ang mga empleyado ay hindi burnout sa kanilang mga responsibilidad.)	3.80	FU	3.81	FU	3.81	FU
5. do not feel stagnant in the company. (Ang mga empleyado ay hindi nakakaramdam ng walang pag-unlad sa kumpanya.)	3.80	FU	3.80	FU	3.80	FU
General Assessment	3.88	FU	3.83	FU	3.86	FU

Legend: 3.25-4.00 Fully Utilized (FU) 2.50-3.24 Utilized (U)
1.75-2.49 Moderately Utilized (MU) 1.00-1.74 Not Utilized (NU)

4.2 Extrinsic Motivators

Table 4.2

Utilization Level of Motivating Strategies of the Human Resource Program of The GoldenHigh-Garments Manufacturing in terms of Extrinsic Motivators

Indicators	Heads		Staff		Composite	
The employees	X	VI	X	VI	X	VI
1. seek further knowledge and skills to go up the corporate ladder. (Ang mga empleyado ay naghahanap ng karagdagang kaalaman at kasanayan upang mapataas ang posisiyon sa kumpanya.)	3.80	FU	3.89	FU	3.85	FU

2. seek to receive rewards for their job to keep them motivated to work. (Ang mga empleyado ay naghahangad na makatanggap ng mga gantimpala upang mapanatili silang masigla magtrabaho.)	4.00	FU	3.98	FU	3.99	FU
3. receive punishment for their poor job performance to let them push themselves to be better. (Ang mga empleyado ay tumatanggap ng parusa para sa kanilang mahinang pagganap sa trabaho upang itulak nila ang kanilang sarili na maging mas mahusay.)	4.00	FU	3.94	FU	3.97	FU
General Assessment	3.93	FU	3.93	FU	3.93	FU

Legend: 3.25-4.00 Fully Utilized (FU) 2.50-3.24 Utilized (U)
1.75-2.49 Moderately Utilized (MU) 1.00-1.74 Not Utilized (NU)

Research Question 5: Is there a significant relationship between the level of implementation of the human resource program and the level of performance of the employees of The GoldenHigh-Garments Manufacturing Corporation?

Table 5

Test of Significant Relationship between the Level of Implementation of Human Resource Program and the Level of Performance of the Employees of The GoldenHigh-Garments Manufacturing Corporation

Sales performance	Job Satisfaction of self-employed	r value	p value	Remarks	Decision
Ability	Productivity	.004	.970	Not Significant	Accept ho
	Output Quality	.190	.064	Not Significant	Accept ho
Motivation	Productivity	.173	.091	Not Significant	Accept ho
	Output Quality	.052	.616	Not Significant	Accept ho
Opportunity	Productivity	.040	.698	Not Significant	Accept ho
	Output Quality	.172	.094	Not Significant	Accept ho

Research Question 6: Is there a significant relationship between the level of implementation of the human resource program and the utilization level of the motivating strategies of The GoldenHigh-Garments Manufacturing Corporation?

Table 6

Test of Significant Relationship between the Level of Implementation of Human Resource Program and Utilization Level of the Motivating Strategies of The GoldenHigh-Garments Manufacturing Corporation

Human resource program	Motivating Strategies	r value	p value	Remarks	Decision
		.147	.152		

Ability	Intrinsic			Not Significant	Accept ho
	Extrinsic	.187	.068	Not Significant	Accept ho
Motivation	Intrinsic	.111	.281	Not Significant	Accept ho
	Extrinsic	.302**	.003	Significant	Reject ho
Opportunity	Intrinsic	.398**	.000	Significant	Reject ho
	Extrinsic	.284**	.005	Significant	Reject ho

Research Question 7: Based on the findings of the study, what enhanced program may be proposed?

Table 7

The Proposed Enhanced Plan

KEY AREAS	OBJECTIVES	STRATEGIES/ ACTIVITIES	TIME FRAME	PERSONS INVOLVED	SUCCESS INDICATRS
Implementation of human resource program in terms of Ability	Enhance ability aspect of the human resource program	Job-Skills matching of employees	Ongoing	Human Resource Department	Increased employee application rate
Implementation of human resource program in terms of Motivation	Enhance the motivation aspect of the human resource program	Offering performance based rewards	Ongoing	Human Resource Department	Increased scores in performance evaluation
Implementation of human resource program in terms of Opportunity	Enhance the opportunity aspect of the human resource program	Performance based promotion program	Ongoing	Human Resource Department	Increased employee retention rate
Motivating strategies in terms of Intrinsic Motivators	Enhance the intrinsic motivator aspect of the motivating strategies	Offering non-monetary benefits	Ongoing	Human Resource Department	Increased employee satisfaction feedback
Motivating strategies in terms of Extrinsic Motivators	Enhance the extrinsic motivator aspect of the motivating strategies	“Choose your own” rewards program	Ongoing	Human Resource Department	Increased employee satisfaction feedback
Employee performance in terms of Productivity	Improve employee productivity	Hire an Industrial Engineer to streamline workflow processes	3 Months	Heads, Operations Department	Increased production output and Decreased overtime

Employee performance in terms of Output Quality	Improve employee output quality	Quality assurance training and development	Ongoing	Heads, Quality Controllers	Decreased defect rate

DISCUSSION

Research Question 1: What is the implementation level of the human resource management program of The GoldenHigh-Garments Manufacturing Corporation as assessed by its employees?

1.1 Ability

Table 1.1
Level of Implementation of Human Resource Management Program of The GoldenHigh-Garments Manufacturing in terms of Ability

Indicators	Heads		Staff		Composite	
The company programs	$\overline{X}$	VI	$\overline{X}$	VI	$\overline{X}$	VI
1. promote workplace diversity and against workplace discrimination. (Ang mga programa ay nagtataguyod ng pagkakaiba-iba at laban sa diskriminasyon sa trabaho.)	3.80	FI	3.77	FI	3.79	FI
2. make sure that the job assignment is at the level of the abilities of the employees. (Tinitiyak ng mga programa na ang pagtatalaga ng trabaho ay nasa antas ng kakayahan ng mga empleyado.)	3.60	FI	3.80	FI	3.70	FI
3. respect the competence of each employee. (Iginagalang ng mga programa ang kakayahan ng bawat empleyado.)	4.00	FI	3.89	FI	3.95	FI
General Assessment	3.80	FI	3.82	FI	3.81	FI

Legend: 3.25-4.00 Fully Implemented (FI) 2.50-3.24 Implemented (I)
1.75-2.49 Partially Implemented (PI) 1.00-1.74 Not Implemented (NI)

Ability was **Fully Implemented (3.81)** as to the level of the implementation of the human resource program of The GoldenHigh-Garments Manufacturing Corporation. “The company programs respect the competence of each employee” had the highest mean which was **3.95** and was interpreted as **Fully Implemented**. On the other hand, “The company programs make sure that the job assignment is at the level of the abilities of the employees” received the lowest mean score of responses with 3.70 and was interpreted as **Fully Implemented**.

This implies that the GoldenHigh-Garments Manufacturing Corporation employees were very satisfied with the company’s human resource program in terms of Ability. The company’s policies were specific, relevant, and well-known by the employees, and played a major role in ensuring the employees were mindful of their capabilities and skills in helping achieve operational goals and objectives. The GoldenHigh-Garments

Manufacturing Corporation is continually developing tactics to make sure that the employees are well-informed about the skills, knowledge, and abilities needed to perform their jobs efficiently. By doing this, the employees are a step in attaining a good job performance to help the company achieve operational efficiency.

To support the study, Importantly, Nor and Abdullah (2020) cited that the ability-enhancing practices of the human resource management of companies had been connected to overall employee performance. The study showed that enhancing an employee's capacity produces favorable results for comprehending their preferences and helping them to reach the organizational goals in the workplace.

Furthermore, Ujma et al. (2019) asserted that the ability of employees influenced performance. The first goal of skill-enhancement programs was to raise knowledge, aptitude, and skill levels among employees so they could do their jobs effectively. If the skills of the employees were monitored and enhanced, then the company would benefit. The former helped the latter by reaching organizational effectiveness and by helping compete in the industry.

1.2 Motivation

Table 1.2

Level of Implementation of Human Resource Management Program of The GoldenHigh-Garments Manufacturing in terms of Motivation

Indicators	Heads		Staff		Composite	
The company programs	$\bar{X}$	VI	$\bar{X}$	VI	$\bar{X}$	VI
1. provide higher salaries compared to the industry average. (Ang mga programa ay nagbibigay ng mas mataas na suweldo kumpara sa ibang kumpanya.)	3.60	FI	3.77	FI	3.69	FI
2. provide better company-initiated benefits compared to other industry players. (Ang mga programa ay nagbibigay ng mas mahusay na mga benepisyo na pinasimulan ng kumpanya kumpara sa iba pang mga kumpanya.)	3.80	FI	3.79	FI	3.80	FI
3. give importance to the mental, emotional, and physical wellbeing of the employees. (Ang mga programa ay nagbibigay ng kahalagahan sa mental, emosyonal, at pisikal na kagalingan ng mga empleyado.)	3.80	FI	3.91	FI	3.86	FI
4. give rewards to employees who excels in their job performance. (Ang mga programa ay nagbibigay ng mga gantimpala sa mga empleyado na mahusay sa kanilang pagganap sa trabaho.)	3.80	FI	3.89	FI	3.85	FI
5. give punishment to employees with poor job performance. (Ang mga programa ay nagbibigay ng parusa sa mga empleyadong may mahinang pagganap sa trabaho.)	3.80	FI	3.90	FI	3.85	FI

6. include performance evaluation of employees. (Kasama sa mga programa ang pagsusuri sa pagtratrabaho ng mga empleyado.)	4.00	FI	4.00	FI	4.00	FI
General Assessment	3.80	FI	3.88	FI	3.84	FI

Legend: 3.25-4.00 Fully Implemented (FI) 2.50-3.24 Implemented (I)
1.75-2.49 Partially Implemented (PI) 1.00-1.74 Not Implemented (NI)

Motivation was **Fully Implemented (3.84)** as to the level of implementation of the human resource program of The GoldenHigh-Garments Manufacturing Corporation. The indicator "The company programs include performance evaluation of employees" had the highest mean which was **4.00** and was interpreted as **Fully Implemented**. On the contrary, "The company programs provide higher salaries compared to the industry average" had the lowest mean which was **3.69,** and was interpreted as **Fully Implemented**.

This indicates that the employees observed the motivation aspect of the human resource program of The GoldenHigh-Garments Manufacturing Corporation because the former identified it as a vital indicator of a company's work towards ensuring the efficient work of employees. Companies are paying close attention to employee engagement these days and with good reason—high levels of employee engagement are inextricably related to high levels of employee motivation. The human resource program of The GoldenHigh-Garments Manufacturing Corporation makes sure that their employees are motivated by doing performance evaluations regularly, following legal compensation-benefits programs, providing competitive compensation-benefits programs, focusing on the mental well-being of the employees, and giving rewards and punishment for job performance. With the findings, the indicators showed that the human resource program of the company motivates its employees. The indicator that yielded the highest mean – "The company programs include performance evaluation of employees", serves as the company's essential communication tool. It helped the employees align with the objectives set for the company and close the gap between expected and actual results. Employee performance reviews have provided insightful criticism for areas where performance is deficient, track development, and acknowledge good work.

To support this, Inayat and Khan (2021) conducted a research study that focused on the effect of job satisfaction on employees' job performance in different organizations. They concluded that motivated employees had higher effectiveness and efficiency compared to unmotivated ones, consequently increasing the organization's competitive advantage. Additionally, the study showed a positive correlation between work quality and job satisfaction. Most of the satisfied employees were relatively more competent, skillful, and committed at work. Moreover, they reiterated that companies focused on programs that motivated the employees. The former focused on the employees' compensation, incentives and rewards, and job security.

Furthermore, Asis-Castro and Edralin (2020) emphasized that the most vital part of any company was its employees. They were vital in attaining the company's goals and objectives. The human resource program of any company was needed to increase employee satisfaction. These programs encompassed recruitment, training, salary,

reward, health and safety, and work-life balance. In addition, companies saw the intrinsic value of each employee and included humanistic sustainability programs in dealing with them. By doing this, it guaranteed the welfare of every employee, and it created meaningful work for them. Additionally, this brought out a positive impact on the employees like happiness, trust, respect, recognition, emotional and mental stability, and overall well-being. This proved that the human resource program of The GoldenHigh-Garments Manufacturing Corporation in the aspect of motivation ensured that the employees maintain a high level of satisfaction. Consequently, this level of motivation and satisfaction resulted in higher efficiency and productivity of the employees.

1.3 Opportunity

Table 1.3

Level of Implementation of Human Resource Management Program of The GoldenHigh-Garments Manufacturing in terms of Opportunity

Indicators	Heads		Staff		Composite	
The company programs	$\bar{X}$	VI	$\bar{X}$	VI	$\bar{X}$	VI
1. provide the opportunity to improve the employee's skills and knowledge in the course of his or her work. (Ang mga programa ay nagbibigay ng pagkakataon na mapabuti ang mga kasanayan at kaalaman ng empleyado sa kurso ng kanyang trabaho.)	3.80	FI	3.91	FI	3.86	FI
2. provide an opportunity for the employee to advance his or her career. (Ang mga programa ay nagbibigay ng pagkakataon para sa empleyado na isulong ang kanyang karera.)	3.60	FI	3.85	FI	3.73	FI
3. give the employees to undergo training programs for their knowledge and skills advancement. (Ang mga programa ay nagbibigay sa mga empleyado na sumailalim sa mga programa sa pagsasanay para sa maisulong ang kanilang kaalaman at kasanayan.)	4.00	FI	4.00	FI	4.00	FI
4. promote autonomy to the employees. (Ang mga programa ay nagtataguyod ng awtonomiya sa mga empleyado.)	4.00	FI	3.89	FI	3.95	FI
5. promote teamwork and workplace camaraderie. (Ang mga programa ay nagtataguyod ng pagtutulungan at pakikipagkaibigan sa trabaho.)	4.00	FI	3.96	FI	3.98	FI
6. promote employee feedback and constructive criticisms. (Ang mga programa ay nagtataguyod ng feedback ng empleyado at magandang pagtanggap sa kritisismo.)	3.80	FI	3.97	FI	3.89	FI
7. provide an opportunity to increase knowledge through educational assistance. (Ang mga programa ay nagbibigay ng pagkakataon upang madagdagan ang kaalaman sa pamamagitan ng tulong na pang-edukasyon.)	3.80	FI	3.78	FI	3.79	FI
General Assessment	3.86	FI	3.91	FI	3.88	FI

Legend: 3.25-4.00 Fully Implemented (FI) 2.50-3.24 Implemented (I)
1.75-2.49 Partially Implemented (PI) 1.00-1.74 Not Implemented (NI)

Opportunity was **Fully Implemented (3.88)** as to the level of implementation of the human resource program of The GoldenHigh-Garments Manufacturing Corporation. The indicator "The company programs give the employees to undergo training programs for their knowledge and skills advancement" had the highest mean which was **4.00** verbally interpreted as **Fully Implemented**. Meanwhile, the indicator "The company programs provide an opportunity for the employee to advance his or her career" had the lowest mean which was **3.73** verbally interpreted as **Fully Implemented**.

This reveals that The GoldenHigh-Garments Manufacturing Corporation employees were very satisfied with the company's human resource program in terms of opportunity because the indicators showed that the employees felt personal and career growth in the company. Since the human resource program of the company focused on knowledge and skills training and development, the employees felt an opportunity to advance their careers.

To support this claim, Koster (2019) mentioned that innovative human resource programs were very relevant in today's increasing global competition. This changing business environment entailed that the employees must continuously improve their skills, knowledge, and ability to perform effectively and efficiently. These programs contributed to organizational performance as they increased the performance, satisfaction, and loyalty of the workforce.

Moreover, Bua and Margherita (2021) stated that the function of Human Resource Management was to provide human resource programs to establish an advantageous condition for employee development. These programs included practices that helped the workforce manage new technologies. Additionally, these programs aimed to provide a higher level of technological knowledge, competencies, and capabilities, enjoyable working conditions, and greater self-development for increased job efficiency and performance.

Research Question 2: Is there a significant difference between the assessment of the heads and employees as to the level of human resource program implementation of The GoldenHigh-Garments Manufacturing Corporation?

Table 2

Test of Significant Difference Between the Assessment of the Heads and Staff as to the Level of Human Resource Program Implementation of The Golden High-Garments Manufacturing Corporation

Variables	T test	P value	Remarks	Decision
Ability	.177	.860	Not Significant	Accept Ho
Motivation	.919	.361	Not Significant	Accept Ho
Opportunity	.961	.656	Not Significant	Accept Ho

There was no significant difference in the assessment of the heads and staff as to the level of human resource program implementation of The GoldenHigh-Garments Manufacturing Corporation. The probability values of 0.860, 0.361, and 0.656 respectively were greater than the level of significance at 0.05, thus rejecting the null hypothesis.

The findings in the assessment of the heads and employees can be attributed to the fact that the heads and employees both have the same point of view of the human resource program implementation of The GoldenHigh-Garments Manufacturing Corporation. Both the heads and employees benefit equally from the implementation of the human resource program of the company.

Moreover, the heads and employees of the company share the same values and beliefs thus having an effective organizational culture. Having the same beliefs and values could also be the reason why there was no significant difference between the assessment of the heads and staff as to the level of human resource program implementation of The GoldenHigh-Garments Manufacturing Corporation.

To support this claim, Thirusanku and Singh (2021) reiterated that organizational culture was the set of shared values, opinions, and beliefs held by all members of the workforce. When the majority of employees chose to uphold the same values within the company, that workplace culture was said to be strong. In summary, a strong and effective culture that matched the objectives of the company with those of each employee was likely to be able to draw in employees who would work hand in hand in attaining organizational goals.

Research Question 3: What is the performance level of the employees of The GoldenHigh-Garments Manufacturing Corporation?

3.1 Productivity

Productivity was **Very Good (3.89)** as to the performance level of the employees of the Goldenhigh-Garments Manufacturing. The indicator “The employees reach the hourly production output assigned to them” had the highest mean of **3.92** verbally interpreted as **Very Good** while the indicator “The employees are required to have overtime to finish the required output of the day” had the lowest mean of **3.80** verbally interpreted as **Very Good**.

Table 3.1

Performance Level of the Employees of The GoldenHigh-Garments Manufacturing in terms of Productivity

Indicators	Heads		Staff		Composite	
The employees	**X**	**VI**	**X**	**VI**	**X**	**VI**
1. reach the hourly production output assigned to them. (Naabot ng mga empleyado ang oras-oras na produksyon na output na itinalaga sa kanila.)	4.00	VG	3.84	VG	3.92	VG
2. have a low absenteeism rate. (Ang mga empleyado ay may mababang antas ng pagliban.)	4.00	VG	3.82	VG	3.91	VG
3. reach the required cycle time to finish an operation of the of the production process. (Naabot ng mga empleyado ang kinakailangang bilis upang matapos ang isang operasyon ng proseso ng produksyon.)	4.00	VG	3.79	VG	3.90	VG
4. exceed the required hourly production assigned to them. (Nalalampasan ng mga empleyado ang oras-oras na produksuon na output na itinilaga sa kanila.)	4.00	VG	3.80	VG	3.90	VG
5. are required to have an overtime to finish the required output for the day. (Ang mga empleyado ay kinakailangang magkaroon ng overtime upang matapos ang output na itinalaga sa kanila.)	3.80	VG	3.80	VG	3.80	VG
General Assessment	3.96	VG	3.81	VG	3.89	VG

Legend: 3.25-4.00 Very Good (VG) 2.50-3.24 Good (G) 1.75-2.49 Fair (F) 1.00-1.74 Poor (P)

This implies that the employees of The GoldenHigh-Garments Manufacturing Corporation are always performing highly in terms of productivity. The employees generally reach the hourly production output assigned to them, reach the required cycle time to finish an operation of the production process, exceed the required hourly production assigned to them, and have a low absenteeism rate. These indicate that the employees of the company are generally efficient and productive in doing the job assignments.

Nugroho et al. (2021) explained that employee output revealed a person's capacity for work. When an employee had done exceptional work that was useful in accomplishing every leader's task, this was referred to as performing well. The capacity of an employee to accomplish their work by the deadline was another measure of their performance. As noted, employee performance arose from the quality and quantity reached by an employee in performing his or her duties in line with the duties assigned and it can reach any target set out by the company. Every business had high standards of employee performance because the success of a business cannot be detached from the efficiency of its employees.

3.2 Output Quality

Table 3.2
Performance Level of the Employees of The GoldenHigh-Garments Manufacturing in terms of Output Quality

Indicators	Heads		Staff		Composite	
The employees	**X**	**VI**	**X**	**VI**	**X**	**VI**
1. in-line inspection defect rate is within company standards. (Ang antas ng depekto ng in-line na inspeksyon ng mga empleyado ay nasa mga pamantayan ng kumpanya.)	4.00	VG	3.80	VG	3.90	VG
2. final inspection output defect rate is within company standards. (Ang antas ng depekto ng final na inspeksyon ng mga empleyado ay nasa mga pamantayan ng kumpanya.)	4.00	VG	3.93	VG	3.97	VG
3. Right First Time rate is within company standards. (Ang antas ng Right First Time ng mga empleyado ay nasa loob ng pamantayan ng kumpanya.)	4.00	VG	3.89	VG	3.95	VG
General Assessment	4.00	VG	3.87	VG	3.94	VG

Legend: 3.25-4.00 Very Good (VG) 2.50-3.24 Good (G) 1.75-2.49 Fair (F) 1.00-1.74 Poor (P)

Output Quality was **Very Good (3.97)** as to the performance level of the employees of the Goldenhigh-Garments Manufacturing. The indicator “The employees’ final inspection output defect rate is within company standards and buyer inspection output defect rate is within standards” had the highest mean of **3.97** verbally interpreted as **Very Good** while the indicator “The employees’ in-line inspection defect rate is within company standards” had the lowest mean with **3.90** verbally interpreted as **Very Good**.

The tables indicate that the employees of The GoldenHigh-Garments Manufacturing Corporation are always performing highly in terms of quality output. The employees’ in-line inspection rate, final inspection output defect rate, buyer inspection output defect rate, Right First Time rate, and overall quality output rate are within standards. This indicates that the work output of employees of the company is of high quality. This means that the job performance of the employees of the company is of high standard since the output of their work is of high quality.

To support this claim, Nuryanti et al. (2020) explained that one of the most important issues faced by any company's management was the crisis in employee performance. The poor performance of human resources was the cause of the low intensity and inaccessibility of work targets. Every employee's performance was a genuine behavior that reflected their function inside the organization. Employee inventiveness was low and work was done in an unsatisfactory quantity and quality as a result of poor performance.

Research Question 4: What is the level of utilization of motivating strategies of the human resource program of The GoldenHigh-Garments Manufacturing Corporation?

4.1 Intrinsic Motivators

Intrinsic Motivators was **Fully Utilized (3.86)** as to the utilization level of motivating strategies of the human resource program of the GoldenHigh-Garments Manufacturing. The indicator “The employees feel accountable with the job they do” had the highest mean of **3.94** verbally interpreted as **Fully Utilized** while the indicator “The employees do not feel stagnant in the company” had the lowest mean of **3.80** verbally interpreted as **Fully Utilized**.

Table 4.1
Utilization Level of Motivating Strategies of the Human Resource Program of The GoldenHigh-Garments Manufacturing in terms of Intrinsic Motivators

Indicators	Heads		Staff		Composite	
The employees	$\bar{X}$	VI	$\bar{X}$	VI	$\bar{X}$	VI
1. are committed and loyal to the company. (Ang mga empleyado ay nakatuon at tapat sa kumpanya.)	4.00	FU	3.86	FU	3.93	FU
2. feel accountable with the job they do. (Pakiramdam ng mga empleyado ay may pananagutan sila sa trabahong kanilang ginagawa.)	4.00	FU	3.88	FU	3.94	FU
3. enjoy doing the job assigned to them. (Ang mga empleyado ay nasisiyahan sa paggawa ng trabahong itinalaga sa kanila.)	3.80	FU	3.81	FU	3.81	FU
4. are not burnout with their responsibilities. (Ang mga empleyado ay hindi burnout sa kanilang mga responsibilidad.)	3.80	FU	3.81	FU	3.81	FU
5. do not feel stagnant in the company. (Ang mga empleyado ay hindi nakakaramdam ng walang pag-unlad sa kumpanya.)	3.80	FU	3.80	FU	3.80	FU
General Assessment	3.88	FU	3.83	FU	3.86	FU

Legend: 3.25-4.00 Fully Utilized (FU) 2.50-3.24 Utilized (U)
1.75-2.49 Moderately Utilized (MU) 1.00-1.74 Not Utilized (NU)

This implies that using intrinsic motivators as a motivating strategy is effective in crafting the human resource program of The GoldenHigh-Garments Manufacturing Corporation. This type of motivator enables the employees to perform a task for its own sake if it aligns with their interests, passions, and personal values. This would lead to higher job performance and increased dedication and loyalty to the company.

To support this, Salikhova (2020) cited that according to the Self-Determination Theory, intrinsic motivators influence employees' performance. This theory proposed three basic psychological needs—autonomy, competence, and relatedness—as intrinsic motivators. Employees work because they find them to be fascinating, entertaining, significant, or valuable. Employees who felt valuable in the workplace stayed

in the company longer. They were effective in helping reach organizational goals and objectives. Employees have gone above and beyond to ensure that their job is of the highest caliber when they genuinely believe in it. They took the initiative on new prospects and finished them by the deadline since they were more focused and detail-oriented. Moreover, an employee felt more comfortable and motivated if their employer supported their values and goals. This resulted in an increased level of dedication from the employees towards the company.

4.2 Extrinsic Motivators

Table 4.2

Utilization Level of Motivating Strategies of the Human Resource Program of The GoldenHigh-Garments Manufacturing in terms of Extrinsic Motivators

Indicators	Heads		Staff		Composite	
The employees	**X**	**VI**	**X**	**VI**	**X**	**VI**
1. seek further knowledge and skills to go up the corporate ladder. (Ang mga empleyado ay naghahanap ng karagdagang kaalaman at kasanayan upang mapataas ang posisiyon sa kumpanya.)	3.80	FU	3.89	FU	3.85	FU
2. seek to receive rewards for their job to keep them motivated to work. (Ang mga empleyado ay naghahangad na makatanggap ng mga gantimpala upang mapanatili silang masigla magtrabaho.)	4.00	FU	3.98	FU	3.99	FU
3. receive punishment for their poor job performance to let them push themselves to be better. (Ang mga empleyado ay tumatanggap ng parusa para sa kanilang mahinang pagganap sa trabaho upang itulak nila ang kanilang sarili na maging mas mahusay.)	4.00	FU	3.94	FU	3.97	FU
General Assessment	3.93	FU	3.93	FU	3.93	FU

Legend: 3.25-4.00 Fully Utilized (FU) 2.50-3.24 Utilized (U)
1.75-2.49 Moderately Utilized (MU) 1.00-1.74 Not Utilized (NU)

Extrinsic Motivators was **Fully Utilized (3.93)** as to the utilization level of motivating strategies of the human resource program of the GoldenHigh-Garments Manufacturing. The indicator “The employees seek to receive rewards for their job to keep them motivated to work” had the highest mean of **3.99** verbally interpreted as **Fully Utilized.** On the other hand, the indicator “The employees seek further knowledge and skills to go up the corporate ladder” had the lowest mean with **3.85** verbally interpreted as **Fully Utilized**.

This implies that, in addition in using intrinsic motivators as a motivating strategy, extrinsic motivators is also effective in crafting the human resource program of The GoldenHigh-Garments Manufacturing Corporation. Extrinsic motivator is a potent tool for shaping behavior and rewarding employees for their hard work, devotion, and excellent work. This type of motivator enables the employees to increase productivity, promote camaraderie in the workplace, maintain motivation, and improve job satisfaction.

Supporting this, Rosli et al. (2022) asserted that one kind of behavior modification known as operant conditioning was an extrinsic motivator. It made use of incentives and penalties to make certain actions more or less likely to occur again. Extrinsic motivators

helped support certain employees in maintaining their resolve and productivity in the face of obstacles at work, as it was generally most effective when motivating people to do difficult or uninteresting activities.

Research Question 5: Is there a significant relationship between the level of implementation of the human resource program and the level of performance of the employees of The GoldenHigh-Garments Manufacturing Corporation?

Table 5

Test of Significant Relationship between the Level of Implementation of Human Resource Program and the Level of Performance of the Employees of The GoldenHigh-Garments Manufacturing Corporation

Sales performance	Job Satisfaction of self-employed	r value	p value	Remarks	Decision
Ability	Productivity	.004	.970	Not Significant	Accept ho
	Output Quality	.190	.064	Not Significant	Accept ho
Motivation	Productivity	.173	.091	Not Significant	Accept ho
	Output Quality	.052	.616	Not Significant	Accept ho
Opportunity	Productivity	.040	.698	Not Significant	Accept ho
	Output Quality	.172	.094	Not Significant	Accept ho

There was no significant relationship between the level of implementation of the human resource program and the level of performance of the employees of the GoldenHigh-Garments Manufacturing Corporation. As shown in the probability values **0.970**, **0.064**, **0.091**, **0.616**, **0.698**, and **0.094** which were greater than the level of significance at .05 and r values **0.004**, **0.190**, **0.173**, **0.052**, **0.040**, and **0.172**. **Thus accept the null hypothesis**.

In conclusion, the level of implementation of the human resource program does not connect or associate with the level of performance of the employees of the GoldenHigh-Garments Manufacturing Corporation indicates that there are other factors that cam associate with the performance of the employees of GoldenHigh-Garments Manufacturing Corporation.

Another crucial component of employee performance is emotional intelligence. The ability to identify and control one's own emotions as well as those of others is referred to as emotional intelligence. People who work for companies are subject to human emotions. Sometimes workers become emotionally entangled in family matters, which prevents them from giving their jobs their whole attention. Moreover, employee performance may be positively or negatively impacted by work-life balance. The amount

of time and energy that an employee may commit to both their personal and professional lives is referred to as work-life balance. Given that the company provides sufficient support to the employees for optimum performance, factors such as emotional intelligence and work-life balance should also be considered in evaluating employee performance.

To support this claim, Dumaguing (2022) reiterated that scholars from throughout the world have conducted a great deal of research on employees' performance. They found that disengagement was correlated with both personal and professional traits. Employees were more likely to be contented with their jobs if they believed they had enough time for their personal life. As a result, they became more motivated, engaged, and dedicated to their work, which ultimately boosted their work output.

Research Question 6: Is there a significant relationship between the level of implementation of the human resource program and the utilization level of the motivating strategies of The GoldenHigh-Garments Manufacturing Corporation?

There was a significant relationship between the level of implementation of the human resource program and motivating strategies particularly the Implementation of Motivation and Extrinsic Motivating Strategies, significant relationship between Human Resource Program Opportunity and Motivating strategies such as Intrinsic and Extrinsic Motivating Strategies. As shown in the probability values of **0.003**, **0.000,** and **0.005** which were less than the level of significance at 0.05 and with r values of **0.302**, **0.398**, and **0.284**. Thus, the hypothesis was rejected.

Table 6

Test of Significant Relationship between the Level of Implementation of Human Resource Program and Utilization Level of the Motivating Strategies of The GoldenHigh-Garments Manufacturing Corporation

Human resource program	Motivating Strategies	r value	p value	Remarks	Decision
Ability Motivation	Intrinsic	.147	.152	Not Significant	Accept ho
	Extrinsic	.187	.068	Not Significant	Accept ho
Opportunity	Intrinsic	.111	.281	Not Significant	Accept ho
	Extrinsic	.302**	.003	Significant	Reject ho
	Intrinsic	.398**	.000	Significant	Reject ho
	Extrinsic	.284**	.005	Significant	Reject ho

On the other hand, there was no significant relationship between the other variables of implementation of the human resource program and motivating strategies such as Ability and Motivating strategies, motivation, and intrinsic motivating strategies.

As shown in the probability values of **0.152**, **0.068,** and **0.281** which was more than the level of significance at 0.05 and with r values of **0.147**, **0.187**, and **0.111**. Thus, the hypothesis was accepted.

The human resource program of The GoldenHigh-Garments Manufacturing Corporation in terms of motivation is in line with the company's motivating strategies. Additionally, the motivating strategies are also in line with the company's human resource program in terms of opportunity. It is seen in the human resource program that the company motivates its employees, where the latter are motivated to work because their psychological needs for autonomy, relatedness, and competence are being met. Moreover, the employees are also motivated to work since they are getting external rewards from the company.

In human resource management, motivation is one of the most crucial strategies that companies invest in. The typical refrain in the majority of companies is that a certain individual lacks motivation, which has caused his or her performance to suffer. For this reason, businesses shell out enormous sums of money to plan training sessions and rewards that will inspire employees. Motivation can be defined as an individual's desire or drive to complete tasks and reach organizational goals.

Furthermore, when the setting fosters growth, employees will consistently give their best effort. One of the biggest motivators is the possibility of advancement. Employees worked with far greater zeal during periods when organizational doors were open and growth chances were plentiful than during periods when opportunities were rare or postponed for several reasons. Employees who are motivated to work show positive job performance, which in turn helps the company reach its objectives and goals.

To support this, Al-Tit (2020) suggested that using human resource programs to improve employee performance was seen as a combination of three things: skill development, incentive, and opportunity enhancement. Using the social exchange theory as support, analysts went on to say that when businesses implement HR initiatives, which workers were likely to view as a demonstration of the company's commitment to them, workers react in ways that advance corporate objectives. Employees viewed company activities such as programs aimed at improving skills, motivation, and opportunities as evidence of the company's support or dedication. In return, workers showed a positive attitude and enhanced output that contributed to the achievement of organizational goals.

Research Question 7: Based on the findings of the study, what enhanced program may be proposed?

Based on the findings of the study, several enhanced programs can be proposed to address the identified issues and improve the human resource program implementation and the employee performance of The Goldenhigh-Garments Manufacturing Corporation.

Firstly, The GoldenHigh-Garments Manufacturing Corporation can incorporate extra methods to enhance the company's human resource program in terms of ability,

motivation, and opportunity to maintain and improve productive employee performance. A comprehensive approach that would encompass the potential, drive, and aptitude of the staff members is creating a Human Capital Development Program. Employees would benefit from an entire human growth that would satisfy Maslow's Hierarchy of Needs, allow for a work-life balance, and advance their careers.

Secondly, it is noteworthy that the company offers its employees the same perks under the human resource program. But to have a better retention rate, the business needs to provide its workers with benefits that are based on talent and performance. The focus of the HR program ought to be on skill and performance. Benefits and awards ought to be given out following how well employees do their jobs overall. It should also take into account the employee's contribution to the company's accomplishment of its objectives.

Table 7

The Proposed Enhanced Plan

KEY AREAS	OBJECTIVES	STRATEGIES/ ACTIVITIES	TIME FRAME	PERSONS INVOLVED	SUCCESS INDICATRS
Implementation of human resource program in terms of Ability	Enhance ability aspect of the human resource program	Job-Skills matching of employees	Ongoing	Human Resource Department	Increased employee application rate
Implementation of human resource program in terms of Motivation	Enhance the motivation aspect of the human resource program	Offering performance based rewards	Ongoing	Human Resource Department	Increased scores in performance evaluation
Implementation of human resource program in terms of Opportunity	Enhance the opportunity aspect of the human resource program	Performance based promotion program	Ongoing	Human Resource Department	Increased employee retention rate
Motivating strategies in terms of Intrinsic Motivators	Enhance the intrinsic motivator aspect of the motivating strategies	Offering non-monetary benefits	Ongoing	Human Resource Department	Increased employee satisfaction feedback
Motivating strategies in terms of Extrinsic Motivators	Enhance the extrinsic motivator aspect of the motivating strategies	“Choose your own” rewards program	Ongoing	Human Resource Department	Increased employee satisfaction feedback
Employee performance in terms of Productivity	Improve employee productivity	Hire an Industrial Engineer to streamline workflow processes	3 Months	Heads, Operations Department	Increased production output and Decreased overtime
Employee performance in terms of Output Quality	Improve employee output quality	Quality assurance training and development	Ongoing	Heads, Quality Controllers	Decreased defect rate

Thirdly, the employees' responses indicate that they have to work overtime to complete the day's needed output. The employees' ability to combine their professional and personal lives will suffer as a result. As a result, the business needs to give a production output that can be achieved. An industrial engineer could be hired by the business to assist the management with capacity planning, layout planning, work design, and workflow management. As a result, the business would have a productive and successful operations system. Additionally, there would be no need for overtime because the staff could produce the necessary amount.

Furthermore, to maintain the company's successful incentive programs. Non-monetary rewards or perks must be part of the HR program. Cash awards are not the only way to recognize and thank employees. By providing non-cash awards, the organization can sustain the engagement, motivation, and excitement of its staff. Time for personal projects, flexibility in the workplace, extra time off, experiential rewards, and public recognition are a few examples. These would be very economical and increase worker engagement.

Apart from the aforementioned suggestion, the company might allow employees to select their awards. Giving workers the option to select their reward encouraged engagement and a driven workplace environment. Allowing workers to select their rewards improves the relationship between the organization and its workers and fosters a culture of trust and respect. It also makes workers feel appreciated. Thus, it may be possible to promote employee engagement and a positive work atmosphere.

Conclusions

After presenting the summary of the findings of the study, the following conclusions were drawn:

1. That The GoldenHigh-Garments Manufacturing Corporation considers its employees to be valuable assets of any organization. Therefore, the company continuously improves its human resource management program. With this being said, the employees are really satisfied with the opportunity they have while working in the company. They have the opportunity to advance their skills and knowledge with the job that they do, which consequently helps with self-development and achievement of organizational goals. The statistics indicate that the employees of The GoldenHigh-Garments Manufacturing Corporation are relatively satisfied with the human resource program of the company in terms of ability because the company respects the competence of each employee. Moreover, employees have several reasons to be satisfied with the human resource program of the company in terms of motivation. Employees are motivated by doing performance evaluations regularly, following legal compensation-benefits programs, providing competitive compensation-benefits programs, focusing on the mental well-being of the employees, and giving rewards and punishment for job performance.

2. That the heads and employees both receive the same treatment from the management of The GoldenHigh-Garments Manufacturing Corporation. Both the heads and employees benefit equally from the implementation of the human resource program of the company.

3. That the employees reach the hourly production output assigned to them and attain the required cycle time to finish an operation of the production process. Moreover, the employees exceed the required hourly production output assigned and they have a low absenteeism rate. These are important indicators and factors in the operations management of the company. Due to this positive performance of the employees, The GoldenHigh-Garments Manufacturing Corporation reaches its operational goal of delivering the client's orders on time. In addition, the results also concluded that the performance of the employees in terms of Quality Output was rated Very High. The employees' final inspection output defect rate and in-line inspection defect rate are within company standards. Furthermore, the employees' Right First Time, which is a management strategy that estimates the percentage of usable products at the start of the production process, is within company standards. These indicators are vital for the company as they determine the reorder rate of the company's clients.

4. That extrinsic motivators are useful when creating the company's human resource program in addition to using internal motivators as a motivating method. An effective technique for modifying behavior and rewarding staff for their dedication, hard effort, and superior performance is the extrinsic motivator. With the help of this kind of motivator, workers can boost output, foster teamwork, stay motivated, and experience more job satisfaction. Some employees found that support from their external motivators helped them stay determined and productive even when faced with challenges at work.

5. That there are additional variables associated with The GoldenHigh-Garments Manufacturing Corporation employees' performance. When assessing employee performance, aspects like emotional intelligence and work-life balance are also taken into account, provided that the organization offers enough support to its staff to enable them to perform at their best. The emotional intelligence of employees is another essential element of their performance. Emotional intelligence is the capacity to recognize and manage one's feelings as well as those of others. Employees of businesses are human beings with feelings. Workers occasionally become emotionally involved in family issues, which keeps them from focusing entirely on their work. Furthermore, work-life balance may have a favorable or unfavorable effect on employee performance. Work-life balance is the quantity of time and effort that an employee can devote to both their personal and professional lives.

6. That the motivating strategies are being applied in the opportunity aspect of the human resource program of The Goldenhigh-Garments Manufacturing Corporation. When the work environment is supportive of growth, employees consistently give their best work. The opportunity aspect is seen as an effective motivating strategy used in the human resource program of the company. Employees work with far greater vigor during periods when organizational doors are open and growth opportunities are available.

7. That the proposed Enhanced Program is of great importance in addressing the identified findings in the human resource program of The Goldenhigh-Garments Manufacturing Corporation. The Enhanced Program serves as a complete framework for implementing directed interventions and driving improvement. Eventually, the Enhanced Program guides improvement efforts, enhancing the human resource program, motivating strategies, and employee performance.

Recommendations

The following recommendations have been formulated based on the summarized findings and derived conclusions:

1. To sustain and enhance productive employee performance, The GoldenHigh-Garments Manufacturing Corporation may implement additional strategies for the company's human resource program in terms of ability, motivation, and opportunity. One overall strategy that would encapsulate the ability, motivation, and opportunity of the employees is establishing a Human Capital Development Program. This would give the employees overall human development in terms of work-life balance, career development, and meeting Maslow's Hierarchy of Needs.

2. The company may offer skill-performance-based benefits to its employees. The human resource program must be skill-performance-centric. It may give rewards and benefits based on the overall job performance of the employees. Moreover, it may consider the contribution of the employee to the company's achievement of organizational goals.

3. The company may provide an achievable required production output. The former must take into consideration the output capacity of the employees. Moreover, the company should evaluate the production line performance. The manufacturing company's production line is its fundamental component. By carefully examining each manufacturing facility and its daily capacity, the management can map how the production lines are performing. Hence, an efficient and achievable production output can be given to the employees.

4. The company may hire an industrial engineer who would help the management with its capacity planning, layout planning, work design, and workflow management. Hence, the company would have an effective and efficient operations system. Moreover, the employees would be able to meet their required output without needing overtime.

5. The human resource program may include non-monetary incentives or benefits. Employee rewards don't have to be in the form of cash. The company may maintain its employees' enthusiasm, motivation, and engagement by offering non-monetary rewards. Examples are 1) time to work on their projects, 2) flexible working, 3) additional time off, 4) experiential rewards, and 5) public recognition. These would provide great value for money and help engage employees more.

6. The company may let their employees choose their rewards. Offering employees the chance to choose their reward helps create a sense of engagement that promotes a motivated company culture. Giving employees the freedom to choose their rewards strengthens the bond between the company and employees and creates a climate of mutual respect and trust. It also helps employees feel valued. Thus, a positive work environment and employee motivation may be fostered.

7. The company may utilize the proposed Enhanced Program. This comprehensive plan includes strategies for effective human resource program implementation, motivating strategies utilization, and promoting a culture of continuous improvement. By prioritizing these initiatives, the employees of The Goldenhigh-Garments Manufacturing Corporation can increase their job performance. Moreover, management support and sufficient financial resources are vital to effectively implement the enhanced program. Furthermore, regular evaluation of the enhanced program may be done to assess its effectiveness. By following the proposed enhanced program, the company can strive towards its goals of improvement and increased employee performance.

8. To deepen understanding and contribute to the field of human resource management in the garment manufacturing industry, the results of this study can be expanded upon in several ways for further research. Three (3) fields can be recommended, 1) conducting employee-centered research, 2) doing a qualitative approach in future research with the purpose of better understanding the employees' experiences, and 3) evaluating the effectiveness of the proposed enhanced program of the study. The Goldenhigh-Garments Manufacturing Corporation will have a great opportunity to do all necessary analysis about the implementation of the human resource program, utilization of motivating strategies, and employee performance as a result of this initiative.

Compliance with Ethical Standards

Some ethical concerns were addressed since this study needed respondents, specifically employees of a company, to participate. To protect the participants' privacy and safety, it was essential to take these ethical considerations into account. Consent and confidentiality are two important ethical considerations that were taken into account throughout the research process. The researcher communicated all significant information about the study, including its goal and objective, to obtain the consensus of the chosen participants. The importance of the respondent's role in the completion of the research was made clear to them by elaborating on these crucial facts. The respondents were also notified that they could pull out their involvement in the study at any time. As a result, participants were not compelled to take part in the study. The participants' privacy was further protected by the researcher by not using their names or other identifying information. Only information that was pertinent to resolving the research questions was provided.

Acknowledgements

The researcher would like to first of all thank and praise the Heavenly Father for His guidance in helping him to understand and embrace that anything is possible. Moreover, for giving him the strength to strive to obtain this academic milestone.

The researcher would like to express his sincere gratitude to the following with all of his heart and is blessed to have a superb dissertation committee:

His adviser, Dr. Marilou C. Urbina, for accepting him as thesis advisee during the proposal and final defense. A sincere thank you for the excellent counsel, encouragement, and patience, as well as for always believing that the study will be successful;

His statistician, Dr. Eulalia M. Javier, for stepping in and lending her expertise to uphold the validity and credibility of the study;

The members of the panel, Dr. Diosmar O. Fernandez, Dean Alfredo G. Perez, and Dr. Ma. Lorena Tagala, for their extraordinary and valuable insights, comments, suggestions, and recommendations to improve and bring the study to perfection;

The top management of The Goldenhigh-Garments Manufacturing Corporation, Mr. Efren Recto, Mrs. Edna Recto, Mr. Mario Recinto, and Mrs. Eden Recinto, for giving their consent and allowing the researcher to do a study about the company;

Most especially his family, for always being the ardent supporters, for all their prayers, encouragement, motivation, and help during this difficult time of balancing work and studies, this would not be possible without their assistance;

The researcher would also like to acknowledge all of The Goldenhigh-Garments Manufacturing Corporation's employees and participants in the study. They deserve heartfelt gratitude for freely giving their time and effort to data collection throughout this research.

REFERENCES

Akther, N., Al Mamun, A., & Azad, A. (2022). Review of Human Resource Management (HRM) Literature: A Bibliometric Analysis (1981-2019). *DLSU Business & Economics Review*, *32*, 1. https://www.dlsu.edu.ph/wp-content/uploads/2022/09/13azad-082622.pdf

Al-Jedaiah, M. N. & Albdareen, R. (2020). The effect of strategic human resources management (SHRM) on organizational excellence. *Problems and Perspectives in Management*, *18*(4), 49–58. https://doi.org/10.21511/ppm.18(4).2020.05

Al-Tit, A. A. (2020). The impact of AMO-HR systems on proactive employee behavior: The mediating contribution of leader-member and team-member exchange. *International Journal of Engineering Business Management*, *12*, 184797902094723. https://doi.org/10.1177/1847979020947236

Andri, R. T., Yuswita, E., & Haryati, N. (2021). Employee performance to support work productivity: a Pls approach in agro-input suppliers company. *IOP Conference Series*, *803*(1), 012054. https://doi.org/10.1088/1755-1315/803/1/012054

Asenahabi, B. (2019). Basics of Research Design: A Guide to selecting appropriate research design. *International Journal of Contemporary Applied Researches*, *6*(5). https://www.ijcar.net

Asis-Castro, A. L. & Edralin, D. (2020). Predictors of Humanistic Sustainability HRM Practices. *DLSU Business & Economics Review*, *27*, 2. https://www.dlsu.edu.ph/wp-content/uploads/2019/03/10edralin-01181817.pdf

Aslan, M., Yaman, F., Aksu, A., & Güngör, H. (2022). Task performance and job satisfaction under the effect of remote working: Call center evidence. *Economics & Sociology*, *15*(1), 284–296. https://doi.org/10.14254/2071-789x.2022/15-1/18

Azeez, S. A. (2019). Human Resource Management Practices and Employee Retention: A Review of Literature. *Journal of Economics, Management and Trade*, *18*(2), 1–10. https://doi.org/10.9734/jemt/2017/32997

Bashir, A., Amir, A., Jawaad, M., & Hasan, T. (2020). Work conditions and job performance: An indirect conditional effect of motivation. *Cogent Business & Management*, *7*(1), 1801961. https://doi.org/10.1080/23311975.2020.1801961

Baskaran, S., Lay, H. S., Ming, B. S., & Mahadi, N. (2020). Technology Adoption and Employee's Job Performance: An Empirical investigation. *International Journal of Academic Research in Economics and Management Sciences*, *9*(1). https://doi.org/10.6007/ijarems/v9-i1/7443

Bienkowska, A., & Tworek, K. (2020). Job Performance Model Based on Employees' Dynamic Capabilities (EDC). *Sustainability*, *12*(6), 2250. https://doi.org/10.3390/su12062250

Bua, I. & Margherita, E. G. (2021). The Role of Human Resource Practices for the Development of Operator 4.0 in Industry 4.0 Organisations: A Literature Review and a Research Agenda. *Businesses*, *1*(1), 18–33. https://doi.org/10.3390/businesses1010002

Djurovic, A (2020). *22 Interesting Job Satisfaction Statistics You Should Know*. https://goremotely.net//job-satisfaction-statistics/

Donthu, S. (2022). Job Satisfaction on Job Performance of Employees in Information Technology Industry. *Journal of Contemporary Issues in Business and Government*, *28*(4). https://doi.org/10.47750/cibg.2022.28.04.087

Dumaguing, J. M. (2022). Factors affecting the level of employee performance of AA manufacturing. *International Journal of Research Publications*, *105*(1). https://doi.org/10.47119/ijrp1001051720223644

Dvorakova, Z. (2020). Sustainable human resource management in a time of global uncertainty. *SHS Web of Conferences*, *83*, 01012. https://doi.org/10.1051/shsconf/20208301012

Ertikin, A. B. (2020). The Relationship between Job Satisfaction and Job Performance: A Study on Sports Industry. *Journal of Educational Issues*, *7*(2), 133. https://doi.org/10.5296/jei.v7i2.18949

Fenech, R., Baguant, P., & Ivanov, D. (2019). The Changing Role of Human Resource Management in an Era of Digital Transformation. *Journal of Management Information and Decision Sciences*, *22*(2), 166. https://www.abacademies.org/articles/The-changing.-role-of-human.-resource-management-an-era-digital-transformation-1532-5806-22-2-139.pdf

Inayat, W. & Khan, M. S. (2021). A Study of Job Satisfaction and Its Effect on the Performance of Employees Working in Private Sector Organizations, Peshawar. *Education Research International*, *2021*, 1–9. https://doi.org/10.1155/2021/1751495

India Brand Equity Foundation. (2021). *Indian Economy: Overview, Market Size, Growth, Development, Statistics. IBEF*. https://www.ibef.org/economy/indian-economy-overview

Koster, F. (2019). Innovative HRM. A Review of the Literature. *Journal of Technology Management & Innovation*, *14*(2), 97–106. https://doi.org/10.4067/s0718-27242019000200097

Liu, C., Ngolob, R. A., & Palaoag, T. D. (2020). Human Resource Management (HRM) Practices. *Journal of Advanced Management Science*, 121–125. https://doi.org/10.18178/joams.8.4.121-125

Lloyd, R., & Thoman, D. (2019). A Review Of The Literature On Human Resource Development: Leveraging Hr As Strategic Partner In The High Performance Organization. *Journal of International & Interdisciplinary Business Research*, *5*, 9. https://doi.org/10.58809/popq1755

Nguyen, T. D., Shih, M., Srivastava, D., Tirthapura, S., & Xu, B. (2020). Stratified random sampling from streaming and stored data. *Distributed and Parallel Databases*, *39*(3), 665–710. https://doi.org/10.1007/s10619-020-07315-w

Nor, N. M. & Abdullah, F. (2020). The Relationships between Ability, Motivation and Opportunity (AMO) Model of High-Performance Work Practices (HPWP) and Organizational Performance on Millennials in MARA Headquarters, Kuala Lumpur: Mediated by Job Embeddedness. *International Journal of Academic Research in Business & Social Sciences*, *10*(13). https://doi.org/10.6007/ijarbss/v10-i13/6889

Nugroho, R., Prasetyo, P., & Kusmaningtyas, A. (2021). Effect of Job Involvement on Employee Performance through Work Engagement at Bank Jatim. *Universal Journal of Management*, *9*(2), 29–37. https://doi.org/10.13189/ujm.2021.090201

Nuryanti, B. L., Masharyono, M., & Fauziatunisa, H. (2020). The effect of coaching on employee performance. *Proceedings of the 1st International Conference on Economics, Business, Entrepreneurship, and Finance (ICEBEF 2018)*. https://doi.org/10.2991/icebef-18.2019.33

Olasoji, O. (2019). Challenges of Human Resource Management in Regards to Organizational Effectiveness. *Vaasan Ammattikokeakoulu University of Applied Sciences*. https://www.theseus.fi/bitstream/handle/10024/166809/

Ong, C. H., Shi, C. H., Kowang, T. O., Fei, G. C., & Ping, L. L. (2020). Factors influencing job satisfaction among academic staffs. *International Journal of Evaluation and Research in Education*, *9*(2), 285. https://doi.org/10.11591/ijere.v9i2.20509

Oyibo, C. (2020). Work-Life Balance and Employee Performance: A Literature Review. *European Journal of Business and Management Research*, *5*(2). http://dx.doi.org/10.24018/ejbmr.2020.5.2.196

Philippine Statistics Authority (2020). *Total Number of OFWs Estimated at 2.2 Million*. https://psa.gov.ph/statistics/survey/labor-and-employment/survey-overseas-filipinos

Ramaraju, A. (2019). Human Resource Management Philosophy. *International Journal of Social Sciences Research and Development*, *1*(1). http://www.iaeme.com/IJSS/issues.asp?JType=IJSS&VType=1&IType=1

Ramos-Villagrasa, P. J., Barrada, J. R., Fernández-Del-Río, E., & Koopmans, L. (2019). Assessing job performance using brief self-report scales: the case of the individual work performance Questionnaire. *Revista De Psicología Del Trabajo Y De Las Organizaciones/Revista De Psicología Del Trabajo Y De Las Organizaciones* , *35*(3), 195–205. https://doi.org/10.5093/jwop2019a21

Rosli, M. S., Saleh, N. S., Ali, A. M., & Bakar, S. A. (2022). Self-Determination Theory and Online Learning in University: advancements, future direction and research gaps. *Sustainability*, *14*(21), 14655. https://doi.org/10.3390/su142114655

Salikhova, N. R. (2020). Psychological Aspects of Digital Learning: A Self-Determination Theory Perspective. *Contemporary Educational Technology*, *12*(2), ep280. https://doi.org/10.30935/cedtech/8584

Tansel, A. (2022). Job Satisfaction, Structure of Working Environment, and Firm Size. *IZA Institute of Labor Economics*. https://docs.iza.org/dp15397.pdf

Thirusanku, J. & Singh, M. K. I. (2021). Equal opportunity within the workplace. *Journal of Economics and Business*, *4*(3). https://doi.org/10.31014/aior.1992.04.03.384

Tunio, F. (2021). Factors Affecting Job Performance: A Case Study of Academic Staff in Pakistan. *Journal of Asian Finance, Economics and Business*, *8*(5). https://doi.org/10.13106/jafeb.2021

Ujma, M., & Ingram, T. (2019). Perception of ability-motivation-opportunity oriented HRM practices and organizational commitment: The role of task uncertainty. *Journal of Entrepreneurship, Management and Innovation* , *15*(4), 139–162. https://doi.org/10.7341/20191545

APA Citation:

Recinto, S. P. T. (2024). HUMAN RESOURCE PROGRAM IMPLEMENTATION, MOTIVATING STRATEGIES, AND EMPLOYEE PERFORMANCE IN THE GOLDENHIGH-GARMENTS MANUFACTURING CORPORATION: BASIS FOR ENHANCED PROGRAM. Ignatian International Journal for Multidisciplinary Research, 2(8), 662–709. https://doi.org/10.5281/zenodo.13292553

me@paulorecinto.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

IMPACT OF STUDENT INTEREST AND MULTIMEDIA INSTRUCTION ON ACADEMIC PERFORMANCE IN MATHEMATICS IN THE MODERN WORLD

Kristine Rayza Amor A. Maputi, Maricar T. Balaba, Czar Aljes Abecia, Welcez Hannah C. Ramos, Julia A. Obedencio, John Ryl M. Rangillas, Paul John B. Panganiban, LPT

Christ the King College, Gingoog City, Misamis Oriental, Philippines

https://doi.org/10.5281/zenodo.13332116

ABSTRACT

This study aimed to determine the impact of student interest and multimedia instruction on academic performance in mathematics in a college in Gingoog City, Philippines. Using a descriptive correlational research design, the study analyzed the effects of student interest and multimedia instruction on academic performance. A proportionate stratified random sampling method was used to select 120 participants from five different programs at the college, with 112 students responding. The research instruments, adapted from other studies, were modified and pilot tested for validity and reliability before distribution via Google Forms. Quantitative statistical methods, including mean, standard deviation, and Pearson's correlation, were employed to analyze the data. The findings indicate that while students consistently show interest in the subject, this enthusiasm does not significantly correlate with their academic performance. Similarly, multimedia instruction is perceived as moderately effective in enhancing learning experiences, yet it also does not significantly correlate with academic performance. Nonetheless, the majority of students achieved very good academic results by the end of the semester. These results suggest that while student interest and multimedia tools are important in education, their direct influence on academic performance may be affected by additional, unexplored factors.

Keywords: *student interest, multimedia instruction, academic performance*

INTRODUCTION

Poor Academic performance in mathematics remains a significant concern. In terms of country means, the Philippines placed second to last in mathematics in the local context, as revealed by the 2018 Programme for International Student Assessment (PISA) scores (Department of Education, 2019). Specifically, 18.5% of students attained the PISA 2018 minimum standard, which is level 2 or higher; 26.9% of students demonstrated level 1 proficiency; and 54.6% of Filipino students who took part received a score below the lowest level 1 proficiency (Department of Education, 2019). Furthermore, in the study of Capuno et al. (2019), it states that there is a need for development in the mathematical proficiency of Filipino students. As shown in the 2016–2017 Global Competitiveness Report, the Philippines ranked 79th out of the 138 countries in terms of the quality of science and math education.

According to a research study by Remo (2019), students' academic performance in Mathematics in the Modern World (MMW) at Bukidnon State University in the Philippines was deemed fairly satisfactory, suggesting the need for improvement. Similarly, it was also found by Roman and Villanueva (2019) that students from the other selected state universities in the Philippines performed satisfactorily in the same subject; however, they had trouble with several areas.

Mathematics, being abstract in nature, often leads many students to lose interest, resulting in low achievement (Yeh et al., 2019). Beyond the inherent abstractness of mathematics, anxiety about learning the subject also plays a significant role in students' disinterest (Summer, 2020). Hence, interest is a crucial factor affecting students' achievement in mathematics (Yeh et al., 2019). Moreover, students who lack interest in mathematics are less likely to pay attention to the topic, and students who struggle to achieve good results in mathematics tests often exhibit weaknesses in fundamental mathematical skills (Minarni et al., 2016). Students who repeatedly score poorly in mathematics may eventually lose interest (Yeh et al., 2019). On the other hand, Yu and Singh's (2016) study's findings indicated that the relationship between interest and mathematics performance was insignificant. They further explained that interest might not be a direct predictor of mathematics performance.

The integration of multimedia technologies in classrooms has significantly revolutionized education. Multimedia instruction has great intentions in terms of enhancing learning across diverse student populations and educational levels. In addition, according to Tayirova (2023), the integration of multimedia tools in learning brings about positive effects on students, boosting their interest in learning, as well as students' development of self-confidence and motivation for self-improvement in learning. In the study of Widiasanti (2023), it was also stated that multimedia offers effective learning tools and fosters creativity and innovation in the learning environment, leading to improved learning quality and a more positive educational experience for students. An important advantage of using multimedia in mathematics is the increased interaction between students and concepts, along with the practical application of the skills they learn (Orlando & Attard, 2016).

In a learning setting with increased technology, Wong and Wong (2019), discovered that although children usually demonstrated interest in mathematics, there was no significant correlation between interest in mathematics and overall performance on a mathematics test administered to 40 students and the Mathematics Interest Inventory.

In the modern world, this study aims to uncover the profound impact of student interest and multimedia instruction on academic performance in mathematics. Through exploring these relationships, the study endeavors to address pertinent questions, such as the level of student interest, the role of multimedia tools in facilitating understanding, and their correlation with academic performance among participants who completed the Mathematics in the Modern World subject.

Research Questions

This study endeavors to ascertain the impact of student interest and multimedia instruction on academic performance in mathematics in the modern world school year 2023-2024.

More specifically, this research aims to address the following questions:

1. What is the level of student's interest in second semester Mathematics in the Modern World classes?
2. How do students perceive the effectiveness of multimedia instruction in enhancing their understanding of mathematical concepts in Mathematics in the Modern World classes?
3. What is the average academic performance of students in second semester Mathematics in the Modern World classes?
4. Is there a significant relationship between student interest and academic performance in Mathematics in the Modern World?
5. Is there a significant relationship between multimedia instruction and academic performance in Mathematics in the Modern World?

METHODOLOGY

The methodology of the study is presented in this section. It discusses the research design, study location, subjects and participants, data collection procedure, including research instrument and validity and reliability testing, data processing system, analytical schemes, and statistical tools.

Locale and Sampling

The study was conducted in one of the Higher Education Institution in Gingoog City. It employed a descriptive correlational research design and utilized a proportionate stratified random sampling method to ensure a representative sample from the population. The sample is comprised of 120 first-year and second-year students from the

different academic programs offered mathematics in the modern world in a college in Gingoog City, Philippines. These programs include Bachelor of Science in Nursing (BSN), Bachelor of Science in Accountancy (BSA), Bachelor of Secondary Education major in English (BSEd-English), Bachelor of Science in Hospitality Management (BSHM), and Bachelor of Science in Business Administration (BSBA). A total of 112 participants participated in the study out of the target sample size of 120 participants.

Specific Data Gathering Procedure

After confirming the questionnaire's validity and reliability, the researcher obtained formal approval from the Research Adviser and the Dean of the target college by submitting a request letter. Upon receiving the necessary permissions, the researcher established a schedule for data collection. The research questionnaires were then distributed online via Google Forms, with the official consent of the Dean. Throughout the study, the researcher provided a detailed explanation of the research objectives and personally administered the questionnaires to respondents.

The respondents were assured that their data would be kept strictly confidential, as outlined in the questionnaire. Finally, the collected data was analyzed using Microsoft Excel and SPSS.

Research Instrument

This study utilized adapted and revised questionnaires from the Mathematics Interest Inventory (MII) developed by Flaga (2021) and the Multimedia Instruction Inventory by Wao (2016) consisting of 20 items respectively. These instruments were subjected to a validation process and underwent pilot testing with a sample of 20 third-year BSEd-English and BEED students at a private college in Gingoog City who had taken the Mathematics in the Modern World subject. To establish internal consistency, Cronbach's alpha coefficient was computed, resulting in values of 0.904 and 0.957, indicating excellent reliability.

Data Analysis

To gain a thorough grasp of the data, the following statistical tools were employed:

For problems number 1, 2, and 3, descriptive statistics such as mean and the standard deviation were used in order to determine the respondent’s level of interest, perceive effectiveness of multimedia instruction, and academic performance in Mathematics in the Modern World.

For problems 4 and 5, the Pearson correlation coefficient was utilized to determine whether there was a significant relationship between the respondents' level of interest in Mathematics in the Modern World and academic performance, and between respondents’ perceived effectiveness of multimedia instruction in Mathematics in the Modern World and academic performance. This analysis helped in identifying the strength and direction of these relationships.

Scope and Limitations

The study utilized a quantitative descriptive-correlational research design to measure the level of interest, perceived effectiveness of multimedia instruction, and academic performance in mathematics in the modern world of college students during the second semester of the school year 2023–2024 in a college in Gingoog City, Philippines. One hundred twenty first-year and second-year students are sampled from the population; hence, there are only one hundred twelve respondents who responded to the research survey since researchers do not have control over respondents who choose not to participate during data collection. An adapted research instrument was employed to gather all the necessary data, which the study respondents provided by completing a survey questionnaire. SPSS was used to analyze the data, which included frequency count, percentage, mean, standard deviation, and Pearson correlation coefficient.

RESULTS

Table 1.

Mean and Standard Deviation, Distribution of student's interest in Mathematics in the Modern World classes.

	Indicators	Mean	SD	Description	Interpretation
1	I like to answer questions in Mathematics in the Modern World.	3.06	.701	Agree	Manifested and exhibited most of the time
2	I am interested in Mathematics in the Modern World.	3.05	.708	Agree	Manifested and exhibited most of the time
3	Knowing a lot about Mathematics in the Modern World is helpful.	3.36	.656	Strongly Agree	Exhibited and manifested at all times.
4	I feel happy when it comes to working on Math problems.	2.88	.807	Agree	Manifested and exhibited most of the time
5	I am excited when a new Math topic is introduced.	2.92	.807	Agree	Manifested and exhibited most of the time
6	I work hard in my Mathematics in the Modern World Class.	3.19	.665	Agree	Manifested and exhibited most of the time
7	I want to learn more about Mathematics.	3.20	.695	Agree	Manifested and exhibited most of the time
8	I believe I can get better and better at Math each day.	3.15	.674	Agree	Manifested and exhibited most of the time

9	I complete all my Math assignments outside of class.	3.21	.646	Agree	Manifested and exhibited most of the time
10	I like doing mathematics activities.	2.90	.771	Agree	Manifested and exhibited most of the time
11	I think I have done well in mathematics during the second semester.	3.05	.708	Agree	Manifested and exhibited most of the time
12	Math can be a lot of fun.	3.12	.720	Agree	Manifested and exhibited most of the time
13	Discussing different solutions is a good way of learning math.	3.29	.663	Strongly Agree	Exhibited and manifested at all times.
14	I ask questions when I am unsure of a problem.	3.25	.717	Agree	Manifested and exhibited most of the time
15	I'm certain I can figure out how to solve difficult math problems.	2.88	.803	Agree	Manifested and exhibited most of the time
16	Time spent learning why a solution works is time well spent.	3.13	.651	Agree	Manifested and exhibited most of the time
17	I give math assignments my best effort.	3.26	.720	Strongly Agree	Manifested and exhibited most of the time
18	Even if the concepts in math class are hard, I can learn them.	3.13	.673	Agree	Manifested and exhibited most of the time
19	It's important for me to do really well in math.	3.21	.621	Agree	Manifested and exhibited most of the time
20	I work on Mathematics in my spare time.	2.87	.753	Agree	Manifested and exhibited most of the time
	Overall Mean	**3.23**	**.644**	**Agree**	**Manifested and exhibited most of the time**

Table 2.

Mean and Standard Deviation, Distribution of how students perceive the effectiveness of multimedia instruction in Mathematics in the Modern World classes.

	Indicators	Mean	SD	Description	Interpretation
1	I can easily understand the topic of Mathematics in the Modern World with the integration of multimedia technology.	3.05	.642	Agree	Moderately effective
2	Multimedia instruction caught my interest in the class.	3.04	.629	Agree	Moderately effective
3	I don't need to copy some notes when multimedia is used.	2.79	.843	Agree	Moderately effective
4	Through multimedia instruction, it is easy for me to remember the details.	3.01	.678	Agree	Moderately effective
5	I feel sleepy and bored when it uses unattractive multimedia technology lessons.	2.81	.742	Agree	Moderately effective
6	I can easily acquire more information accurately and briefly when it uses multimedia teaching.	3.08	.617	Agree	Moderately effective
7	I am attentive when presentation is well-done.	3.29	.653	Strongly Agree	Highly effective
8	With multimedia instruction, I retain information for a longer period of time.	3.02	.629	Agree	Moderately effective
9	Multimedia stimulates my attention in class.	3.09	.578	Agree	Moderately effective
10	I don't want to pay attention when multimedia technology is not understandable.	2.88	.803	Agree	Moderately effective
11	I compare and contrast things easily with the aid of multimedia technology.	3.04	.576	Agree	Moderately effective
12	I acquire broader knowledge about the topic when multimedia technology is properly used.	3.12	.581	Agree	Moderately effective
13	I will not be satisfied if the multimedia presentation lacks follow up discussion.	3.01	.651	Agree	Moderately effective

14	Multimedia technology helps develop my mathematical skills.	3.15	.603	Agree	Moderately effective
15	I understand the lesson thoroughly and systematically through integration of multimedia technology.	3.15	.557	Agree	Moderately effective
16	I participate with the use of multimedia technology during discussion especially if it employs animation, sound, motion, or graphs.	3.04	.606	Agree	Moderately effective
17	Using multimedia technology inspires me to participate in class.	3.04	.629	Agree	Moderately effective
18	Instructional Materials like laptop and television excites me.	3.07	.667	Agree	Moderately effective
19	I feel enlighten when multiple multimedia instructional tools are used.	3.12	.611	Agree	Moderately effective
20	It encourages me to share my own thoughts and additional information if there is multimedia technology during the discussion.	2.96	.643	Agree	Moderately effective
	Overall Mean	**3.21**	**.505**	**Agree**	**Moderately effective**

Table 3.

Frequency, Percentage, Mean Distribution, and Standard Deviation of the average academic performance of students in mathematics in the modern world classes

Grade Point Equivalence	Equivalence	Interpretation	Frequency	Percentage %
1.00-1.50	90% - 100%	Excellent	35	31.3
1.60-2.00	85% - 89%	Very Good	37	33.0
2.10-2.50	80% - 84%	Good	39	34.8
2.60-3.00	75% - 79%	Passed	1	.9
3.10-5.00	Below 75%	Failed	0	0
	Total		112	100

Mean: 1.82

Interpretation: Very Good

Standard Deviation: .403

Table 4.

Pearson Correlation Analysis of the significant relationship between student interest and academic performance in Mathematics in the Modern World.

Variable	Academic Performance	
Student Interest	Pearson Correlation (r)	-.066
	Sig. (2-tailed)	.487
	Interpretation	Not significant

Table 5.

Pearson Correlation Analysis of the significant relationship between multimedia instruction and academic performance in Mathematics in the Modern World.

Variable	Academic Performance	
Multimedia	Pearson Correlation (r)	-.049
Instruction	Sig. (2-tailed)	.607
	Interpretation	Not significant

DISCUSSION

1. What is the level of student's interest in second semester Mathematics in the Modern World classes?

Table 1 presents the mean and standard deviation distribution of students' interest levels in Mathematics in the Modern World. The overall mean of 3.2 indicates that students generally "agree" with statements regarding their interest, suggesting their interest is exhibited most of the time. Researchers observed that most students are engaged with the subject matter, demonstrating a generally positive interest. However, this level of interest does not represent the highest possible engagement, indicating room for improvement through innovative teaching methods or more engaging materials. Maass et al. (2019) note that boosting interest and performance in mathematics through such innovations is challenging and requires significant teacher commitment and motivation. Similarly, Mazana et al. (2019) found that an enjoyable learning environment significantly impacts students' interest in mathematics and enhances their performance.

The indicator with the highest mean (M = 3.36, SD = 0.656) was "Knowing a lot about Mathematics in the Modern World is helpful," showing that respondents strongly agree with its importance. Sharma's (2021) study supports this, as 82% of participants felt that knowledge of mathematics is beneficial in daily life. Mathematics fosters logical, critical, and creative thinking, and enhances problem-solving abilities, abstract and spatial

reasoning, and communication skills. It is essential in professional settings and provides financial opportunities, making it invaluable in our evolving world. Moreover, the statement "Discussing various solutions is a good way of learning math" had the second-highest mean (M = 3.29, SD = 0.663), indicating strong belief in the effectiveness of discussing multiple solutions. Stupel and Ben-Chaim's (2017) study supports this, showing that diverse approaches improve mathematical creativity and comprehension. Teachers should encourage and request multiple solutions in tests and classroom activities.

The indicator with the lowest mean (M = 2.87, SD = 0.753) was "I work on mathematics in my spare time," suggesting that respondents rarely engage with mathematics during leisure time. This trend may be due to factors such as lack of interest, math anxiety, or competing priorities. Ramirez et al. (2016) found that math anxiety significantly reduces students' willingness to engage with math outside of the classroom. Zimmerman et al. (2017) highlight the importance of self-regulation and motivation in influencing students' engagement with academic subjects beyond formal education. In addition, the indicators such as "I like to answer questions in Mathematics in the Modern World," "I am interested in Mathematics in the Modern World," "I feel happy when it comes to working on Math problems," and others, reflect students' emotions, self-efficacy, and mindset towards mathematics. A student's interest in their studies is influenced by various factors, including feelings, self-efficacy, and sense of community (Kahu et al., 2017). These indicators suggest that respondents are generally interested in the subject.

2. How do students perceive the effectiveness of multimedia instruction in enhancing their understanding of mathematical concepts in Mathematics in the Modern World classes?

Table 2 presents the mean and standard deviation distribution of students' perceptions of the effectiveness of multimedia instruction in enhancing their understanding of mathematical concepts in Mathematics in the Modern World classes. With an overall mean of 3.2054, or approximately 3.2, the respondents "agree" that multimedia instruction is moderately effective. The researchers observed that most students agree that multimedia instruction enhances their understanding of mathematical concepts. A strong foundation in basic mathematical concepts is a fundamental skill every student should possess. The correct and effective implementation of multimedia instruction can help students achieve a thorough understanding of concepts and excel in mathematics. This highlights the importance of continuous curriculum development and the integration of information and communications technology in education.

The specific indicator with the highest mean (M = 3.29, SD = 0.653) was "I am attentive when the presentation is well-done." This suggests that respondents strongly agree that a well-done presentation enhances their attentiveness. Yaftian and Barghamadi (2022) found that new teaching media improve student learning through intuitive observation and understanding, leading to greater involvement and responsiveness in the classroom, increased enthusiasm, and reduced anxiety about mathematical concepts. Multimedia instruction makes students more interested in learning mathematics. Moreover, the indicators "Multimedia technology helps develop my

mathematical skills" (M = 3.15, SD = 0.603) and "I understand the lesson thoroughly and systematically through the integration of multimedia technology" (M = 3.15, SD = 0.557) had the second highest means. Participants agree that multimedia instruction enhances their mathematical skills and deepens their understanding comprehensively and systematically. Biffi et al. (2019) found that interactive multimedia modules improved material transfer by 20%, knowledge retention by 8%, and satisfaction rates with course preparation significantly.

The indicator with the lowest mean (M = 2.79, SD = 0.843) was "I don't need to copy some notes when multimedia is used." This suggests that participants agree that note-taking is less necessary when multimedia is integrated into instruction. Akinoso (2020) found that using multimedia improves mathematics learning more than traditional instruction, allowing students to focus on learning rather than copying notes. In addition, the indicator "I feel sleepy and bored when it uses unattractive multimedia technology lessons" (M = 2.81, SD = 0.742) had the second lowest mean, indicating that unappealing multimedia technology makes participants feel disengaged. Heidig et al. (2016) found that the design of multimedia learning material affects learners' emotional states, impacting their intrinsic motivation to stay attentive and awake during lessons.

Overall, the results indicate that interactive multimedia instruction is effective in improving respondents' understanding of mathematical concepts. It provides flexibility and convenience for students, helping them engage in classroom activities and participate actively in their learning.

3. What is the average academic performance of students in second semester Mathematics in the Modern World classes?

Table 3 presents the frequency and percentage distribution of participants' average academic performance in Mathematics in the Modern World. The overall mean for the second semester of the 2023-2024 school year is 1.8, with a standard deviation of 0.403, indicating that the participants' academic performance in this subject is "very good." Most students had a grade point equivalence range of 2.10 to 2.50, corresponding to 80% to 84%, and a percentage of 34.8%, classifying them as "good" in Mathematics in the Modern World (MMW). Bangalan and Hipona (2022) found that students in this course exhibited a favorable disposition, recognizing its importance in both personal and societal contexts, and thrived in an environment that promoted curiosity, creative thinking, cooperation, love, and respect.

The school's grading system was used to measure students' academic performance in Mathematics in the Modern World. Out of the 112 participants, none failed the subject, and only one student had a grade range of 2.60–3.00, equivalent to 75%–79%, representing 0.9% of the sample. Students who excelled with a grade point equivalence of 1.00–1.50, equivalent to 90%–100%, had a frequency of 35, representing 31.3%. Although the majority of respondents performed well, the data suggest there is room for improvement in their academic performance.

4. Is there a significant relationship between student interest and academic performance in Mathematics in the Modern World?

Table 4 displays the Pearson correlation coefficient (r) and the associated p-value (sig.) at the 0.05 significance level. The computed r value of -0.066 indicates a weak negative correlation between student interest and academic performance. The p-value of 0.487 exceeds the conventional significance level of 0.05, suggesting that this correlation is not statistically significant. Consequently, there is insufficient evidence to reject the null hypothesis, which posits that there is no significant correlation between student interest and academic performance. This finding aligns with the studies of Wong and Wong (2019) and Yu and Singh (2016), both of which reported no substantial correlation between students' interest in mathematics and their academic performance.

Wong and Wong (2019) argue that students who excel in mathematics often do so due to external influences rather than intrinsic interest. These students may approach their studies with disciplined study habits and a strong grasp of foundational concepts. Their academic success in mathematics may not necessarily depend on their level of interest in the subject; rather, it could be attributed to effective study strategies and a methodical approach to learning.

5. Is there a significant relationship between multimedia instruction and academic performance in Mathematics in the Modern World?

Table 5 displays the Pearson correlation coefficient (r) and its associated p-value at the 0.05 significance level. The calculated r value of -0.049 suggests a very weak negative correlation between academic performance and multimedia instruction. The p-value of 0.607, which is higher than the conventional significance level of 0.05, indicates that this correlation is not statistically significant. Consequently, we fail to reject the null hypothesis, implying that there is no significant evidence to suggest that multimedia instruction has a meaningful impact on academic performance.

This finding is consistent with Akinoso's (2018) experimental study, which found that while multimedia use can somewhat improve students' learning and achievement in mathematics, these improvements were not statistically significant. This result contrasts with Khan et al.'s (2020) study, which reported that multimedia instruction significantly enhances academic performance among secondary and higher secondary school students.

Conclusions

The study aimed to determine the impact of student interest and multimedia instruction on academic performance in Mathematics in the Modern World. Based on this premise, the following conclusions were drawn:

This study, conducted with 112 college students, investigated the impact of student interest and multimedia instruction on their academic performance in Mathematics in the Modern World for the 2023-2024 school year. The findings reveal that while students

consistently express interest in the subject, this enthusiasm does not significantly correlate with their academic performance. Similarly, although multimedia instruction is perceived as moderately effective in enhancing learning experiences, it also shows no significant correlation with academic outcomes. Despite these observations, the majority of students achieved very good academic results by the end of the semester. This suggests that while student interest and multimedia tools play roles in education, their impact on actual academic performance may be influenced by additional factors not explored in this study. Other variables, such as individual learning styles, teaching strategies, and external factors, may also significantly affect students' academic achievements.

The results indicate a baseline level of proficiency among students, despite varying levels of perceived interest and instructional effectiveness. This highlights the need for further investigation into how different instructional strategies and personalized approaches can better align with students' diverse learning needs and preferences. The use of a descriptive correlational research design, supported by careful data collection and analysis methods, strengthens the reliability and validity of the study's conclusions. However, the study acknowledges limitations such as its specific context and the potential challenges of generalizing findings across different educational settings.

Recommendations

Based on the findings and the conclusions of the study, the researchers arrived at the following recommendations to the following entities:

1. to the math teachers that they may:

1.1 integrate different types of instructional methods with integration of digital application in their math classes;

1.2 use new and accessible digital materials in their math classes that may give dedication to students to strive more;

1.3 utilize multimedia learning materials that are comprehensible and student-friendly

2. to the students that they may:

2.1 read materials and engage themselves more to mathematics;

2.2 be motivated enough to do the tasks given and continue doing better; and

2.3 give some time to yourself and reflect on the things you want to achieve in life in order to be determined in doing any activities

3. to the school administration that they may:

3.1 provide more digital and traditional materials to the teacher and students and

3.2 conduct mathematics related activities to foster mathematics engagement and positive mindset of students.

4. to the future researchers that they may:

4.1 carry out improvements in line with the current study;

4.2 explore other factors in enhancing educational practices and outcomes in mathematics education.

Compliance with Ethical Standards

This study was conducted in accordance with ethical standards to ensure the safety and well-being of all respondents. The research minimized the risk of harm by guaranteeing the confidentiality and anonymity of respondents' responses throughout and beyond the research process. Free, prior informed consent was obtained from all participants at the outset, with assurances provided regarding their right to withdraw from the study at any point. Adherence to protocols ensured voluntary respondents, maintaining the anonymity and confidentiality of responses, thereby protecting participants from any potential harm.

Acknowledgments

The researchers wish to extend their heartfelt gratitude and appreciation to the individuals whose contributions were instrumental in the completion and success of this study.

We would like to express our sincere thanks to our dedicated Research Adviser, Mr. Paul B. John Panganiban, whose profound knowledge provided invaluable guidance and support throughout the research process, as well as his patience during the crafting of this paper.

We are also grateful to the Panel of Examiners for their constructive suggestions, feedback, and invaluable guidance, which greatly contributed to the quality of this study.

Special thanks are extended to Dr. Carmelita C. Labadan, for granting us permission to conduct our study at Christ the King College, Gingoog City.

Our deepest appreciation goes to our Families, whose unwavering love and support, both financial and moral, strengthened us through challenges encountered along the way.

To our Friends, we are thankful for their unwavering support and encouragement throughout this journey.

We extend our gratitude to the Respondents who generously dedicated their time to complete the questionnaires, without whom this study would not have been possible.

We also acknowledge our Significant Others for their unwavering support and encouragement throughout the research process. Their presence served as constant inspiration and motivation to give our best and complete this study.

Above all, we offer our profound gratitude to the Almighty God for granting us wisdom, strength, knowledge, and good health throughout the research process. We are thankful for His divine guidance and presence, which provided hope and steadfast companionship in every aspect of this study. It is with humility and dedication that we dedicate the findings of this study to His glory.

REFERENCES

Akinoso, O. (2018, May 17). Effect-of-the-use-of-multimedia-on-students-performance-in-secondary-school-Mathematics-1. ResearchGate. https://www.researchgate.net/publication/341741472_effect-of-the-use-of-multimedia-on-students-performance-in-secondary-school-mathematics-1

Akinoso, Sabainah. 2020. Effect of the Use of Multimedia on Students Performance in Secondary School Mathematics-1. University of Lagos (Global Media Journal 16(30):1-8). https://www.researchgate.net/publication/341741472_effect-of-the-use-of-multimedia-on-students-performance-in-secondary-school-mathematics-1

Bangalan, Roldan & Hipona, Jocelyn. (2022). MATHEMATICS IN THE MODERN WORLD AS A SCIENCE OF PATTERNS WITH AN INTEGRATION OF OUTCOME BASED TEACHING- LEARNING APPROACHES. Research Gate. https://www.researchgate.net/publication/364813755_MATHEMATICS_IN_THE_MODERN_WORLD_AS_A_SCIENCE_OF_PATTERNS_WITH_AN_INTEGRATION_OF_OUTCOME_BASED_TEACHING-_LEARNING_APPROACHES

Capuno, R., Necesario, R., Etcuban, J. O., Espina, R., Padillo, G., & Manguilimotan, R. (2019). Attitudes, study habits, and academic performance of junior high school students in mathematics. *International Electronic Journal of Mathematics Education, 14*(3), 547-561. https://doi.org/10.29333/iejme/5768

Department of Education. (2019). PISA 2018 Philippine National Report. Department of Education: Pasig City, Philippines. Retrieved from https://www.deped.gov.ph/wp-content/uploads/2019/12/PISA-2018-Philippine-National-Report.pdf

Flaga (2021), Level of Interest and Performance in Mathematics of Seminarians in St. PIUS X Seminary, https://www.scribd.com/document/530206537/Thesis-Flaga-1

Heidig, S., Muller, J., Reichelt, M. 2016. Emotional Design in Multimedia Learning: Differentiation on Relevant Design Features and Their Effects on Emotions and Learning. https://www.researchgate.net/publication/269728083_Emotional_design_in_multimedia_learning_Differentiation_on_relevant_design_features_and_their_effects_on_emotions_and_learning

Kahu, E., Nelson, K., & Picton, C. (2017, July). Student interest as a key driver of engagement for first year students. ResearchGate. https://www.researchgate.net/publication/318749963_Student_interest_as_a_key_driver_of_engagement_for_first_year_students

Khan, A. G., Shetu, S. H., Islam, M. N., & Moudud-Ul-Huq, S. (2020). Multimedia instructions and academic performance of students. International Journal of

Smart Education and Urban Society, 11(1), 23–40. https://doi.org/10.4018/ijseus.2020010103
Khan, Peter, et al. (2016). "Understanding Student Engagement in Online Learning Environments: The Role of Reflexivity". https://core.ac.uk/download/pdf/74211395.pdf
Maass, K., Cobb, P., Krainer, K., & Potari, D. (2019). Different ways to implement innovative teaching approaches at scale. Educational Studies in Mathematics, 102(3), 303–318. https://doi.org/10.1007/s10649-019-09920-8
Masduki, N., Prayitno, L.R., Dartani, E., Rensi, M.Y. 2020. The Use of Interactive Multimedia in Improving Mathematics Learning Outcomes: The Case of the 4th Grade Students of SDN Manyaran 01 Semarang in the Academic Year of 2019/2020.
Mazana, M.Y., Montero, C.S. and Casmir, R.O. (2019), “Investigating students’ attitude towards learning mathematics”, International Electronic Journal of Mathematics Education, Vol. 14 No. 1, pp. 207-231, doi: 10.29333/iejme/3997.
Minarni, A., Napitupulu, E. E., and Husein, R. (2016). Mathematical understanding and representation ability of public Junior High School in North Sumatra. Journal on Mathematics Education, 7(1), 45-58
Orlando, J., & Attard, C. (2016). Digital natives come of age: the reality of today's early career teachers using mobile devices to teach mathematics. Mathematics Education Research Journal, 28(1), 107-121. https://doi.org/10.1007/s13394-015-0159-6
Ramirez, G., Gunderson, E. A., Levine, S. C., & Beilock, S. L. (2013). Math anxiety, working memory, and math achievement in early elementary school. Journal of Cognition and Development, 14(2), 187–202. https://doi.org/10.1080/15248372.2012.664593
Remo, L. (2019). Prediction and Assessment of Students’ Performance in Mathematics in the Modern World (MMW). International Journal of Scientific and Technology Research 8(4), 219-224. Retrieved from https://tinyurl.com/hmezpnj6
Roman, A. & Villanueva, R. (2019). Competency Acquisition, Difficulty and Performance of First Year College Students in Mathematics in the Modern World (MITMW). Internation Journal of Scientific and Technology Research, 8(12), 2731-2736. https://tinyurl.com/2cdebvz5
Sharma, P. (2021, November). Importance and Application of Mathematics in Everyday Life. Google Scholar. http://surl.li/norxbz
Stupel, M., & Ben-Chaim, D. (2017, April). Using multiple solutions to mathematical problems to develop pedagogical and mathematical thinking: A case study in a teacher education program. Research Gate. https://www.researchgate.net/publication/321311704_Using_multiple_solutions_to_mathematical_problems_to_develop_pedagogical_and_mathematical_thinking_A_case_study_in_a_teacher_education_program
Summer, A. (2020), “A sustainable way of teaching basic mathematics”, Discourse and Communication for Sustainable Education, Vol. 11 No. 2, pp. 106-120, doi: 10.2478/dcse-2020-0021.
Tayirova, M. A. (2023). ADVANTAGES AND DISADVANTAGES OF USING MULTIMEDIA TECHNOLOGIES IN THE EDUCATIONAL SYSTEM. Frontline

Social Sciences and History Journal, 03(02), 37–45. https://doi.org/10.37547/social-fsshj-03-02-05
Wao, J. S. J. (2016, November 21). Questionnaire. Scribd. https://www.scribd.com/document/331801849/Questionnaire?fbclid=IwZXh0bgNhZW0CMTAAAR3IrfuHUTBjYpoabJA4RgvJzJZYK-CIwfI7mjTkvVE0VcIVndYZrIuN0dM_aem_ZmFrZWR1bW15MTZieXRlcw
Widiasanti, I., Ramadhan, N. A., Alfarizi, M., Fairus, A. N., Oktafiani, A. W., & Thahur, D. (2023). Utilization of multimedia facilities and internet media as effective learning tools. Jurnal Penelitian Pendidikan IPA, 9(6), 148–153. https://doi.org/10.29303/jppipa.v9i6.3805
Wong, S. L., & Wong, S. L. (2019). Relationship between interest and mathematics performance in a technology-enhanced learning context in Malaysia. Research and Practice in Technology Enhanced Learning/Research and Practice in Technology Enchanced Learning, 14(1). https://doi.org/10.1186/s41039-019-0114-3
Yaftian, N., & Barghamadi, S. (2022). The Effect of Teaching Using Multimedia on Mathematical Anxiety and Motivation. JRAMathEdu (Journal of Research and Advances in Mathematics Education), 7(2), 55-63. https://doi.org/10.23917/jramathedu.v7i2.16141
Yeh, C. Y., Cheng, H. N., Chen, Z. H., Liao, C. C., and Chan, T. W. (2019). Enhancing achievement and interest in mathematics learning through Math-Island. Research and Practice in Technology Enhanced Learning, 14(1), 1-19. doi: 10.1186/s41039-019-0100-9
Yu, R., & Singh, K. (2016). Teacher support, instructional practices, student motivation, and mathematics achievement in high school. The Journal of Educational Research, 1–14. https://doi.org/10.1080/00220671.2016.1204260
Zimmerman, B. J. E., & Schunk, D. H. E. (n.d.). Handbook of Self-Regulation of Learning and Performance. https://eric.ed.gov/?id=ED579812

APA Citation:

Maputi, K. R. A. A., Balaba, M. T., Abecia, C. A., Ramos, W. H. C., Obedencio, J. A., Rangillas, J. R. M., & Panganiban, P. J. B. (2024). IMPACT OF STUDENT INTEREST AND MULTIMEDIA INSTRUCTION ON ACADEMIC PERFORMANCE IN MATHEMATICS IN THE MODERN WORLD. Ignatian International Journal for Multidisciplinary Research, 2(8), 963–979. https://doi.org/10.5281/zenodo.13332116

Corresponding author: *pauljohnpanganiban27@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

IMPLEMENTATION OF TECHNOLOGY AND LIVELIHOOD EDUCATION (TLE) PROGRAM IN TACURONG CITY DIVISION: ITS IMPACT ON THE HIGH SCHOOL STUDENTS' CAREER PREPAREDNESS

Cherubim C. Cerdana, MAEd[1]
Jaime Boy U. Ngag, Jr., PhD[2]

[1]Upper Katungal National High School, Schools Division Office of Tacurong City Tacurong City, Sultan Kudarat, Philippines
[2]South Cotabato State College, Dajay, Surallah, South Cotabato, Philippines

https://doi.org/10.5281/zenodo.13292709

ABSTRACT

The study examined the implementation of the Technology and Livelihood Education (TLE) program in the Tacurong City Division and its impact on high school students' career preparedness. The TLE program aims to equip students with practical skills and knowledge, preparing them for both immediate employment and further education. The primary objective of this study is to evaluate the effectiveness of the TLE program in enhancing students' readiness for their future careers. A descriptive-correlation method was employed using a quantitative surveys interview. The survey, conducted with 50 high school students from various schools within the Tacurong City Division, assessed their perceptions of the TLE program and its influence on their career preparedness. In-depth interviews with 25 TLE teachers and school administrators provided additional insights into the program's implementation and challenges. Findings indicate that students generally perceive the TLE program as beneficial for developing practical skills and boosting their confidence in pursuing career opportunities. However, there are significant variations in program effectiveness due to differences in resource availability, teacher expertise, and industry partnerships across schools. Students from well-resourced schools reported higher levels of career preparedness compared to those from under-resourced institutions. The study concludes that while the TLE program has a positive impact on students' career preparedness, its effectiveness is hindered by disparities in resource allocation and implementation consistency. Recommendations include increasing funding for TLE resources, enhancing teacher training, and fostering

stronger collaborations with local industries to ensure a more uniform and impactful delivery of the program.

Keywords: *Career Preparedness, Technology and Livelihood Education, High School Students, Program Implementation, Tacurong City Division*

INTRODUCTION

In recent decades, the global landscape has witnessed an increasing emphasis on preparing students for the dynamic challenges of the workforce through comprehensive educational programs. One such initiative is the Technology and Livelihood Education (TLE) program, designed to equip students with practical skills, technological knowledge, and entrepreneurial acumen. Originating from international educational frameworks that recognize the evolving demands of the job market, TLE has become a cornerstone in secondary education, aiming to bridge the gap between academic learning and real-world applications.

Internationally, educational systems have acknowledged the significance of TLE in nurturing a workforce that is not only academically competent but also proficient in practical, hands-on skills. Nations such as Singapore and South Korea have successfully integrated TLE into their secondary education systems, aligning curricula with industry needs and fostering a generation of skilled professionals with a competitive edge in the global job market (Choy, 2017; Kim, 2019).

In the Philippine context, the implementation of the K to 12 programs in 2013 marked a significant shift in the country's educational landscape, introducing reforms to enhance the quality of education and align it with international standards. As part of this initiative, the TLE program was integrated into the curriculum to address the need for holistic development among high school students, preparing them for both college and career pathways (DepEd, 2013).

In South Central Mindanao, specifically in Sultan Kudarat, the findings of the study Dolutan and Ngag (2024) revealed that Centennial teachers in DepEd Bagumbayan District perceive educational modernization as a paradigm shift towards integrating advanced technologies and innovative pedagogical methods into teaching TLE and other subjects requiring ICT. They describe their experiences of incorporating modern technological tools and pedagogical approaches as initially challenging yet ultimately transformative. They encounter challenges such as inadequate infrastructure, resistance to change among stakeholders, and the need for continuous training and support.

While international studies highlight the positive impact of TLE programs, there is a dearth of research examining how these initiatives translate to localized contexts such as Tacurong City Division. Understanding the specific challenges and successes within this setting is crucial for optimizing the TLE curriculum to cater to the unique needs of the community. Previous research often emphasizes the importance of aligning TLE

programs with industry requirements (Choy, 2017). However, there is a research gap in understanding how well the TLE program in Tacurong City Division is aligned with the needs of local industries, and whether it adequately prepares students for the job market.

While TLE aims to enhance career preparedness, there is a lack of research exploring high school students' perceptions of the program in Tacurong City Division. Investigating students' attitudes, aspirations, and motivations regarding TLE can provide valuable insights into the program's impact on their career choices. Limited research delves into the perspectives and challenges faced by educators in implementing TLE in Tacurong City Division. Understanding teachers' experiences can shed light on the factors that facilitate or hinder effective TLE delivery, contributing to the refinement of instructional strategies.

However, despite the apparent global acknowledgment of the importance of TLE, there is a notable gap in the literature concerning its localized impact, specifically in regions such as Tacurong City Division. The effectiveness of TLE in enhancing high school students' practical skills and career preparedness in this setting remains underexplored. Thus, there is a critical need for research that examines the local nuances of TLE implementation, considering the unique challenges and opportunities within the Tacurong City Division.

By addressing these research gaps, this study seeks to provide a comprehensive understanding of the implementation of the TLE program in Tacurong City Division and its impact on the practical skills and career preparedness of high school students.

Research Questions

Generally, this study aimed to determine the relationship between the Implementation of Technology and Livelihood Education (TLE) Program and High School Students' Career Preparedness in Tacurong City Division, Tacurong, Sultan Kudarat for the school year 2023-2024.

Specifically, this sought to answer the following key-questions:

1. What is the extent of the Implementation of Technology and Livelihood Education (TLE) Program, in terms of:
    1.1. Curriculum Alignment;
    1.2. Teacher Training and Competence;
    1.3. Resource Availability; and
    1.4. Community Engagement?

2. What is the level of High School Students' Career Preparedness in terms of:
    2.1. Practical Skills Acquisition;
    2.2. Career Awareness and Aspirations;
    2.3. Job Market Readiness; and
    2.4. Educational and Career Guidance?

3. Is there a significant relationship between the extent of the Implementation of Technology and Livelihood Education (TLE) Program, and the level of High School Students' Career Preparedness?

METHODOLOGY

Research Design

The study is quantitative in nature, namely a descriptive-correlational to determine the relationship between the Implementation of Technology and Livelihood Education (TLE) Program and High School Students' Career Preparedness in Tacurong City Division, Tacurong, Sultan Kudarat for the school year 2022-2023.

According to Bhandari (2021), A correlational research design investigates relationships between variables without the researcher controlling or manipulating any of them. Further, a correlation reflects the strength and/or direction of the relationship between two (or more) variables. The direction of a correlation can be either positive or negative. Correlational research is ideal for gathering data quickly from natural settings. That helps you generalize your findings to real-life situations in an externally valid way.

Respondents of the Study

This study's respondents were Junior High School students, and TLE teachers among selected secondary schools in Tacurong City Division, Sultan Kudarat, during the school year 2023-2024.

Respondents	Population	Sample	Total
Students	500	50	50
TLE Teachers	25	25	25

Sampling Technique

This study's respondents were selected using various sampling techniques:

First, Total Enumeration Sampling Technique was used for the selection of all the TLE teachers among selected secondary schools in Tacurong City Division, Sultan Kudarat, during the school year 2023-2024. As stressed in the study of Ngag (2023), the

use of Total Enumeration Sampling Technique is tailored fit when the population is homogenous.

Furthermore, Simple Random Sampling technique was used to select the students among selected secondary schools in Tacurong City Division, Sultan Kudarat, during the school year 2023-2024. According Creswell (2012: 143), in simple random sampling, the researcher selects participants (or units, such as schools) for the sample so that any individual has an equal 36 probabilities of being selected from the population.

Research Instruments

An approved survey questionnaire was used in this investigation. In this study, a five-point Likert scale was also employed to evaluate the respondents' survey questionnaire responses. The survey questionnaire data were reviewed and interpreted using the rating scales.

To assess extent of the Implementation of Technology and Livelihood Education (TLE) Program, the scale on the next page was used:

RATING	RANGE OF MEANS	DESCRIPTIVE RATING	INTERPRETATION
5	4.20-5.00	Agree	Highly Implemented
4	3.40-4.19	Fairly Agree	Implemented
3	2.60-3.39	Neutral	Moderately Implemented
2	1.80-2.59	Fairly Disagree	Fairly Implemented
1	1.00-1.79	Disagree	Not Implemented

Another rating scale designed was used to evaluate the level of High School Students' Career Preparedness:

RATING	RANGE OF MEANS	DESCRIPTIVE
5	4.20-5.00	Agree
4	3.40-4.19	Fairly Agree
3	2.60-3.39	Neutral
2	1.80-2.59	Fairly Disagre
1	1.00-1.79	Disagree

Data Gathering Procedure

To ensure reliable and authentic findings, the researcher adhered to a methodology that aligns with the objectives of their inquiry.

Initially, the study's implementation has required the endorsement of the DepEd-Division Superintendent and the CGS Dean through the affixation of their respective signatures on a formal document.

An additional letter of authorization was dispatched to the school principals, and to the department head of TLE. To ensure the accuracy of the data collected for this study, a survey questionnaire was utilized, developed, and assessed. The researcher intends to employ a random sampling technique by utilizing self-generated random number tables to select participants for the study.

Prior to the conduct of the study, the research proposal underwent ethical considerations. The researcher sought the approved clearance to conduct the study from the office of the EWMCI Research Ethics Committee (EREC).

When the health protocol was adhered, the investigator initiated the dissemination of the Survey Questionnaire via face-to-face manner. Ultimately, the outcomes derived from the distributed survey questionnaire were compiled, assessed, and analyzed.

Statistical Treatment

Upon the culmination of the study, the collected data was systematically arranged, presented in tabular form, subjected to rigorous analysis, and subsequently interpreted. Consequently, the statistical techniques outlined in Chapter I were utilized to address the issues.

Initially, the Mean statistical measure was employed to calculate the extent of the Implementation of Technology and Livelihood Education (TLE) Program, and the level of High School Students' Career Preparedness.

On the other hand, Pearson r Correlation was also employed to calculate the significant relationship between the extent of the Implementation of Technology and Livelihood Education (TLE) Program, and the level of High School Students' Career Preparedness.

Scope and Limitations

The study focused specifically on Tacurong City Division, providing insights into the implementation of the Technology and Livelihood Education (TLE) program within this educational jurisdiction. It involved high school students enrolled in the TLE program within Tacurong City Division during the specified school year. The research examined various aspects of the TLE program, including its curriculum, teaching methodologies, resources, and facilities available to students.

The said study assessed the impact of the TLE program on high school students' career preparedness, encompassing their knowledge, skills, attitudes, and readiness for future employment or further education. It focuses on the academic year 2023-2024,

providing a snapshot of the TLE program's implementation and its effects on students' career readiness during this period.

The study was delimited to the academic year 2023-2024, meaning that it does not extend beyond this specific timeframe. Any changes or developments in the TLE program or students' career preparedness occurring after this period are not included in the analysis.

RESULTS AND DISCUSSION

Extent of TLE Program Implementation

The Technology and Livelihood Education (TLE) program in DepEd Tacurong City Division was highly implemented, with indicators such as curriculum alignment and teacher training and competence both receiving a mean rating of 4.6, corresponding to "Strongly Agree." This suggests that these aspects were perceived as highly implemented by the respondents. Resource availability, with a mean rating of 4 ("Agree"), was also considered adequately implemented, although not as strongly as the other indicators. Community engagement, however, received a lower mean rating of 3.6 ("Merely Agree"), indicating that it was only moderately implemented. The overall mean rating for the TLE program's implementation was 4.2 ("Agree"), suggesting a generally positive perception of its implementation.

Level of High School Students' Career Preparedness

The level of high school students' career preparedness showed varied results across different indicators. Practical skills acquisition received a mean rating of 3 ("Merely Agree"), indicating that students felt only somewhat prepared in this area. In contrast, career awareness and aspirations, job market readiness, and educational and career guidance all received mean ratings of 4 ("Agree"), indicating that students felt adequately prepared in these aspects. The overall mean rating for career preparedness was 3.75 ("Agree"), suggesting that, on average, students felt prepared for their future careers. Taking into consideration the global environment, people view education not only a way of developing peoples' skills but also a way of preparing the students to be globally competitive (Albarico et al. 2014).

Correlation Between TLE Implementation and Career Preparedness

The correlation analysis revealed significant relationships between certain aspects of TLE program implementation and students' career preparedness. Teacher training and competence had a strong positive correlation with career preparedness ($r = .668$, $p = .002$), as did resource availability ($r = .665$, $p = .003$). The overall implementation of the TLE program also showed a very strong positive correlation with career preparedness ($r = .747$, $p = .000$). However, curriculum alignment did not show a significant correlation ($r = .431$, $p = .074$). These findings underscore the importance of teacher training, resource availability, and comprehensive program implementation in enhancing students' career

preparedness. As mentioned by Bantillo and Ngag (2024), modernized approaches, integrating technology and collaborative tools, were viewed favorably for enhancing engagement and comprehension, particularly among audio-visual learners. Also Teachers' preferences for teaching methods were influenced by the learning environment, instructional materials, and personal styles.

Conclusions

The following conclusions were made considering this study's findings:

The extent of the implementation of the Technology and Livelihood Education (TLE) Program is high, with indicators such as curriculum alignment and teacher training and competence being rated as "highly implemented," while resource availability and community engagement are "implemented" and "moderately implemented," respectively.

The level of high school students' career preparedness is generally positive, with students being "prepared" in areas like career awareness, job market readiness, and educational guidance, though only "merely prepared" in practical skills acquisition.

There is a significant relationship between the extent of the implementation of the TLE Program and the level of high school students' career preparedness. Teacher training and competence, and resource availability show significant correlations, while overall TLE implementation strongly correlates with higher career preparedness levels.

Recommendations

The following recommendations were made considering this study's findings:

1. Given the lower mean in Community Engagement (3.6, indicating "Moderately Implemented"), DepEd may prioritize strengthening partnerships with local communities, industries, and stakeholders. This can be achieved through establishing mentorship programs, internships, and industry partnerships that provide real-world experiences and practical skills to students. By fostering stronger community ties, DepEd can enrich the TLE program's relevance and impact on students' career readiness.

2. With a mean of 3 ("Merely Agree"), TLE Coordinators should emphasize hands-on learning experiences and practical skills development within the curriculum. Introduce project-based learning initiatives, workshops, and simulations that mirror real-world scenarios to enhance students' technical proficiency and application skills. Allocating resources for specialized equipment and facilities can further support this goal.

3. Despite a relatively high mean (4, indicating "Agree"), TLE Teachers may continue to prioritize individualized educational and career guidance for students. This includes conducting regular career counseling sessions, organizing guest speaker series, and integrating career exploration modules into the curriculum. Providing personalized

support and mentorship can help students make informed decisions about their future career paths.

4. Future researchers may explore the impact of enhanced community engagement on students' career preparedness within TLE programs. Conduct qualitative studies to delve deeper into how community partnerships influence student motivation, skill development, and career aspirations. This research can provide empirical evidence to support the importance of community involvement in vocational education and inform policy recommendations for integrating community engagement strategies into educational frameworks.

Compliance with Ethical Standards

In preparation for implementation, all the plans and recommendations were presented to East-West Mindanao Colleges Inc to ensure compliance with prescribed procedures and protocols. This ethical protocol is patterned after the study of Ngag (2023). Within the context of the research focused on examining the relationship between the Implementation of Technology and Livelihood Education (TLE) Program and High School Students' Career Preparedness in Tacurong City Division, Tacurong, Sultan Kudarat for the school year 2023-2024, it was imperative to emphasize the paramount importance of ethical considerations. Prior to commencing this study, the following ethical principles were highlighted:

Informed Consent

Before participation, explicit and informed consent was diligently obtained from all school heads involved in the study. It was imperative that they possessed a comprehensive understanding of the study's objectives, methodologies, potential risks, and benefits. Furthermore, participation remained entirely voluntary, affording participants the autonomy to withdraw from the study at any juncture without encountering any adverse consequences.

Anonymity and Confidentiality

To safeguard the identities and responses of the students, Ronquillo, & Ngag, (2024) emphasized the rigorous measures to ensure anonymity and confidentiality. Rather than using actual names, pseudonyms or codes were employed in this study, upholding the privacy of the participants. The collected data was securely stored with access restricted solely to the research team.

Avoiding Harm

Delicate subjects, such as the challenges inherent in their roles, were discussed with meticulous consideration for the potential emotional and psychological impact on the participants. Strategies were in place to minimize distress, and a support system was readily available to assist participants should the need arise.

Researcher-Participant Relationship

The researcher maintained a professional and respectful rapport when engaging with the school heads. Any actions that may exploit or cause harm to the participants were scrupulously avoided, ensuring their utmost dignity and respect throughout the research process.

Data Protection

Adherence to data protection regulations and laws was unwaveringly followed to safeguard the personal information of the participants. Stringent measures were employed to ensure the secure storage and transmission of data.

Voluntary Participation

Participants were assured that their involvement in the study was wholly voluntary, devoid of any form of coercion or external pressure.

Researcher Bias

The researcher remained vigilant regarding potential biases that might influence data collection and analysis, upholding objectivity and transparency throughout the research endeavor.

Institutional Approval

Before initiating the study, the researcher diligently sought ethical clearance from the pertinent institutional review boards or ethics committees.

Honesty and Integrity

The research findings were reported truthfully and accurately, devoid of any manipulation or distortion to align with preconceived notions or biases.

Beneficence

The potential benefits of the research to educational practices and policies were thoughtfully considered, ensuring that the study positively contributed to the enhancement of the education system.

Cultural Sensitivity

The researcher displayed cultural sensitivity by respecting local customs, beliefs, and practices within the research setting, refraining from imposing external values on the participants.

Inclusion and Diversity

The study's structure prioritized inclusivity and diversity, encompassing a wide spectrum of students and attitudes towards learning in the 21st century. By meticulously adhering to these ethical considerations, the research was conducted responsibly and respectfully, prioritizing the rights and well-being of the participating students. Simultaneously, it contributed valuable insights to the field of education within the specific context of DepEd Tacurong City Division.

Acknowledgments

The researcher would like to express his profound and heartfelt gratitude to the persons who unselfishly extended their craft and invaluable support to make this study a success:

PATRICEA I. SANDIGAN, MAEd, East West Mindanao Colleges, Inc. President, for inspiring the researcher to keep on with his dreams despite life's challenges.

EMILIA M. LOTILLA, PhD, Dean, Graduate School, for being approachable and whose pieces of advice mean a lot to the researcher;

JULIET P. TAMBUNGALAN, MAEd. Academic Chairperson, for the encouragement as well as the all-out support in the preparation of this manuscript;

JAIME BOY U. NGAG JR., PhD, his adviser, for the guidance and inspiration that motivated the researcher to finish this paper;

AMILUDIN G. MASABPI, PhD, and LEODIE D. MONES, PhD for their valuable contributions in the realization of this manuscript.

GILDO G. MOSQUEDA, CEO VI, Schools Division Superintendent of Tacurong City for generously allowing the conduct of this study manifesting his leadership commitment towards research-based decision-making;

RIZA P. VELASCO, OIC-Principal of Upper Katungal National High School, for the continued push to finish this study and for ensuring that the researcher gathered the necessary data from the respondent schools;

SCHOOL HEADS of the respondent schools from Tacurong Public Secondary Schools, for the warm welcome during the conduct of survey in their respective schools;

TEACHERS OF UPPER KATUNGAL NATIONAL HIGH SCHOOL, the researcher's esteemed colleagues, for the love and unconditional support that enabled the researcher to take things with joy and inspiration despite the challenging demands of work.

His siblings: VIVIAN C. PORTAJE, and ELVIE C. PALIMILLO. Their love and moral support are undeniably inspiring to the researcher; His brother-in-law CHARLIE J. PALOMILLO and his nephews, CHAREL C. PALOMILLO, PAUL IVAN C. PORTAJE, BENEDICT C. PORTAJE, CHARLES C. PALOMILLO and niece, CHRISTELA C. PALOMILLO, for the significant help extended;

His parents: VICENTE P. CERDANA and ANGELA C. CERDANA with his Parent-in-law: MR. EDDIE HERMO and ERLITA HERMO. Their unceasing encouragement, love, support financially, spiritually and emotionally.

DAISY JOY H. CERDANA, the researcher's spouse. She has been his pillar from the start to the finish of all this endeavor. She is truly a God-sent to the researcher.

Above all, the researcher humbly acknowledges the ALMIGHTY GOD, who provides everything and Who sets perfectly according to His will. He is the lone source of life, strength, knowledge, and wisdom. In Him, the researcher brings back all the glory and honor.

REFERENCES

Albarico, et. al., (2014). A Gateway to Global Competitiveness, Adequacy of Instructional Materials Used by Teachers Teaching Technology and Livelihood Education.

Bantillo, R. B., & Ngag, J. B. J. U. (2024). CHANGING LANDSCAPE OF FILIPINO EDUCATION: TEACHERS' PERSPECTIVES ON TRADITIONAL VS. MODERNIZED APPROACHES TO TEACHING FILIPINO. Ignatian International Journal for Multidisciplinary Research, 2(6), 2409–2420. https://doi.org/10.5281/zenodo.12635314¥

Bhandari, P. (2021). An Introduction to Correlational Research. Retrieve from https://www.scribbr.com/methodology/correlationalresearch

Choy, L. (2017). Integrating Technical Education for Workforce Development: Lessons from Singapore. Journal of Vocational Education and Training, 42(3), 123-140.

Creswell, J. (2012). The Simple Random Sampling Technique. http://repository.uin-suska.ac.id/12173/8/8.%20CHAPTER%20III.pdf

Department of Education. (2013). K to 12 Curriculum Guide: Social Studies. DepEd Philippines.

Dolutan, M. N., & Ngag, J. B. J. U. (2024). LIVED EXPERIENCES OF CENTENNIAL TEACHERS IN THE EDUCATIONAL MODERNIZATION: A PHENOMENOLOGICAL ANALYSIS IN DEPED BAGUMBAYAN DISTRICT III. Ignatian International Journal for Multidisciplinary Research, 2(7), 22–32. https://doi.org/10.5281/zenodo.12672884

Kim, S. (2019). Enhancing Secondary Education through Technical Education Integration: The South Korean Experience. International Journal of Educational Development, 35(2), 217-235.

Ngag, J.B. (2023). Unveiling The Literary Appreciation of Teduray Students: A Case Study Analysis of Their Works. *Boletin De Literatura Oral - Tradition Oral Literature*, *10*(1), 30-3. http://boletindeliteratuoral.com/index.php/bdlo/article/view/5

Ngag, J.B. (2023). Efficacy of Téduray Literature Module in Teaching English. *CEMJP*, *31*(1), 404–409. https://doi.org/10.57030/23364890.cemj.31.1.3

Ronquillo, K. C., & Ngag, J. B. J. U. (2024). OVERCOMING LINGUISTIC HURDLES: INVESTIGATING CHALLENGES ENCOUNTERED BY MAGUINDANAON STUDENTS IN ACHIEVING PROFICIENCY IN SPEAKING ENGLISH. Ignatian International Journal for Multidisciplinary Research, 2(7), 1069–1081. https://doi.org/10.5281/zenodo.13133747

APA Citation:

Cerdana, C. C., & Ngag, J. B. J. U. (2024). IMPLEMENTATION OF TECHNOLOGY AND LIVELIHOOD EDUCATION (TLE) PROGRAM IN TACURONG CITY DIVISION: ITS IMPACT ON THE HIGH SCHOOL STUDENTS' CAREER PREPAREDNESS. Ignatian International Journal for Multidisciplinary Research, 2(8), 735–746. https://doi.org/10.5281/zenodo.13292709

Corresponding author: *cherubimcerdana@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

IMPORTANCE-PERFORMANCE ANALYSIS OF A RESTAURANT MOBILE BOOKING AND RESERVATION APPLICATION

Franz Joseph I. Clemente, Gail Bien Aubrey S. Diño, Nelson S. Gonzales Jr., Raven Jewell Rodilas, Michelle T. Rojas, Dr. John Paul G. Buenaventura

College of Tourism and Hospitality Management, National University, Sampaloc Manila, Philippines

https://doi.org/10.5281/zenodo.13208030

ABSTRACT

This study examined issues with performance and ongoing user dissatisfaction in the OpenTable application, a well-known restaurant booking and reservation platform in the Philippines. Researchers use the Importance-Performance Analysis (IPA) model to assess OpenTable's importance and performance. Researchers also use Gummesson's 4Q-Quality Model to improve the analysis structure. Researchers gathered comprehensive data by distributing a structured survey questionnaire to 120 individuals who use OpenTable. Ethical considerations guide researchers' investigation at every step. The researchers showed their commitment to methodological and ethical standards by thoroughly outlining the research's design, sampling approach, data gathering methods, and interpretation approaches. A Likert scale was used in the survey questionnaire for performance analysis and importance assessment, and it has been validated through a methodical approach, the findings revealed that: The most significant discrepancy between performance and importance can be observed in the product and service quality (0.70), followed by Designed Quality, Relational Quality (0.59), and Outcome Quality (0.56). For the greatest influence on consumer/users' satisfaction, this proposes putting efforts to make improvements in product and service quality, relational quality, and designed quality. OpenTable is recommended to focus on enhancing communication channels, brand identity, and user experience. Management should place a high priority on resource allocation and transparent communication, and feedback is encouraged. It's recommended that features like responsive reservation updates and live chat assistance be included.

Keywords: *Restaurant Mobile Booking and Reservation Application, Importance Performance Analysis, Gummesson 4Q- Quality Model, OpenTable, Designed Quality, Product and Service Quality, Relational Quality, Outcome Quality*

INTRODUCTION

The restaurant sector had been continuously changing to satisfy the demands of a client base that was becoming more tech-savvy and convenience-oriented in an era of fast technology innovation and shifting consumer tastes. Recent studies about service innovation in the service and hospitality industries mainly focused on technology-related innovation. (Helkkula et al., 2018) pointed out that the hospitality industry was relatively strongly focused on innovations in assortment and technology, leaving non-technological innovation largely unobserved. A new era in restaurant access and engagement has been brought about by the widespread use of smartphones and mobile applications. This study aims to investigate how well the OpenTable application performs from the perspective consumers and the importance of a mobile application for restaurant reservations. Considering that the mobile booking app is becoming an essential component of today's modern dining experience.

With a few taps on their smartphones, patrons could then book tables at their preferred restaurants. The days of making reservations over the phone or standing in huge lines were long gone (Buhalis & Law, 2018). Many believed that online reservations represented one of the largest and fastest-growing segments of B2C e-commerce. Planning and obtaining a table with ease had become possible with mobile booking, which frequently provided real-time availability information and prompt confirmation. In addition to helping customers, this ease enabled restaurants to manage seating arrangements more effectively, which raised customer satisfaction.

The growth of mobile applications for restaurants has improved the dining experience even further. These apps offer a variety of services, such as digital menus, personalized suggestions, loyalty programs, and even mobile payment alternatives, in addition to reservation booking. Jiang (2020) informed that since agent-based models allow us to explore user behavior at the micro-level, we build a simulation model to describe individual decision-making and complex interaction between users of mobile applications in social networks.

The decision to focus this investigation on OpenTable had been supported by evidence that pointed to performance problems and persistently poor user experiences in the Philippines. Critical feedback from consumers of OpenTable, a popular restaurant booking, and reservation application, had been posted on websites including Google Maps and Google Search. Consumers had regularly voiced concerns about a number of issues, such as the cost of restaurants, customer service, rating systems, food quality, and service. One specific TripAdvisor review had highlighted the difficulties that OpenTable customers had; it had expressed both high expectations and a deep sense of frustration regarding the length of wait times for meals, which had resulted in a negative

rating for OpenTable. To reduce these issues and enhance OpenTable's standing in the Philippines, several practical recommendations had been made. In the beginning, it had been essential to conduct a comprehensive study specifically designed for OpenTable's Filipino customer base.

According to a study by Gioseff (2019), there are a number of benefits to studying the OpenTable app. The study indicates a need to comprehend user concerns and enhance the overall experience by revealing user unhappiness and performance issues with the app in the Philippines. OpenTable may be able to grow its customer base and improve its reputation by taking care of these problems. As more people install restaurant reservations on their smartphones, the survey also highlights the significance of mobile optimization. Using Gummesson's 4Q-Quality Model and Importance-Performance Analysis (IPA), the study offers a methodical way to assess the app's effectiveness and identify areas that require development.

To outline the purpose and relevance of conducting an Importance- Performance Analysis (IPA) for a mobile application that allows consumers to book and reserve restaurants. To improve the entire customer experience, this analysis attempts to assess the application's efficacy and user satisfaction while pinpointing areas that require improvement.

Research Questions

Specifically, it sought to answer the following questions:

1. What is the assessment of the respondents on the level of importance of the OpenTable booking app in terms of:
   1.1. Design Quality
   1.2. Product and Service Quality
   1.3. Relational Quality
   1.4. Outcome Quality

2. What is the assessment of the respondents on the level of performance of the OpenTable booking app in terms of:
   1.1. Design Quality
   1.2. Product and Service Quality
   1.3. Relational Quality
   1.4. Outcome Quality

3. How does the OpenTable mobile app have been assessed using the IPA model?

METHODOLOGY

This study assesses restaurant mobile booking and reservation applications employing survey questionnaires as the primary data collection method and descriptive

data. Descriptive research was regarded as an exploration of existing phenomena through the formulation of inquiries. This approach involved comprehending the meanings attributed to people or objects and was applicable in both quantitative and qualitative research contexts, as articulated by McCombes (2019). It aims to understand demographic profiles and perceptions of quality and services. By bridging the gap between theoretical importance and actual performance, the research aims to identify key features that customers value and provides suggestions for enhancing mobile applications.

The target respondents for this study are consumers of the OpenTable application residing in the Philippines, with a sample size of 120 respondents determined through methods outlined by Sarstedt, Ringle, & Hair, (2022). Utilizing purposive sampling, the researchers ensured the inclusion of individuals who met specific criteria, such as legal age, residence in the Philippines, and with history of using the OpenTable app for restaurant bookings.

Table 2.1 Respondents as to Age

Age	Frequency	Percentage (%)
18-26 years old	48	40.00
27-42 years old	44	36.70
43-58 years old	28	23.30
59 years old and above	0	0
TOTAL	**120**	**100.00**

The table illustrates that the age range among the majority of responders is 18–26, with (40.00%), 27–42 (36.70%), and 43–58 (23.30%). The least represented age group consists of those over 59.

Table 2.2 Respondents as to Gender

Gender	Frequency	Percentage (%)
Male	61	51.80
Female	59	49.20
TOTAL	**120**	**100.00**

The table indicates that 51.80%, or 61, of the participants are men. However, 59, or 49.20%, of the remaining are female. In summary, 61 or 51.80% of respondents as a whole is male, and only 59 or 45.60% are female.

Table 2.3 Respondents as users of the OpenTable Restaurant Mobile Application

OpenTable	Frequency	Percentage (%)
Yes	120	100.00
No	0	0
TOTAL	**120**	**100.00**

As shown in the table, majority of participants utilize the OpenTable restaurant mobile booking application. This suggested that a large portion of the studied population relied heavily on OpenTable as their platform of choice for making restaurant reservations.

A structured process was followed for data collection process, involving four phases: creating and developing research tools, validating these tools, distributing research instruments, and analyzing the collected data. They developed survey questionnaires, which were divided into three parts: Personal Profile, Assessment of Importance of mobile food ordering application services, and Performance of mobile food ordering application services. The researchers sought permission to conduct the study and provided participants with a formal letter stating the purpose, objectives, and potential benefits. Researchers conducted face-to-face surveys in Okada Manila, targeting respondents who use the OpenTable mobile booking and reservation application. The collected data was then analyzed by a professional statistician, providing insights to enhance the functionality and user experience of the application.

The survey questionnaire served as the primary instrument for data gathering, designed to capture relevant insights aligned with the study's objectives. The researchers conducted a descriptive study using a survey questionnaire to gather data on the importance and performance of a restaurant mobile booking and reservation application. The questionnaire was designed to gather demographic data and personal experiences from participants. The study assessed the importance of mobile application systems using a 5-point Likert scale and assessed the performance of mobile food ordering application services. The Gummesson 4Q model was applied to the OpenTable app, focusing on four key aspects of service quality: design quality, product quality, relational quality, and result quality.

The data gathered from the survey questions will be tallied, recorded, and evaluated by the researchers. To accurately understand the results of the data analysis and how they will contribute to the study's primary objective, the frequency and percentage will be calculated, along with overall results and final rankings of the criteria included in the survey questionnaires.

Weighted Mean - The objective is to add up several scores. It is the average that was determined by giving several individual variables a different amount of weight.

Formula: $WM = \frac{\sum (W1f1 + W2f2 \ldots + wnfn)}{n}$

Where:

WM	=	weighted mean
f1	=	frequency of first cell
w1	=	weight of first cell
f2	=	frequency of second cell
w2	=	weight of second cell
n	=	number of cases

Percentage - To determine the relationships of a portion to a whole in the respondents' profile.

Formula: $P = \frac{F \times 100}{N}$

Where:

P	=	percentage

F	=	frequency of each category
N	=	total number of respondents
100	=	constant multiplier

Likert Scale -The five (5) Linkert Scale Method was employed as the criterion for the interpretation of the data.

Likert Scale Interpretation for Importance

Range of Mean	Description Level	Initials
5.00-4.20	Extremely Important	EI
4.19-3.40	Very Important	VI
3.39-2.60	Moderately Important	MI
2.59-1.80	Slightly Important	SI
1.79-1.00	Not At All Important	NI

Likert Scale Interpretation for Performance

Range of Mean	Description Level	Initials
5.00-4.20	Far Above Standards	FAS
4.19-3.40	Above Standards	AS
3.39-2.60	Meets Standards	MS
2.59-1.80	Below Standards	BS
1.79-1.00	Far Below Standards	FBS

Cronbach's Alpha - is a metric used to assess a test or survey's internal consistency. It indicates how closely connected all the questions on a questionnaire relate to one another and quantifies the measure's dependability. Greater consistency and reliability are indicated by higher values, which range from 0 to 1.

Formula:

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\sum V_i}{V_t}\right)$$

Where:

α	=	alpha
k	=	number of items in the survey
ΣVi	=	summation of variance
Vt	=	variance of the total score (sum of all item scores)

RESULTS AND DISCUSSION

Sub problem No. 1 On the assessment of the respondents on the level of importance of the OpenTable booking app in terms of

Table 1 Assessment of the Respondents on the Level of Importance of the OpenTable Booking App in terms of Designed Quality

Designed Quality	Mean	Interpretation	Rank
1. The interface of the app is visually appealing and easy to use.	4.32	Extremely Important	2
2. The app is easy to use and understand	4.38	Extremely Important	1
3. The application offers simple and easy-to-follow usage guidelines of all its features.	4.08	Very Important	4

4. The app has an eye-catching design and keeps the restaurant its serves' brand identity.	4.10	Very Important	5
5. The application is responsive and works nicely on variety of screens and gadgets.	4.23	Extremely Important	3
General Weighted Mean	**4.22**	**Extremely Important**	

| 5.00-4.20 – Extremely Important | 4.19-3.40 – Very Important | 3.39-2.60 – Moderately Important | 2.59-1.80 – Slightly Important | 1.79-1.00 – Not at All Important |

Table 1 presents the assessment of the respondents on the level of importance of the OpenTable booking app in terms of designed quality. It can be noticed that the indicator which states, "The app is easy to use and understand." ranked first with a mean of 4.38. It was followed by "The interface of the app is visually appealing and easy to use." with a mean of 4.32. Next to it were the indicators "The application is responsive and works nicely on a variety of screens and gadgets." and "The App has an eye-catching design and keeps the restaurant its serves' brand identity." with means of 4.23 and 4.10, respectively. Lastly, the indicator states, "The application offers Simple and Easy-to-follow usage guidelines of all its features." with a mean of 4.08. The respondents agreed that all these indicators were extremely important in terms of the OpenTable booking app's designed quality.

In general, the level of importance of the OpenTable booking app in terms of designed quality by the respondents was Extremely Important, with a general weighted mean of 4.22.

Relative to the findings of Shahzadi & Riaz (2018), who mentioned that restaurant table reservation systems should provide users with tools to manage and organize their restaurant bookings; to enhance the efficiency and convenience of table reservations in restaurants, it is imperative for the reservation system to possess comprehensive visibility effectively and efficiently. Therefore, it is essential that restaurants should designed a mobile application that is eye catching, visually appealing, and easy to use, a well-designed restaurant food mobile application is crucial for maintaining the brand identity of the restaurant it serves. The design quality plays a significant role in creating a first impression on potential customers. It can also help in building trust and loyalty towards the restaurant's brand or image. In addition, good design will make an app more user friendly, thus improving customer satisfaction and increasing the likelihood of repeat business and a well-designed app will reflect positively on the restaurant and can contribute to the success in the competitive food service industry.

This indicates that the respondents placed significant importance on the design quality of the OpenTable app, suggesting that they value features such as user interface, ease of navigation, visual appeal, and overall user experience provided by the application.

Table 2 Assessment of the Respondents on the Level of Importance of the OpenTable Booking App in terms of Product and Service Quality

Product and Service Quality	Mean	Interpretation	Rank
1. Through the app, users can quickly look up and find restaurants according to their interests	4.31	Extremely Important	1
2. The app offers exact up-to-date information, wait times, and restaurant availability	4.30	Extremely Important	2
3. Users of app can easily book, change, or cancel reservations without any difficulty at all	4.28	Extremely Important	3
4. The application makes sure that transactions are secure and provides a wide variety of payment choices.	4.28	Extremely Important	3
5. The app transmits reservation confirmations, updates, and adjustments in an informative and timely manner.	4.28	Extremely Important	3
General Weighted Mean	**4.29**	**Extremely Important**	

| 5.00-4.20 – Extremely Important | 4.19-3.40 – Very Important | 3.39-2.60 – Moderately Important | 2.59-1.80 – Slightly Important | 1.79-1.00 – Not at All Important |

Table 2 presents the assessment of the respondents on the level of importance of the OpenTable booking app in terms of product and service quality. It can be noticed that the indicators that state, “Through the app, users can quickly look up and find restaurants according to their interests.” ranked first with a mean of 4.31 each. It was followed by “The app offers exact up-to-date information, wait times, and restaurant availability.” with a mean of 4.30. Next to it was the indicator “Users of app can easily book, change, or cancel reservations without any difficulty at all.”, “The application makes sure that transactions

are secure and provides a wide variety of payment choices.", and "The app transmits reservation confirmations, updates, and adjustments in an informative and timely manner." with a mean of 4.28 each. The respondents agreed upon all these indicators as extremely important on the level of importance of the OpenTable booking app in terms of product and service quality.

In general, the level of importance of the OpenTable booking app in terms of product and service quality by the respondents was Extremely Important, with a general weighted mean of 4.29.

Relative to the findings of Vinaik, Goel, Sahai, & Garg, (2019), who mentioned that mobile food apps have tie-ups with many restaurants and act as a link between restaurants and people, there are many factors that lead to an increase in sales, such as convenience, easy payment methods, variety of food and restaurants, delivery time, customer service, etc. With its unparalleled convenience, consumers can easily browse restaurant menus and place orders using their cellphones. Easy and secure payment choices further improve the user experience, and the variety of food options accommodates a wide range of tastes and preferences. Therefore, when it comes to the ease with which customers may plan, modify, or cancel meals, good products and services in a mobile restaurant application are mostly beneficial to customers. Easy-to-use interfaces encourage loyalty in addition to increasing client satisfaction. Because reservation management is so simple with this software, it stands out in a crowded market and enhances brand perception. Effective operations, informative data, and flexibility all emphasize how important it is to have a simple and rapid reservation process. All things considered, an appealing and functional app guarantees that users will remain interested and creates a strong and long-lasting relationship between patrons and the business.

The respondents placed significant importance on the quality of products and services offered by the OpenTable app, suggesting that they value aspects such as the accuracy of restaurant information, reliability of the reservation system, responsiveness of customer support, and overall satisfaction with the booking process facilitated by the application.

Table 3 Assessment of the Respondents on the Level of Importance of the OpenTable Booking App in terms of Relational Quality

Relational Quality	Mean	Interpretation	Rank
1. In the case of any problems or question, the app offers prompt and friendly customer care	4.08	Very Important	3
2. The application constantly updates and enhance its features in	3.97	Very Important	4

response to comments and recommendations from users.			
3. The application protects user privacy and make sure that private data is managed safely	4.36	Extremely Important	1
4. By providing features like reviews, ratings and suggestions, the app helps user feel more connected to one another.	3.96	Very Important	5
5. Through personalized offers, unique incentives, and loyalty programs, the app expresses gratitude to its users.	4.17	Very Important	2
General Weighted Mean	**4.11**	**Very Important**	

| 5.00-4.20 – Extremely Important | 4.19-3.40 – Very Important | 3.39-2.60 – Moderately Important | 2.59-1.80 – Slightly Important | 1.79-1.00 – Not at All Important |

Table 3 presents the assessment of the respondents on the level of importance of the OpenTable booking app in terms of relational quality. It can be noticed that the indicator that states, “The application protects user privacy and make sure that private data is managed safely.” ranked first with a mean of 4.36. It was followed by “Through personalized offers, unique incentives, and loyalty programs, the app expresses gratitude to its users.” with a mean of 4.17. Next to it were the indicators “In the case of any problems or question, the app offers prompt and friendly customer care.” and “The application constantly updates and enhance its features in response to comments and recommendations from users.” with a mean of 4.08 and 3.97 respectively. Lastly was the indicator that states, “By providing features like reviews, ratings and suggestions, the app helps user feel more connected to one another.” with a mean of 3.96. All these indicators were agreed upon by the respondents as very important on the level of importance of the OpenTable booking app in terms of relational quality.

In general, the level of importance of the OpenTable booking app in terms of relational quality by the respondents was Very Important, with a general weighted mean of 4.11.

Relative to the findings (Cho, Bonn, & Li, et al., 2018), who mentioned that with benefits like customized suggestions, reward programs, and contactless ordering as just a few of what users can take advantage of, these applications are a popular choice for consumers wishing to simplify their eating experiences. Reviews, ratings, and ideas are

some of the most important aspects of a restaurant food mobile app that help users feel connected to one another and as a community. These components enable users to contribute their dining experiences, tastes, and suggestions, generating an active forum for conversations on food. Building trust between customers and restaurants is another benefit of being able to read and write reviews, in addition to helping with educated decision-making. Furthermore, customers feel understood and appreciated when they receive tailored recommendations based on their behavior, which improves the entire experience. Along with strengthening the bond between the user and the app, this social interaction creates a lively community of food enthusiasts who may bond over common interests and experiences.

With a weighted average of 4.11 across the board, respondents said the OpenTable app was essential in relationship quality. This shows that factors like communication effectiveness, reliability, responsiveness to feedback, and general satisfaction with the interactions and engagement made possible by the application were highly valued by the respondents when it came to their relationship with the OpenTable platform.

Table 4 Assessment of the Respondents on the Level of Importance of the OpenTable Booking App in terms of Outcome Quality

Outcome Quality	Mean	Interpretation	Rank
1. Making restaurant bookings using the app saves the user time and effort	4.42	Extremely Important	1
2. The application lessens the possibility of long queues and waiting times at dining establishments	4.30	Extremely Important	2
3. The app makes dining more enjoyable by simplifying easy reservations and guaranteeing a seamless arrival procedure.	4.24	Extremely Important	3
4. The application increases the possibility of repeat customers and helps user feel more satisfied with the dining establishment	4.18	Very Important	5
5. The application promotes a positive image of the brand and	4.21	Extremely Important	4

engagement of restaurants that make use of it		
General Weighted Mean	**4.27**	**Extremely Important**

| 5.00-4.20 – Extremely Important | 4.19-3.40 – Very Important | 3.39-2.60 – Moderately Important | 2.59-1.80 – Slightly Important | 1.79-1.00 – Not at All Important |

Table 4 presents the assessment of the respondents on the level of importance of the OpenTable booking app in terms of outcome quality. It can be noticed that the indicator that states, “Making restaurant bookings using the app saves the user time and effort.” ranked first with a mean of 4.42. It was followed by “The application lessens the possibility of long queues and waiting times at dining establishments.” with a mean of 4.30. Next to it were the indicators “The app makes dining more enjoyable by simplifying easy reservations and guaranteeing a seamless arrival procedure.” and “The application promotes a positive image of the brand and engagement of restaurants that make use of it.” with a mean of 4.24 and 4.21 respectively. Lastly was the indicator that states “The application increases the possibility of repeat customers and helps user feel more satisfied with the dining establishment” with a mean of 4.18. The respondents agreed upon all these indicators as extremely important on the level of importance of the OpenTable booking app in terms of outcome quality.

In general, the level of importance of the OpenTable booking app in terms of outcome quality by the respondents was Extremely Important, with a general weighted mean of 4.27.

Relative to the findings of Al-Smadi (2022), mobile commerce has emerged as a vital tool for many firms as smartphones continue to evolve and gain popularity. It offers customers accessibility, enabling them to purchase products or services at any time and from anywhere. Therefore, through the promotion of a good and user-friendly experience, the application plays a critical role in improving the restaurant brand image. Customers are left with a lasting impression of a mobile app that is both professionally designed and practical, reflecting the expertise of the restaurant. It functions as a potent marketing tool that enables restaurants to successfully engage customers, emphasize distinctive aspects, and exhibit their offers. Customer satisfaction and loyalty are raised by positive app experiences like simple navigation, speedy order placement, and tailored recommendations.

This suggests that the respondents gave the results of using the OpenTable app a high priority. These results included making reservations successfully, receiving accurate restaurant recommendations, having a positive overall dining experience, and being satisfied with the results the app helped to achieve.

Sub Problem No. 2 On the assessment of the respondents on the level of performance of the OpenTable booking app in terms of

Table 5 Assessment of the Respondents on the Level of Performance of the OpenTable Booking App in terms of Designed Quality

Design Quality	Mean	Interpretation	Rank
1. The Interface of the app is visually appealing and easy to use.	3.78	Above Standards	1.5
2. The app is Easy to use and understand	3.78	Above Standards	1.5
3. The application offers Simple and Easy-to-follow usage guidelines of all its features.	3.42	Above Standards	5
4. The App has an eye-catching design and keeps the restaurant its serves' brand identity.	3.56	Above Standards	4
5. The application is responsive and works nicely on variety of screens and gadgets.	3.63	Above Standards	3
General Weighted Mean	**3.63**	**Above Standards**	

| 5.00-4.20 – Far Above Standards | 4.19-3.40 –Above Standards | 3.39-2.60 –Meets Standards | 2.59-1.80 – Below Standards | 1.79-1.00 –Far Below Standards |

Table 5 presents the assessment of the respondents on the level of performance of the OpenTable booking app in terms of designed quality. It can be noticed that the indicators that state, "The Interface of the app is visually appealing and easy to use." and "The app is Easy to use and understand" ranked 1.5 with a mean of 3.78 each. It was followed by "The application is responsive and works nicely on variety of screens and gadgets." with a mean of 3.63. Next to it was the indicator "The App has an eye-catching design and keeps the restaurant its serves' brand identity." with a mean of 3.56. It was followed by the indicator "The application offers Simple and Easy-to-follow usage guidelines of all its features." with a mean of 3.42. All these indicators were agreed upon by the respondents as above standards on the level of performance of the OpenTable booking app in terms of designed quality.

In general, the level of performance of the OpenTable booking app in terms of design quality by the respondents was Above Standards, with a general weighted mean of 3.63.

This coincides with Shahzadi & Riaz (2018), who mentioned that restaurant table reservation systems should provide users with tools to manage and organize their restaurant bookings. To enhance the efficiency and convenience of table reservations in restaurants, it is imperative for the reservation system to possess comprehensive visibility effectively and efficiently. Giving users of a restaurant food mobile app clear and simple instructions for all tasks has two main goals: it improves user experience and increases customer satisfaction. With the aid of simple and clear instructions, users can easily run the application, ensuring a seamless ordering experience. The app's simplicity and complexity reduction make it more approachable for a wider audience, including less tech-savvy people. This tactic or strategy increases overall convenience and enjoyment of dining, which benefits the restaurant's brand in addition to increasing customer loyalty. To put it simply, ensuring user involvement and ease of use of the app.

This implies that the responders considered the design elements of the program, including the user interface, usability, aesthetic appeal, and overall user experience. According to the evaluation, even though respondents value design quality, there might be some areas where enhancements could be made to further increase user satisfaction.

Table 6 Assessment of the Respondents on the Level of Performance of the OpenTable Booking App in terms of Product and Service Quality

Product and Service Quality	Mean	Interpretation	Rank
1. Through the app, users can quickly look up and find restaurants according to their interests	3.56	Above Standards	5
2. The app offers exact up-to-date information, wait times, and restaurant availability	3.58	Above Standards	3
3. Users of app can easily book, change, or cancel reservations without any difficulty at all	3.64	Above Standards	1
4. The application makes sure that transactions are secure and provides a wide variety of payment choices.	3.58	Above Standards	3

5. The app transmits reservation confirmations, updates, and adjustments in an informative and timely manner.	3.58	Above Standards	3
General Weighted Mean	**3.59**	**Above Standards**	

| 5.00-4.20 – Far Above Standards | 4.19-3.40 –Above Standards | 3.39-2.60 –Meets Standards | 2.59-1.80 – Below Standards | 1.79-1.00 –Far Below Standards |

Table 6 presents the assessment of the respondents on the level of performance of the OpenTable booking app in terms of product and service quality. It can be noticed that the indicator that states, “Users of app can easily book, change, or cancel reservations without any difficulty at all.” ranked first with a mean of 3.64. It was followed by “The app offers exact up-to-date information, wait times, and restaurant availability.”, “The application makes sure that transactions are secure and provides a wide variety of payment choices.” and “The app transmits reservation confirmations, updates, and adjustments in an informative and timely manner.” with a mean of 3.58 each. Lastly, the indicator states, “Through the app, users can quickly look up and find restaurants according to their interests.” with a mean of 3.56. All these indicators were agreed upon by the respondents as above standards on the level of performance of the OpenTable booking app in terms of product and service quality.

In general, the level of performance of the OpenTable booking app in terms of product and service quality by the respondents was Above Standards, with a general weighted mean of 3.59.

This coincides with Vinaik, Goel, Sahai, & Garg, (2019), who mentioned that mobile food apps have tie-ups with many restaurants and act as a link between restaurants and people, there are many factors that lead to an increase in sales, such as convenience, easy payment methods, variety of food and restaurants, delivery time, customer service, etc. With its unparalleled convenience, consumers can easily browse restaurant menus and place orders using their cellphones. Easy and secure payment choices further improve the user experience, and the variety of food options accommodates a wide range of tastes and preferences. Therefore, the timely and informative distribution of reservation confirmations, revisions, and alterations inside a restaurant mobile app is essential to a smooth and satisfying client experience. Notifying patrons or customers about their reservations helps manage expectations and reduces the chance of misunderstandings in the fast-paced restaurant industry, where schedules are subject to last-minute modifications. Good communication through the app fosters professionalism and dependability, which raises customer satisfaction and confide.

This suggests that while product and service quality are considered important by the respondents, they may not be as highly prioritized as other aspects of the app's performance. This rating indicates that there may be areas where improvements could

be made to enhance the quality of products and services offered by the OpenTable app to better meet the users' expectations.

Table 7 Assessment of the Respondents on the Level of Performance of the OpenTable Booking App in terms of Relational Quality

Relational Quality	Mean	Interpretation	Rank
1. In the case of any problems or question, the app offers prompt and friendly customer care	3.35	Meets Standards	5
2. The application constantly updates and enhance its features in response to comments and recommendations from users.	3.41	Above Standards	4
3. The application protects user privacy and make sure that private data is managed safely	3.71	Above Standards	1
4. By providing features like reviews, ratings and suggestions, the app helps user feel more connected to one another.	3.58	Above Standards	2
5. By providing features like reviews, ratings and suggestions, the app helps user feel more connected to one another.	3.54	Above Standards	3
General Weighted Mean	**3.52**	**Above Standards**	

| 5.00-4.20 – Far Above Standards | 4.19-3.40 –Above Standards | 3.39-2.60 –Meets Standards | 2.59-1.80 – Below Standards | 1.79-1.00 –Far Below Standards |

Table 7 presents the assessment of the respondents on the level of performance of the OpenTable booking app in terms of relational quality. It can be noticed that the indicator that states, “The application protects user privacy and make sure that private data is managed safely.” ranked first with a mean of 3.71. It was followed by the indicators “By providing features like reviews, ratings and suggestions, the app helps user feel more connected to one another.” and “By providing features like reviews, ratings and suggestions, the app helps user feel more connected to one another.” with a mean of 3.58 and 3.54 respectively. Next to these was “The application constantly updates and

enhance its features in response to comments and recommendations from users." With a mean of 3.41. These indicators were agreed upon by the respondents as Above Standards on the level of performance of the OpenTable booking app in terms of relational quality. Lastly was the indicator that states, "In the case of any problems or question, the app offers prompt and friendly customer care." with a mean of 3.35. These indicators were agreed upon by the respondents as Meets Standards on the level of performance of the OpenTable booking app in terms of relational quality.

In general, the level of performance of the OpenTable booking app in terms of relational quality by the respondents was Above Standards, with a general weighted mean of 3.52.

This coincides with Relative to the findings (Cho, Bonn, & Li, et al., 2018), who mentioned that with benefits like customized suggestions, reward programs, and contactless ordering as just a few of what users can take advantage of, these applications are a popular choice for consumers wishing to simplify their eating experiences. Reviews, ratings, and ideas are some of the most important aspects of a restaurant food mobile app that help users feel connected to one another and as a community. Quick and friendly customer service is essential for a mobile application that provides restaurant-quality food. Reactive customer service becomes an essential lifesaver for anyone with questions or concerns. A quick and friendly resolution not only fixes problems efficiently but also enhances user experience overall and boosts customer loyalty. This kind of support is crucial for maintaining app users' confidence and satisfaction since it shows a commitment to their needs and concerns. Furthermore, it strengthens the app's reputation by demonstrating that it is a trustworthy and customer-focused meal ordering platform, which eventually increases customer confidence and encourages repeat business.

This suggests that while relational quality, such as communication effectiveness, trustworthiness, and responsiveness to feedback, is considered important by the respondents, it may not be as highly prioritized as other aspects of the app's performance. This rating indicates that there may be room for improvement in enhancing the relational aspects of the OpenTable app to better meet users' expectations.

Table 8 Assessment of the Respondents on the Level of Performance of the OpenTable Booking App in terms of Outcome Quality

Outcome Quality	Mean	Interpretation	Rank
1. Making restaurant bookings using the app saves the user time and effort	3.73	Above Standards	2.5
2. The application lessens the possibility of long queues and	3.75	Above Standards	1

waiting times at dining establishments			
3. The app makes dining more enjoyable by simplifying easy reservations and guaranteeing a seamless arrival procedure.	3.62	Above Standards	5
4. The application increases the possibility of repeat customers and helps user feel more satisfied with the dining establishment	3.72	Above Standards	4
5. The application promotes a positive image of the brand and engagement of restaurants that make use of it	3.73	Above Standards	2.5
General Weighted Mean	**3.71**	**Above Standards**	

| 5.00-4.20 – Far Above Standards | 4.19-3.40 –Above Standards | 3.39-2.60 –Meets Standards | 2.59-1.80 – Below Standards | 1.79-1.00 –Far Below Standards |

Table 8 presents the assessment of the respondents on the level of performance of the OpenTable booking app in terms of outcome quality. It can be noticed that the indicator that states, “The application lessens the possibility of long queues and waiting times at dining establishments” ranked first with a mean of 3.75. It was followed by the indicators “Making restaurant bookings using the app saves the user time and effort.” and “The application promotes a positive image of the brand and engagement of restaurants that make use of it” with a mean of 3.73 each. Next to these was “The application increases the possibility of repeat customers and helps user feel more satisfied with the dining establishment” with a mean of 3.72. Lastly was the indicator that states, “The app makes dining more enjoyable by simplifying easy reservations and guaranteeing a seamless arrival procedure.” with a mean of 3.62. All these indicators were agreed upon by the respondents as above standards on the level of performance of the OpenTable booking app in terms of outcome quality.

In general, the level of performance of the OpenTable booking app in terms of outcome quality by the respondents was Above Standards with a general weighted mean of 3.71.

This coincides with Al-Smadi (2022), who mentioned that mobile commerce has emerged as a vital tool for many firms as smartphones continue to evolve and gain popularity. It offers customers accessibility, enabling them to purchase products or services at any time and from anywhere. The food mobile app for a restaurant is essential

since it may enhance the entire dining experience by simplifying reservations and ensuring a seamless arrival process. Using the app, which streamlines the booking process and provides an intuitive reservation management interface, customers may save time and effort. A more enjoyable dining experience is also achieved by guaranteeing a seamless arrival process, maybe with the aid of computerized check-ins or designated waiting areas. This efficiency not only makes the restaurant more convenient for patrons, but it also conveys the image of a professional business that puts patron satisfaction first., Finally the app's capacity to expedite reservations and improve the arrival process significantly increases customers' enjoyment of their dining experience.

It appears from this that the respondents gave great weight to the results of using the OpenTable app, including successful reservation bookings, the precision of restaurant recommendations, overall dining experiences, and satisfaction with the results made possible by the app.

Sub Problem No. 3 On the OpenTable mobile application assessment using the Importance-Performance Analysis model

Table 9 Importance – Performance Model of OpenTable Booking App

	OpenTable Booking App	
	Importance	**Performance**
Designed Quality	4.22	3.63
Product Quality & Service Quality	4.29	3.59
Relational Quality	4.11	3.52
Outcome Quality	4.27	3.71

| 5.00-4.20 – Extremely Important | 4.19-3.40 – Very Important | 3.39-2.60 – Moderately Important | 2.59-1.80 – Slightly Important | 1.79-1.00 – Not at All Important |

| 5.00-4.20 – Far Above Standards | 4.19-3.40 –Above Standards | 3.39-2.60 –Meets Standards | 2.59-1.80 – Below Standards | 1.79-1.00 –Far Below Standards |

Table 9 shows the importance – performance model of OpenTable booking app. It can be noticed that the respondents assessed the designed quality in importance at 4.22 and performance of 3.63. In product and service quality, respondents assessed the importance of 4.29 and performance of 3.59. Respondents assessed the importance of 4.11 and performance of 3.52 in relational quality. Lastly, the outcome quality, the respondents assessed the importance of 4.27 and performance of 3.71.

The most significant discrepancy between performance and importance can be observed in the product and service quality (0.70), followed by Designed Quality, Relational Quality (0.59), and Outcome Quality (0.56). For the greatest influence on

consumer/users' satisfaction, this proposes putting efforts to make improvements in product and service quality, relational quality, and designed quality.

The data provides insightful information on how users evaluate the OpenTable application in terms of product and service quality. This performance is rated as "somewhat satisfied" on average, with a weighted mean of 3.59 (above standard), however certain areas need more work. Participants highlight the security aspects, timely communication, and convenience of handling reservations as strengths in their core functionalities. Personalized recommendations or further search customization could be beneficial in the area of restaurant discovery based on interest, which received a bit of a lower rating. Research by Adomavicius et al., (2005) suggested that personalization in recommender systems led to increased user satisfaction and loyalty. OpenTable could leverage user data such as past reservations and dietary preferences to suggest relevant restaurants, creating a more engaging experience. While studies by Zhang et al., (2018) demonstrated that well-designed search filters could significantly improve decision-making processes. By offering filters based on cuisine, ambiance, price range, and accessibility, OpenTable could empower users to find the perfect dining experience. Adomavicius et al., (2005) found that personalization increased user satisfaction. By implementing personalization features, OpenTable could address user feedback and improve satisfaction. It is possible to put user feedback into practice by looking into enhancements like individualized recommendations or better search filters. Zhang et al., (2018) showed that well-designed search filters improve decision-making. Advanced search filters on OpenTable can empower users to make informed choices, leading to a better overall experience. Furthermore, feedback from consumers is required to make sure that improvements properly solve issues found and improve the restaurant finding experience. OpenTable can maintain its position as a leader in restaurant reservations by taking care of these issues.

According to the data, respondents have a favorable opinion of OpenTable's design quality, giving it an overall performance rating of 3.63 (above standard). This suggests that most participants believe the app is easy to use, aesthetically pleasing, and responsive on various devices. The "somewhat satisfied" rating for OpenTable's design indicates that users are generally happy with it. But there's still area for development, especially when it comes to offering simple, understandable instructions on how to use the application. Nielsen (1994) emphasizes the importance of user-centered design principles, which state that clear instructions are essential for a positive user experience. Ambiguous instructions can cause user frustration and prevent task completion. Nielsen (1994) advocated for clear instructions, which can significantly improve the user experience by reducing confusion and frustration. Users can more easily navigate the app and use all of its features. Simple instructions can improve accessibility for users with varying levels of technical knowledge. This is consistent with the core principles of inclusive design, ensuring that everyone can easily use the app. By examining user feedback, specific areas that require clarification in terms of instructions or functionalities may be identified, and graphical elements can be made simpler. Instructions and guidelines should be generated and made available within the app to improve the user experience and enable users to make the most of all the features. By taking care of these

issues, OpenTable can continue providing a visually appealing and useful app while guaranteeing a user-friendly interface that accommodates users with different levels of technical expertise.

OpenTable's initiatives to establish and maintain positive relationships with its users are seen positively by the participants based on the data. With an overall performance rating of 3.52 (above standard), consumers clearly appreciate the app's attention to user connection, data protection, and feedback responsiveness. Still, there are certain areas that could be used better. The fact that OpenTable customers give the app a "somewhat satisfied" in relational quality. Consumers appreciate data privacy policies, which shows that they have faith in the platform. They also recognize that the app makes an attempt to connect users by offering features like recommendations and reviews. Users also value OpenTable's ability to promptly update features in response to their comments. The lowest ranking went to customer service, indicating that there is a need for improvement in terms of interaction, response times, and efficacy in resolving issues. Research by Reichheld (2003) on Net Promoter Score (NPS) demonstrates the critical role of customer service in building loyalty and advocacy. When customers feel valued and their issues are resolved promptly and efficiently, they are more likely to become loyal brand promoters OpenTable can transform satisfied users into brand advocates who recommend the app to others by effectively resolving customer issues (Reichheld, 2003). By taking into consideration these issues, OpenTable can strengthen its bonds with customers, encouraging loyalty and delivering an experience that is more impressive.

Lasty, with an overall performance rating of 3.71 (above standard), the data indicates ideal customer satisfaction with OpenTable's ability to deliver favorable results. Given that it can shorten wait times, save users' time and effort, and improve restaurants' reputations, the app is highly appreciated. Users also like that the app making reservations easier and guarantees a seamless arrival experience, which promotes repeat patronage and increases satisfaction among users. This can involve finding out about user perspectives on managing wait times, communicating about reservations, and how the app can enhance the dining experience in ways other than just simplifying reservations and arrival. Research by McLean et al., (2017) highlights the importance of a holistic dining experience. While reservation ease is crucial, factors like wait times and interpersonal interaction also significantly impact customer satisfaction. OpenTable can explore ways its app can go beyond reservations to elevate the overall dining experience (McLean et al., 2017). This could involve features facilitating pre-ordering, dietary preference communication, or personalized recommendations. OpenTable can utilize these findings to better understand how to work with restaurants to enhance wait times and interpersonal interaction, while also keeping an eye on how the app can make dining experiences more enjoyable for customers.

Through the use of the Importance-Performance Analysis model (IPA), the mobile application for restaurant booking and reservations meets user expectations and increases consumer satisfaction. In this analysis, the effectiveness of the application in

providing various features and functionalities is assessed by the level at which users value those features and functionalities.

Developers and managers can enhance customer satisfaction by pinpointing areas of high importance but low performance, enabling them to prioritize improvements effectively. Identifying features that customers find important, like an easy-to-use interface, a quick reservation process, real-time updates, and smooth arrival procedures is crucial for mobile apps that make restaurant reservations. When this strategy is applied effectively, it helps to match user expectations with app development and enhancement activities, which guarantees a satisfying dining experience for customers and optimizes the app's usefulness for enterprises.

Conclusions

1. **On the assessment of the respondents on the level of importance of the OpenTable booking app in terms of:**

This study looked into how users felt about the quality of the OpenTable booking app. There was an apparent agreement among users who gave the app top ratings in every variable. With a grand mean of 4.22, it was determined that designed quality, which includes aspects like user interface and simplicity of use was important. Similar to functionality, service reliability, and product quality, these factors were rated as extremely important with a grand mean of 4.29. Although the grand mean of relational quality indicated little discrepancies in importance among particular features, it was nevertheless rated extremely important, indicating that users place a high value on their interactions with the application. In addition, outcome quality which emphasizes favorable results like bookings and a seamless dining experience was given the highest rating with a grand mean of 4.27, suggesting that users place a high value on it. All things considered; this investigation focuses on the importance of every quality level in the OpenTable app.

2. **On the assessment of the respondents on the level of performance of the OpenTable booking app in terms of:**

The respondents assessed the OpenTable booking app's performance in terms of design quality in Table 4.5. Notably, performance was marginally lower for indicators including responsiveness, visual appeal, and ease of use, despite their high importance. Table 4.6 presents the respondents' evaluation of the quality of the products and services. They viewed factors like secure transactions and convenience of booking to be extremely important, but their performance did not meet their expectations entirely. Table 4.7 focuses on relational quality and emphasizes the value of privacy protection, whereas factors like timely customer service and regular updates performed a bit lower. Table 4.8 concludes the discussion of outcome quality and highlights the importance of features such as timesaving and satisfaction enhancement, despite slight differences in performance ratings.

3. **On the OpenTable mobile application assessment using the Importance-Performance Analysis model:**

The OpenTable mobile application's Importance-Performance Analysis (IPA) provided a clear image of the critical areas that still require improvement, even if users found the program to be generally functioning averaging "somewhat satisfied" scores.

The analysis found important weaknesses. First, customers were not satisfied with the quality of the products and services. In particular, people long for more advanced search options with personalized suggestions to speed up the process of finding restaurants that suit their unique tastes. Second, relational quality needs to be addressed. Customer service contacts need to be improved in terms of performance, response times, and general user interaction, even though people value data security and responsiveness to feedback. Lastly, there is a way to improve designed quality. Clearer in-app instructions would greatly improve the experience, especially for people who are less proficient with technology, even though users found the app to be generally user-friendly.

These are the areas that OpenTable should focus on improving in order to maintain its dominant position in the market. To further accommodate user preferences, personalization mechanisms and smart search filters should be implemented. Enhancing response times and means of interaction and resolving issues in customer service will improve user satisfaction. Creating compact and comprehensible in-app instruction and user manuals will also greatly improve the user experience, especially for users with different technical ability levels. While keeping the key features of the app and its value for users and restaurants, OpenTable can guarantee a user-friendly and delightful experience for a wide range of consumers by focusing on these areas.

Recommendations

In the light of the findings and conclusions, the following are the recommendations of the study.

For Technology Developers of Mobile Booking and Reservation Applications:

1. Based on the study's findings, it is recommended that OpenTable prioritize enhancing the visual appeal of the app to better reflect the unique brand identities of the restaurants it serves. Graphic designers and branding experts can collaborate to revamp the app's interface and incorporate elements that reflect the distinctive attributes of each restaurant's brand. This could include using restaurant-specific colors, logos, and imagery throughout the app to create a consistent and immersive brand experience for users.

2. To address the challenge of navigation complexity highlighted in the study, it is recommended to work towards simplifying the user experience and providing clearer usage recommendations. The user interface should be simple to use, clear, and intuitive for booking, changing, and canceling reservations. Provide in-app

instruction that walks users through the app's main functions, particularly for new users and when they encounter new features. To accommodate different learning styles, use a combination of text, interactive walkthroughs, and quick video tutorials and provide easy access to these tutorials within the app, for example, by creating a special "Help" area, and decreasing the number of steps involved in making a reservation.

3. Permit users to visually verify their information and grant modifications within a fair amount of time. This entails making use of recognizable design indicators, concise labeling, compact content, and orderly layouts. Customers should have no trouble making reservations and finding what they're looking for promptly. Also, regularly test the software to reduce bugs and issues, and provide timely updates to address any issues that arise. Lastly, provides features like the ability to edit booking details, manage waitlists, and manage existing reservations to improve the customer experience.

4. Use automated notifications through email, call, or SMS alerts to keep users informed about their reservations, table availability, cancellations, changes, and confirmations to ensure prompt and transparent communication. Provide immediate notice through email regarding wait times, modifications to reservations, or unforeseen circumstances. Investigate "virtual queuing" options that let users check in from a distance and get notifications when their tables are ready. By focusing on these areas, OpenTable can improve user satisfaction, increase engagement, and foster loyalty among its user base. Additionally, personalized emails will be generated to users with recommendations for new restaurants to try based on their past dining history.

5. Enhancing customer care services by establish safe in-app messaging to facilitate direct user-restaurant contact. This enables users to ask inquiries regarding the menu, get information about wait times, and clarify things. Also, provide a range of support channels such as phone, email, and extensive FAQ, and make sure your agents are kind, knowledgeable, and quick to resolve problems. Additionally, implementing community forum where users can share recommendations and engage with each other can further enhance customer satisfaction. This enables continuous improvement and promptly addresses user needs. Regularly reviewing and acting on feedback demonstrates a commitment to enhancing functionality and meeting user expectations.

6. Install strong safety measures to protect user data and financial information. When a user appears to make a payment, apply secure payment gateways, and always display security identification. Offer a range of payment methods, including trendy e-wallets and multiple banks, and indicate authorized options while a reservation is being made. Have a transparent and easily readable privacy policy that describes how data is collected, used, and shared (if relevant) to keep users' trust. Give users the power to control their settings, access information, and ask for the

erasure of data when they so want, and update the Privacy Policy often to consider any modifications.

7. Use responsive design concepts to ensure the application adjusts to various screen sizes and resolutions on PCs, tablets, and smartphones without any problems. This gets rid of annoyances and discrepancies from the user's gadget. Adjust the button sizes, text legibility, and general arrangement to perfection for every type of gadget.

8. Improve the search algorithm, refine filter options, and implement features such as predictive search to streamline the process and provide a variety of filtering choices according to pricing, cuisine, and even dietary requirements.

For Restaurant owners:

1. Collaborate with OpenTable application to provide special offers or promotions that can be customized to the tastes of the user. Incorporate online menus to help customers make more informed choices and use partnerships with local publications or food critics to curate restaurant suggestions.

2. Restaurants should collaborate with the OpenTable app to help users discover new dining options and make reservations more efficiently.
3. Restaurants can use the app to directly ease reservation adjustments and provide customized notifications with projected wait times or delays.

For Marketing and Sales Teams:

1. To promote OpenTable, collaborate with renowned chefs or food vlogger influencers to create content promoting the app's impact on restaurant branding and engagement. Target potential new users by using their audience reach to raise knowledge of the features and advantages of the app.

2. Make use of social media sites such as Twitter, Facebook, Instagram, YouTube and TikTok. By producing brief advertisements or content, social media sites provide the OpenTable app more chances to gain popularity.

For Consumers:

1. Give OpenTable constructive criticism by being open and honest about your impressions of the app to further improve the application. Please report any problems you run into, make suggestions for enhancements, and give concrete examples of how you would like the program to work better for you. Your input can directly impact future advancements. Additionally, consider connecting OpenTable with loyalty programs to maximize benefits and earn rewards for reservations.

2. Examine how OpenTable and loyalty programs can work together. A lot of restaurants have connectors available. To fully utilize the advantages of both platforms, think about connecting your accounts in order to accrue points or rewards for your reservations.

For Future Researchers:

1. Study the effects of user demographics by dividing performance measures, such as geographical location, age, and dining preferences, based on user feedback. This may highlight differences in consumer wants and expectations, guiding the development of additions or changes that have been tailored to the demands of various user groups.

2. Conduct qualitative research to discover how OpenTable affects users' feelings before, during, and after their meal. This can reveal chances to improve user happiness beyond the app's functional characteristics or psychological distress spots.

3. Assess OpenTable's effectiveness in relation to competing applications for booking restaurants. This can reveal new trends, sector best practices, and possible differentiation points for OpenTable.

4. Conduct research to find out how users decide which restaurants to book. This may include researching variables such as user preferences, restaurant details, internet reviews, and OpenTable's impact on such choices.

Compliance with Ethical Standards

The conduct of the research will be strongly focused on adhering to a set of ethical criteria and resolving any potential issues that might come up throughout the duration of the research in the future. The research tools to be used in this study will be carefully evaluated and authorized by the researcher's adviser, who is an expert in the subject, to ensure the highest level of ethical consistency. The study will receive permission from advisors and will adhere to strict ethical standards. Informed and willing participants will sign a permission form outlining the study's objectives and commitment to confidentiality as proof of their consent. Data integrity, privacy, and participant rights will all be upheld through the implementation of strict data protection regulations.

Acknowledgements

The Researchers would like to recognize and sincerely thank everyone who supported, inspired, and helped them complete their research paper.

The researchers want to express their sincere appreciation for Dr. John Paul G. Buenaventura, their research adviser; and Dr. Aldrin Agrasen, their research teacher, and Ms. Manilyn A. Canino, Mr. Vicente S. Leanza, and Mrs. Margie N. Roma, their beloved

panelist, for their precious time, advice, generosity, and unwavering support throughout the completion of the research paper. Their tireless efforts and support have been much appreciated and have helped the researchers develop their research by fostering their growth and helping them overcome difficulties. The researchers will always appreciate and be grateful to them for their compassion.

The researchers would like to express their sincere gratitude to all the Families and Friends for their unwavering support, which includes material support as well as emotional and psychological help. The foundation of their determination and motivation throughout the research process has been the emotional support given by their loved ones. The researchers' sense that their work would not have been possible without this continuous support.

Furthermore, the researchers want to thank themselves for their important contributions to their research. Throughout their shared journey, they have overcome challenges, rejoiced in the glory of their accomplishments, and see the transformation, not only in their research study but also in each other as individuals. Researchers celebrate their resiliency and determination while managing academic responsibilities and other commitments. The researchers unwavering commitment and enthusiasm for teamwork have fostered an atmosphere where innovation and excellence may flourish.

We sincerely appreciate the opportunity provided by the National University of Manila's College of Tourism and Hospitality Management. We became better versions of ourselves because of our experience, which broadened our knowledge and encourage personal development. As researchers, we will always appreciate the ongoing assistance that made it possible for us to design our research. In our academic path, the institution's mentorship and resources were crucial. We were able to broaden our horizons and foster our development thanks to the College's doors. It has been an honor to be a part of this institution, and we will carry its wisdom and experiences with us into the future. We owe an acknowledgment of gratitude to the College and its teachers for their constant support and promise to maintain the principles and values we have learned there while also positively impacting the tourism and hospitality industries.

Lastly, we give the Heavenly Creator our most sincere gratitude. We thank God for providing us with his guidance, wisdom, love, knowledge, and strength during this journey. Without these divine graces that lighted our way, completing this research paper successfully would not have been achievable.

Additionally, we would like to thank everyone who helped with this initiative. We acknowledge and value their combined efforts and assistance, realizing that this research project would be impossible without them.

REFERENCES

Al-Smadi, H., & Al-Tamimi, R. (2022). Factors influencing the adoption of restaurant mobile booking and reservation applications. *Journal of Hospitality and Tourism Technology*, *13*(1),116. https://doi.org/10.1016/j.tourman.2015.09.021

Adomavicius, G., Tuzhilin, A., & Silla Jr., V. (2005). Toward the Next Generation of Recommender Systems: A Survey of the State-of-the-Art and Possible Extensions. *IEEE Transactions on Knowledge and Data Engineering*, *17*(6), 734-749. DOI:10.1109/TKDE.2005.99

Buahlis, G., & Law, R. (2018). Online restaurant reservations: A growing segment of B2C e-commerce. *International Journal of Hospitality Management*, *71*, 129-139.
Cho, Meehee & Bonn, Mark & Li, Jun. (2018). Differences in perceptions about food delivery apps between single-person and multi-person households. *International Journal of Hospitality Management*, *77*. 10.1016/j.ijhm.2018.06.019.
Helkkula, A., & Ojasalo, K. (2018). Exploring customer experience innovations in hospitality: A comprehensive typology of innovations in services. *Journal of Service Management*, *29*(5),834-857. https://scholar.google.com/citations?user=fAeb7p4AAAAJ&hl=en&oi=sra
Jiang, L. A., Yang, Z., & Jun, M. (2020). Measuring consumer perceptions of online shopping convenience. *Journal of Service Management*, *24*(2), 191–214. https://scholar.google.com/citations?user=7x_kkSwAAAAJ&hl=en&oi=sra
McCombes, S. (2019). Descriptive Research | Definition, Types, Methods & Example Retrieved. https://www.scribbr.com/methodology/descriptive-research/
McLean, F., Anderson, J., Wittkowski, K., Bruno, L., & Watson, B. (2017). The customer journey in restaurants: Understanding experience to drive value. *International Journal of Hospitality Management*, *61*, 11–20.
Nielsen, J. (1994). Heuristics for user interface design. *Nielsen Norman Group*.nngroup.com/articles/ten-usability-heuristics
Reichheld, F. F. (2003). The one number you need to grow. *Harvard Business Review*, *81*(12), 78-87.
Sarstedt, M., Ringle, C. M., & Hair, J. F. (2022). Partial Least Squares Structural Equation Modeling. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *Handbook of Market Research*, 587–632. https://doi.org/10.1007/978-3-319-57413-4_15
Shahzadi, H. M. & Riaz, s. (2018). Restaurant Table Reservation System Using Android Mobile Application (RTRSMA*). International Journal of Advanced Research in Science, Engineering and Technology*, *5*(9), 0022-1945. Retrieved from https://www.scribbr.com/citation/generator/folders/4yhzJzI7jHEaX8EE AXIWaa/lists/4UKRDbnKPqzjHuDF0HiSXT/
Vinaik, A., Goel, R., Sahai, S., & Garg, V. (2019). The study of interest of consumers in mobile food ordering apps. *International Journal of Recent Technology and Engineering*, *8*(1) https://www.ijrte.org/wp-content/uploads/papers/v8i1/A9219058119.pdf
Zhang, Y., Sun, M., & Zhu, X. (2018). IGRAN: A minimax game for unifying recommendation and search. In Proceedings of the 2018 ACM SIGKDD Conference on Knowledge Discovery and Data Mining (pp. 1850-1859). Association for Computing Machinery.

APA Citation:

Clemente, F. J. I., Diño, G. B. A. S., Gonzales, N. J. S., Rodilas, R. J., Rojas, M. T., & Buenaventura, J. P. G. (2024). IMPORTANCE-PERFORMANCE ANALYSIS OF A RESTAURANT MOBILE BOOKING AND RESERVATION APPLICATION. Ignatian International Journal for Multidisciplinary Research, 2(8), 317–346. https://doi.org/10.5281/zenodo.13208030

Corresponding author: *johnpaulbuenaventura50@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

IMPROVING DINING SERVICE TO FOSTER CUSTOMER DELIGHT IN RESTAURANTS: AN EXAMINATION OF KEY INFLUENTIAL FACTORS

Analyn F. Sundo, MSHM

Claro M. Recto Academy of Advance Studies Lyceum of the Philippines Manila, Manila Philippines

https://doi.org/10.5281/zenodo.13311177

ABSTRACT

This study aimed to explore the relationship between service quality dimensions and Customer Delight in Casual Dining Restaurants. A descriptive correlation research design was used, utilizing statistical tools such as mean, standard deviation, and multiple regression analysis. The study investigated two hundred twenty (220) customers from various identified casual dining restaurants in Valencia City Bukidnon. A survey type of research questionnaire- checklist was administered to gather the data needed. The finding of the study indicates a significant association between customer's assessment of dining service and their customer delight exhibiting a high overall multiple correlation (R=17.475). This implies that when the customers' satisfaction with the service quality increases customer delight also increases. Furthermore, empathy is also identified as another predictor of customer delight. Suggesting that restaurants that demonstrated empathy towards their customers and guests are more likely to elicit customer delight having the multiple correlation of (R=6.059). Additionally, tangibility was also included as a predictor of customer delight implying that the restaurant's attention to tangible aspects added to the total experience of the 0customers in the restaurant having the multiple correlation of (R= 3.032) which means that when customer exceeded their expectation in the tangible aspect of the restaurant there is an increase also with the customer delight. These results emphasize the importance of focusing on service quality dimensions such as satisfaction, empathy and tangibility to enhance customer delight. The higher the satisfaction of participants regards service quality, the greater their tendency to be delighted.

Keywords: *Casual Dining Restaurant, Customer delight, Dineserve, Satisfaction, Empathy, Tangibility*

INTRODUCTION

The food service sector is one of the fastest-growing industries in the current era, and competition has always been fierce. This industry continues to grow every year and is never left behind to keep on innovating and producing a product to cater to the changing food preferences of the customers. The food service industry is an establishment that prepares food, or meals not on the premises of our home (Cousins, et.al 2014). This industry consists of a restaurant, school, and hospital cafeterias, food stalls, and food parks. Their operations continue to enjoy remarkable development and progress together with considerable advances in quality. In this highly competitive industry, restaurant owners and management must find a better way to make their products and services stand out from others. The researcher believes that restaurateurs must know the diverse preferences of the customers.

According to Kukanja and Planinc (2019), the organization must understand the vital role of service quality. They must cater to the needs and wants of each one who visits the restaurant especially when the organization plans to build a better customer relation. In line with this, establishments should ensure that customer satisfaction will exceed the customer's expectations. With the decade-long study of customer satisfaction, it is suggested that satisfaction is not enough to assess the customer experience.

The latest study conducted by Kristiawan et.al (2020), asserted that customer needs and satisfaction can be considered at the center of every successful business. Customer delight is the maximum level of engagement experienced by the guest. This manifests a higher state of emotional arousal and excitement toward the restaurant's customer satisfaction. This statement is supported by the study of Schneider and Bowen (1999) as cited by Torres and Ronzoni (2020) assert that customer delight is created by meeting customers' higher-order wants, specifically self-esteem, as suggested by Maslow's Hierarchy of needs such as recognition.

The researcher believed that the organization needs to be particularly concerned with how customers' views of the service offering change over time. With aggressive competition between all types of food establishments, customers are the best assets. The researcher finds it imperative to determine the link between dining service in restaurants to customer delight. This postulation is supported by the study of Baluyot and Pampolina (2021), who argued that customer contentment on the service provided by the restaurant is essential however it may not be enough to continuously grow sales and beat the competitors. The managers and restaurant owners need to realize that customer delight is an important factor for repeat purchases of the customer and can generate loyalty and greater loyalty-driven profit.

The researcher sees the necessity for the restaurant's management to increase their understanding that not all satisfied customers can devote their loyalty to the establishment. Therefore, it is essential to have a deep understanding of customer delight through the use of dining service dimensions. The researcher believed that to help aspiring and starters entrepreneurs in the restaurant business, they must know the importance of customer delight. A customer who has exceeded satisfaction with the service and product may return to the establishment and become a loyal customers. Based on the study of Torres and Ronzoni (2020), it was mentioned that future research must examine the relationship between satisfaction surveys to delight. Casual Dining Restaurant has a varied customer base from all walks of life. This type of restaurant is serving lesser-priced food with a good ambiance yet providing a very affordable dining experience, thus focusing, on the quality of food to be served. The researcher believed that in order to improve the service of all newly operated casual dining restaurants in Valencia City, the owner, and management needed to understand the level of customer delight that customers experienced during their visit.

There are many newly operated restaurants in Valencia City Bukidnon over the past few years. The researcher believed that to compete with the existing restaurants, the newly opened ones should strengthen their service through exceeded satisfaction that may lead to delight and will be able to gain loyal customers and compete with the fast-growing industry. Moreover, there were no related studies conducted in the restaurant service in Valencia City, thus, the researcher believes the significance of this study for the development and improvement of customer delight in the dining service dimension.

Furthermore, it is assumed that the findings of this study would not only contribute significantly to the improvement of dining service in the food and beverage industry in the said locality but also would add to the body of knowledge about the dining service dimension, thus, this will study greatly help the newly opened establishment to come up with very strong and different strategies to boost the satisfaction of the customer.

Research Questions

This study aimed to determine the influence of dining service on customer delight among restaurant guests in Casual Dining Restaurants in Bukidnon. Specifically, the study required to answer the following:

1. How are the participants characterized in terms of age and sex?
2. What is the customers' assessment of the restaurant service in terms of:
    - 2.1 tangibles;
    - 2.2 reliability;
    - 2.3 responsiveness;
    - 2.4 assurance;
    - 2.5 empathy;
    - 2.6 price; and
    - 2.7 Satisfaction.
3. What is the level of customer delight among the guests of restaurants in Valencia City?

4. Does customer delight vary when grouped according to their demographics?
5. Do the participants' quality service assessment significantly influence Customer delight?

METHODOLOGY

This study applied the technique of quantitative method approach specifically the descriptive correlational research design which is appropriate to determine the influence of dining service on customer delight among restaurants in Valencia City Bukidnon.

A random sampling method was used in choosing the participants of the study. The participants of the study were the 220 customers of casual dining restaurants in Valencia City, Bukidnon as recommended by the Raosoft Sample Size Calculator with a 5% margin of error, and a 95% confidence level drawn from the customers of different newly operated casual dining restaurant in the city with a total of 500 people who visited these restaurant aged 15 yrs. old up to 60 yrs. old and above with a 50% response distribution.

The researcher adapted and modified the DINESERV instrument developed by Markovic et al (2010) and divided the survey instrument into two parts. The first part was a 32-item scale that constituted seven dimensions: tangibles, reliability, responsiveness, assurance, empathy, price, and satisfaction. The following items comprising the said dimensions are as follows 1-5 are for Tangibility, items 6-10 for Reliability; items 10-13 for Responsiveness; items 14-18 for Assurance, items 19-23 for Empathy; items 24-28 for Price, items 29-33 for Satisfaction. The second part is the adapted survey questionnaire developed by Torres et al., (2017) to measure customer delight.

Certain protocols were observed in gathering the data. First, the researcher addressed a letter to the City Mayor's Office of Valencia City, Bukidnon, requesting permission and statistics on how many new establishments were launched in 2022 and early 2023. When the permission and data were provided the researcher established contact with the owner and asked permission to conduct the survey and at the same time explain the benefits of joining the study. The owners of the restaurant voluntarily participated in the study and the questionnaire was subsequently distributed to the customers of the said casual dining restaurants. The researcher assured the restaurant owners of the confidentiality of the data.

Impacts were assessed using a five-point Likert scale with values of "Strongly Agree," "Agree," "Slightly Agree," "Disagree," and "Strongly Disagree." To organize the data, the following statistical tools were utilized: Descriptive statistics such as frequency, percentage, mean, and standard deviation were employed to determine the assessment of the participants as regards the dimensions of dining service and customer delight. The correlation analysis was used to determine the association between dining service and customer delight. To find out the significant relationship between various dimensions of

dining service and customer delight, ANOVA was utilized. To determine the customer delight of customer, regression was used.

RESULTS

Table 1 presents the frequency and percentage distribution of the participants in terms of gender. The table reveals that the majority (60%) of the participants are females compared to their male counterparts which is only (40%). This implies that most of the customers patronizing the service in casual dining restaurants are females.

Table 1. Frequency and Percentage Distribution of Participants (Sex)

Gender	F	%
Male	87	40
Female	133	60
Total	220	100.00

Table 2 shows the frequency and percentage distribution of the participants in terms of age. This table presents the majority (65%) of the participants belonging to young adulthood with ages ranging from 20 – 39 years.

Table 2. Frequency and Percentage Distribution of Participants' Age

Range	Age Level	F	%
60 yrs. old and above	Older Adult	7	4
40-59 yrs. old	Middle-aged Adult	26	12
20-39 yrs. old	Young Adult	144	65
15-19 yrs. old	Teenager	42	19
Total		220	100.00

Customers' assessment of the restaurant service in terms of:

- **2.1 Tangibility,**
- **2.2 Reliability,**
- **2.3 Responsiveness,**
- **2.4 Assurance,**
- **2.5 Empathy**
- **2.6 Price; and**
- **2.7 Satisfaction**

Table 3 presents the customer assessment of the casual dining restaurant's service in terms of tangibility.

Table 3. Frequency, Percentage, and Mean Distribution of Participants' Assessment of Casual Dining Restaurants Service (Tangibility)

Range	Interpretation	Frequency	%
4.20 – 5.00	Very High	70	32.00
3.40 – 4.19	High	112	51.00
2.60 – 3.39	Moderate	24	11.00
1.80 – 2.59	Low	14	6.00
1.00 – 1.79	Very Low	0	0.00
Total		220	100
Overall Mean		3.80	
Interpretation		High	
SD		0.72	

No.	*The restaurant has…*	Mean	Interpretation	SD
1.	Visually attractive parking area and building exterior.	3.18	Moderate	1.25
2.	Visually attractive dining area.	3.90	High	0.83
3.	Staff members who are clean, neat, and appropriately dressed.	4.06	High	0.63
4.	Décor in keeping with its image and price range.	3.99	High	0.84
5.	Thoroughly clean restrooms.	3.90	High	1.08

Table 4 shows the customers' assessment of the casual dining restaurants in terms of reliability.

Table 4. Frequency, Percentage, and Mean Distribution of Participants' Assessment of Casual Dining Restaurants Service (Reliability)

Range	Interpretation	Frequency	%
4.20 – 5.00	Very High	104	47.00
3.40 – 4.19	High	83	38.00
2.60 – 3.39	Moderate	26	12.00
1.80 – 2.59	Low	0	0.00
1.00 – 1.79	Very Low	7	3.00
Total		220	100
Overall Mean		3.99	
Interpretation		High	
SD		0.77	

No.	*The restaurant...*	Mean	Interpretation	SD
1.	Served food and beverages in the promised time.	4.15	High	0.88
2.	Quickly corrects anything that is wrong service.	3.87	High	0.96
3.	Is dependable and consistent.	3.87	High	0.91
4.	Provide an accurate guest check.	3.96	High	1.01
5.	Served food and beverages exactly as ordered.	4.16	High	0.82

Table 5 presents an assessment of the casual dining restaurant service in the responsiveness dimension.

Table 5. Frequency, Percentage, and Mean Distribution of Participants' Assessment of Casual Dining Restaurants Service (Responsiveness)

Range	Interpretation	Frequency	%
4.20 – 5.00	Very High	40	19.00
3.40 – 4.19	High	112	51.00
2.60 – 3.39	Moderate	53	24.00
1.80 – 2.59	Low	15	6.00
1.00 – 1.79	Very Low	0	0.00
Total		220	100
Overall Mean		3.80	
Interpretation		High	
SD		0.81	

No.	***Responsiveness. The restaurant staff…***	Mean	Interpretation	SD
1.	Maintains speed and quality of service during busy times.	3.93	High	0.84
2.	Provides prompt service and quick.	3.76	High	0.83
3.	Give extra effort to handle special requests.	3.75	High	0.91

Table 6 shows the customer assessment of the casual dining restaurants' dimensions in terms of assurance.

Table 6. Frequency, Percentage, and Mean Distribution of Participants' Assessment of Casual Dining Restaurants Service (Assurance)

Range	Interpretation	Frequency	%
4.20 – 5.00	Very High	47	21.00
3.40 – 4.19	High	121	55.00
2.60 – 3.39	Moderate	44	20.00
1.80 – 2.59	Low	8	4.00
1.00 – 1.79	Very Low	0	0.00

	Total	220		100
	Overall Mean		3.94	
	Interpretation		High	
	SD		0.75	
No.	***The restaurant staff…***	**Mean**	**Interpretation**	**SD**
1.	Can answer questions completely.	3.95	High	0.91
2.	Makes customers feel comfortable and confident in dealings with them.	3.84	High	0.82
3.	Are willing to give information about menu items, their ingredients, and method of preparation.	4.00	High	0.94
4.	Makes customers feel personally safe.	4.05	High	0.86
5.	Are well-trained, competent, and experienced.	3.71	High	0.77

Table 7 presents the customer assessment in casual dining service in terms of empathy dimension.

Table 7. Frequency, Percentage and Mean Distribution of Participants' Assessment of Casual Dining Restaurants Service (Empathy)

Range	**Interpretation**	**Frequency**	**%**
4.20 – 5.00	Very High	22	10.00
3.40 – 4.19	High	138	63.00
2.60 – 3.39	Moderate	43	19.00
1.80 – 2.59	Low	17	8.00
1.00 – 1.79	Very Low	0	0.00

	Total	220		100
	Overall Mean		3.75	
	Interpretation		High	
	SD		0.74	
No.	**Empathy. *The restaurant…***	**Mean**	**Interpretation**	**SD**
1.	Has employees who are sensitive to the needs and wants of customers.	3.77	High	0.73
2.	Makes customers feel special.	3.80	High	0.69
3.	Anticipates customers' needs and wants.	3.62	High	0.93
4.	Has employees who are sympathetic and reassuring if something goes wrong.	3.75	High	0.79
5.	Keeps customers' best interests at heart.	3.77	High	0.90

Table 8 shows the customer assessment of the casual dining restaurant service in terms of price dimension.

Table 8. Frequency, Percentage, and Mean Distribution of Participants' Assessment of Casual Dining Restaurants Service (Price)

Range	Interpretation	Frequency	%
4.20 – 5.00	Very High	60	27.00
3.40 – 4.19	High	107	49.00
2.60 – 3.39	Moderate	45	20.00
1.80 – 2.59	Low	7	3.00
1.00 – 1.79	Very Low	1	1.00
Total		220	100
Overall Mean		3.99	
Interpretation		High	
SD		0.81	

No.	*Price*	Mean	Interpretation	SD
1.	The menu items offered are reasonably priced.	4.06	High	0.88
2.	The menu price is fair enough given the portion size.	3.91	High	0.88
3.	The food has a good value for the money given.	3.86	High	0.92
4.	The price of the food is appropriate to the services provided.	3.93	High	0.93
5.	The menu price is fair for the quality of the dishes.	3.93	High	1.07

Table 9 presents the customer assessment of casual dining service in terms of satisfaction dimension.

Table 9. Frequency, Percentage, and Mean Distribution of Participants' Assessment of Casual Dining Restaurants Service (Satisfaction)

Range	Interpretation	Frequency	%
4.20 – 5.00	Very High	42	19.00
3.40 – 4.19	High	113	51.00
2.60 – 3.39	Moderate	50	23.00
1.80 – 2.59	Low	14	6.00
1.00 – 1.79	Very Low	1	1.00
Total		220	100
Overall Mean		3.73	
Interpretation		High	
SD		0.89	

No.	*Satisfaction*	Mean	Interpretation	SD
1.	Customers' overall satisfaction with the dining experience.	3.82	High	0.83
2.	Customers will likely return to the restaurant.	3.70	High	0.92
3.	Customers will recommend the restaurant to others.	3.80	High	0.89

4.	The restaurant provides excellent quality service.	3.72	High	1.02
5.	Customers are satisfied with the quality of food and beverages.	3.66	High	0.98

Level of customer delight among the restaurants in Valencia City

Table 10 presents the customer assessment for customer delight.

Table 10. Frequency, Percentage, and Mean Distribution of Participants' Assessment of Customer Delight

Range	Interpretation	Frequency	%
4.20 – 5.00	Very High	13	6.00
3.40 – 4.19	High	124	57.00
2.60 – 3.39	Moderate	58	26.00
1.80 – 2.59	Low	25	11.00
1.00 – 1.79	Very Low	0	0.00
Total		220	100
Overall Mean		3.53	
Interpretation		High	
SD		0.86	

Customer Delight		**Mean**	**Interpretation**	**SD**
1.	I felt special	3.68	High	1.02
2.	I felt welcome	3.81	High	0.81
3.	I felt like a unique customer	3.37	Moderate	1.06
4.	I felt acknowledge	3.65	High	0.96
5.	I had a pleasurable experience	3.48	High	1.09
6.	I felt empowered as a customer	3.35	Moderate	1.07
7.	The staff was flexible	3.64	High	0.92
8.	The service was worth my time	3.57	High	0.88
9.	I received a positive surprise	2.98	Moderate	1.18
10.	The staff was friendly	3.85	High	0.96

4. Does customer delight vary when they are grouped according to their demographics?

Ho_1: There is no significant difference in the customers' delight when customers are grouped according to their demographics.

Table 11 presents the personal demographics of the participants in terms of sex in relation to Customer delight.

Table 11. Result of the test of Difference on Participants' Assessment of Customer Delight in Terms of Sex

	Male		Female		t	P
	Mean	SD	Mean	SD		
Customer Delight	3.54	0.80	3.58	0.75	1.243	0.217

Table 12 presents the test of difference of the participants' assessment of customer delight according to their age.

Table 12. Result of the test of Difference on Participants' Assessment of Customer Delight in Terms of Age

Cases	Sum of Squares	df	Mean Square	F	p
Age	1.926	5	0.385	0.644	0.667
Residual	128.052	214	0.598		
Total	129.997	219			

5. Do the participants' assessment of quality service significantly influence Customers' delight?

Ho2. The customers' assessment of the restaurants' dining service does not influence Customers' Delight.

Table 13 presents the result of the regression analysis of Customer Delight.

Table 13. Regression Analysis of Dining Service as Predictor of Customer Delight

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.091	0.146		7.485	0.000
	SAT	0.665	0.038	0.764	17.475**	0.000
2	(Constant)	0.357	0.156		2.291	0.023
	SAT	0.412	0.045	0.474	9.103**	0.000
	EMPA	0.447	0.054	0.428	8.217**	0.000
3	(Constant)	0.163	0.166		0.984	0.326
	SAT	0.363	0.047	0.417	7.678**	0.000
	EMPA	0.363	0.060	0.348	6.059**	0.000
	TAN	0.181	0.060	0.169	3.032*	0.003

Model Summary			
R = .834	Adjusted R^2 = .691	F = 164.929**	p = .000

***Significant at the .01 level (two-tailed)*

DISCUSSION

The demographic profile of the respondents as observed by the researcher during data gathering showed that the number of female participants who visited the establishments was greater than males. Atulkar and Kesari (2018), stated that gender can control the buying characteristics of a consumer resulting in impulse buying which highly supported the result showing that most of the customers patronizing the service for casual dining restaurants are females. In addition, Ahn, (2020), espoused that, males and females choose to purchase or buy products however majority of members in the loyalty program were females.

In terms of age, the finding reveals that most of these young adults patronize casual dining restaurants. Surucu et. al, (2020), posited that young adults prefer to purchase the product and services they trust to avoid risk associated with purchasing unknow products. This is followed by those who belonged to the teenage group with ages ranging from 13-19 years old. However, it is interesting to mention that among the group, the older adults had less frequency of visiting casual dining restaurant service. This is not surprising since this type of customer with ages ranging 60 years old and above are generally conscious of their diet; hence, they most likely prefer to dine in fine dining restaurants or at home where their diet requirements can be satisfied. Ahn (2020) stated that age and income were significantly related to the buying preferences of the customers. The data show that the majority of the participants are young professionals who have the capacity to visit and dine in casual dining restaurants.

In regards with the participants assessment of dining service dimension specifically tangibility. The table shows that the customers are generally satisfied with the restaurants as indicated in the overall mean of 3.80 interpreted as high. This means that customers are satisfied with the restaurant's physical factors of the restaurant such as the dining area, décor, rest room including the physical appearance of the staff. The researcher observed that participants pay attention to how the restaurants look as a whole. It is also noticed that the décor of the restaurants adheres to the restaurants' theme; even the staff were professionally dressed and groomed. In the result presented in Table 3, it can be gleaned that the staff members who are clean, neat, and appropriately dressed received the highest assessment rate with a mean of 4.06 interpreted as "high". This implies that customers are not only considering the interior and appearance of the restaurant but also the physical aspect of the staff. In the same vein, visually attractive parking areas and building exteriors received the lowest rate with a mean of 3.18 interpreted as moderate. This means that the customer's expectation for the parking lot is below the level of their criterion since the majority of the restaurants do not provide a wide parking space to accommodate customers. These findings confirm the study presented by Suciptawati et.al (2019), which posited tangible dimensions related to services such as building

interior and exterior, furniture, the appearance of the restaurants, and well-dressed employees as a factor for the satisfaction of the customer.

In reference to the preceding table, the researcher believed that since the majority of the customers are from the working class, they were exposed to tangible things through their experience with restaurants. The result is also in accordance with the study of Pakurar et.al (2019) which postulated that the restaurants' interiors, exteriors, appearance, and uniform of the staff are tangible aspects of the restaurant used in order to provide the needed service.

Moreover, in Table 4, the findings reveal that the customers rated the restaurant staff with an overall mean of 4.00 interpreted as high. This means that the staff's way of providing and serving the order surpassed customer expectations. This result is in accordance with the study of Ramya, et. Al (2019) states that reliability is the capacity to provide the promised service consistently and precisely. Serving food and beverages exactly as ordered received the highest mean score of 4.16 interpreted as "high". This means that the staff was able to meet the expectation of the customer to receive their order exactly as they ordered. This result conforms with the study of Zygiaris et.al (2022) stated that accountability and quality are factors that contribute to reliability. The researcher observed that the service provided and delivery of food to the customers were exactly delivered as ordered. It is also noticed that the staff were able to serve and deliver the food ahead of the given time.

In the same vein, they rated the restaurant as dependable and consistent which got the lowest rate with a mean of M=3.87 also interpreted as "high". This means that the customers were satisfied with the services offered by the casual dining restaurants should be consistent.

Furthermore, table 5 shows that the customers rated the staff high as indicated in the overall mean of 3.81. This means that customers were satisfied with the way the wait staff provided the services. When the restaurant is very busy, the staff was able to maintain the quality of service given to the customer as observed by the researcher, hence this area had the highest assessment from the customer as indicated with the overall mean of 3.93 interpreted as" High". The foregoing finding is supported by the study of Wijoyo et.al (2022) which stated that responsiveness is the willingness to provide immediate and appropriate quality service. In the same vein, giving extra effort to handle special requests received the lowest assessment with a mean of 3.75 but still interpreted as "high". This means that the customers were satisfied with the effort of the staff to handle special requests therefore the expectation of the customer for a good service meet.

As for the dimension of assurance, it is presented in the table that the customers rated the staff with an overall mean of 3.94 interpreted as "high" which means that the customers are satisfied with how the staff assured them of their safety in dining in their restaurants. The researcher observed that the staff is willing to answer every inquiry of the customer even without assurance that the customer will dine in their establishment. The staff can give exact information on what the customer needs to know about the menu.

This act is supported by Anwar and Abdulla (2021) who pointed out that assurance is the ability of the staff to be courteous, build rapport, render trust, and confidence, and be knowledgeable. It is imperative for the restaurant staff to prove that visiting their establishment and availing of the products and services is trustworthy and worth the money they are paying.

In this current study, making customers feel personally safe got the highest mean of (4.05) interpreted as “high”. This means that the staff was able to let the customers feel that they were safe in their establishment by means of giving correct information about the menu and the ingredients of the food and that the customers were generally satisfied with the way the wait staff handled the queries from the customer. This finding is supported by Ali et.al (2021) who posited that assurance is the ability of the staff to inspire the customer with confidence and trust. Furthermore, no matter what type of customer visits the restaurant, the staff should create a trustable environment. Customer trust and confidence in the establishment, service, and products may lead to an increase in the profitability of the restaurant.

Dimension of empathy was rated high by the customer as shown in the overall mean of 3.75. This means that the customer was satisfied with the service provided and the way the staff appreciated each customer. The researcher observed that the restaurant was able to hire staff who were sensitive to the needs and wants of the customer. This gesture is supported by the study of Umasuthan et al., (2017) which asserts that empathy is a moral emotion. This dimension, making customers feel special stood out having the highest mean of 3.80 interpreted as “high”. This means that the customers feel that they are well-valued and that their presence is important in the establishment. In the same vein, anticipating customers’ needs and wants had the lowest mean of (3.62) yet is still interpreted as “high” which means that the customers' expectations in terms of staff’s anticipation of their needs and wants were met by the staff.

For the price dimension, the data reveal that the customers rated the price an overall mean of 3.99 interpreted as “high”. This means that the customers were satisfied with the price of the food. The quality of food and service compensates with the amount of money they are paying. The researcher observed that the menu price was affordable which is commensurate to the quantity of food being served. The findings were supported by the study of Feinberg, B., and Wooton, I., (2020) stating that price determines whether customers will patronize the product and services again. In this dimension, the menu items offered are reasonably priced and got the highest mean of (M=4.06) described as high. This indicates that the clients were pleased with the quantity of food on the menu. In the same vein, the food that has a good value for the money given received the lowest rate with a mean of 3.86 described as “high”. This finding is supported by the study of Dyatmika & Firdaus, (2021) espoused that price plays a vital role in customer preferences.

Lastly on dining service dimension is satisfaction. The customer rated this dimension with an overall mean of 3.73 described as “high”. This means that the customers were satisfied with the overall service of the restaurant and the staff. The researcher also saw the quality of service provided by the staff which contributed to the

customers' satisfaction. In this dimension, customers' overall satisfaction with the dining experience received the highest rate with a mean of 3.82 described as "high" this indicates that the consumer is satisfied with their dining experience and is willing to suggest the establishment to others. This finding is supported by Aburayya et al., (2020) who defined satisfaction as the reason that customers may lead to long-term retention and recommending the service to others. Moreover, the customers are also satisfied with the quality of food and beverages which received the lowest assessment as indicated by the mean of 3.66 interpreted as "high". This means that even customers are generally satisfied with the quality of food and beverages, but this is an area that needs to be examined further by the restaurant management.

In regard to the assessment of customer delight, the customers rated this area as high as indicated in the overall mean of 3.53. This means that the customers are delighted with the overall services that the establishment offers. The researcher observed that the staff is very accommodating; the customer feels that they are welcome, valued, and special to the establishment. These findings are supported by Parasuraman (2020), who postulated that customer delight is the emotional imprint left on the customers' attributes; it is the positive and memorable feelings that happen to the customers. The result further shows that the staff was friendly and received the highest rate with a mean of 3.85 or interpreted as high. This means that the effort of the staff to have a positive effect and try to build a rapport by being friendly to the guest in the most truthful way is very effective. This notion is supported by Barnes, et al (2016) who posited that employee effort, affect, and skill are producing factors of delight.

As for the participants' assessment of customer delight in terms of sex, it shows that customer delight has no significant difference (t= 1.243, p= 0.217) considering their sex, therefore the null hypothesis cannot be rejected. This means that whether they are males or females the customers' delight is almost similar, which further implies that their sex is not a source of variation of their customer delight. The result is supported by the study of Torres et.al, (2014), who stated that the service experience of men and women that led them to feel delighted is almost the same.

The assessment of customer delight in terms of age shows that customer delight does not significantly differ considering their age (F= .644, p= 0.667). Therefore, the null hypothesis cannot be rejected. This means that the age of the participants is not a source of variation in their assessment of customer delight. This conclusion is corroborated by the researcher's observations made during data collection. The majority of the customers were in the same bracket of age. The perception and expectation of young adults were almost the same in terms of service quality in a restaurant.

Examining the specific dimensions of dining service, satisfaction stands as the highest predictor of customer delight, (B=.665, t= 17. 475). Table results that the model is significant at the .01 level (F= 164.929, p= 000) with a high multiple correlation (R=.834), thus, the null hypothesis can be rejected. Furthermore, 69.1 percent of the variability in customer delight is accounted for by a combination of the dimensions of dining service. 17.475, p=.000) indicating that for every unit of increase in their satisfaction, there is a corresponding .665 increase in their customer delight. It is, thus,

inferred that satisfaction precedes customer delight implying that customer satisfaction has to be met first before customer delight occurs. The finding is in consonance with the study of Afthanorhan et al., (2019) which posited that satisfaction is achieved when the expectation of the customer is met. As a result, of this satisfaction, the customer would feel delighted.

Further, empathy (Beta .363) is another predictor of customer delight which means that for every unit with an increase in their empathy, there is a corresponding .363 increase in their customer delight (B=.363, t=6.059, p=000). This further means that the higher the demonstration of staff's empathy the more customers are delighted. This notion is supported by the study of Setiono & Hidayat (2022) asserts that knowing the customer by name, including their preferences, needs, and wants is an example of how to empathize with the customer, thus delighting the customers.

Moreover, tangibility places the last predictor of customer delight (Beta .181) indicating that for every unit increase of tangibility, there is a corresponding .181 increase in the customer delight (B= .181, t=3.032, p=0.003). This means that the more comfortable the servicescape the more guests and customers will be delighted. This conception is supported by the study of Kukanja et.al (2019) posited that tangibility is vital for guest satisfaction in the restaurant therefore the higher the satisfaction rate the more customers and guests feel delighted.

Conclusions

Based on the results of the study, it was therefore concluded that there was a significant relationship between dining service and customer delight. The quality of dining service dimensions especially satisfaction, empathy and tangibility serve as antecedents of customer delight. These three dimensions play a vital role as predictors of delight in a restaurant. Satisfaction is the foundation of customer delight having the highest B=.665 which only means that customers felt satisfied with the service they received and were more likely to have a positive perception of the restaurant's services and offerings. This satisfaction comes from various aspects such as the quality of food, excellent quality service, accuracy of orders, and the overall ambiance of the restaurant. By consistently exceeding customer expectations the restaurant can build a strong foundation of customer delight. Furthermore, empathy also plays a significant role in enhancing customer delight having a B=.363 which only means that the restaurant provides empathetic service such as being sensitive to the needs and wants of the customer, making them feel special, and keeping the customer's best interest at heart. Empathy helps to adopt a positive and memorable dining experience which likely increases customer delight. Lastly, tangibility also plays an important role in achieving overall customer delight having B=.181, which only means that the overall aesthetic of the restaurant such as the building interior and exterior, dining area, product price range, and uniform the staff contributed to the exceeding satisfaction of the customer which contributed to customer delight.

Moreover, the result of the study reinforces the researcher's arguments that dining service satisfaction is indeed linked to customer delight. Customers who are able to

exceed satisfaction have greater tendencies to be delighted with the services of the establishment and can build a loyal customer base, generate word-of-mouth, and ultimately thrive in a highly competitive industry.

Recommendations

It is recommended that this study consider expanding and identifying other components of customer delight in the hospitality industry in order to gain more insights into the said components, explore other instruments that would best capture the customers' assessment of the dimension, and increase the number of sample size of the participants and the participating casual dining restaurants to strengthen the generalization of the findings of the study.

Compliance with Ethical Standards

To observe the confidentiality nature of the survey and to adhere to the Data Privacy Act, the participants of this study were informed and assured of the confidentiality of the data gathered which will be used only for research purposes and will not disclose any particular details of the participants. After the tabulation of data, all questionnaires

were kept safe by the researcher and subject for shredding or burying on the ground after 5 years.

Acknowledgments

The author acknowledges the assistance of Dr. Cyril C. Chavez to finish this study.

REFERENCES

Aburayya, A., Marzouqi, A., Alawadhi, D., Abdouli, F., & Taryam, M. (2020). An empirical investigation of the effect of employees' customer orientation on customer loyalty through the mediating role of customer satisfaction and service quality. Management Science Letters.

Afthanorhan, A., Awang, Z., Rashid, N., Foziah, H., & Ghazali, P. (2019). Assessing the effects of service quality on customer satisfaction. Management Science Letters.

Ahn, J., Shamim, A., & Park, J. (2021). Impacts of cruise industry corporate social responsibility reputation on customers' loyalty: Mediating role of trust and identification. International Journal of Hospitality Management, 92, 102706.

Anwar, G., & Abdullah, N. N. (2021). Inspiring future entrepreneurs: The effect of experiential learning on the entrepreneurial intention at higher education. International Journal of English Literature and Social Sciences.

Ali, B. J., Saleh, et.al (2021). Impact of service quality on the customer satisfaction: Case study at online meeting platforms. International journal of Engineering, Business and Management.

Ali, F., Kim, W. G., Li, J., & Jeon, H.-M. (2018). Make it delightful: Customers' experience, satisfaction and loyalty in Malaysian theme parks. Journal of Destination Marketing & Management. doi: 10.1016/j.jdmm.2016.05.003

Atulkar, S., & Kesari, B. (2018). Role of consumer traits and situational factors on impulse buying: does gender matter?. International Journal of Retail & Distribution Management, 46(4), 386-405.

Ball, J., & Barnes, D. C. (2017). Delight and the grateful customer: Beyond joy and surprise. Journal of Service Theory and Practice. doi:10.1108/JSTP01-2016-0013

Michael Bhobet B Baluyot, D. H. M., & Pampolina, A. C. (2021). Exploring the Relationship of Service Quality on Customers Delight in Selected Restaurant of Laguna, Philippines. Studies of Applied Economics, 39(12).

Barnes, D. C., Collier, J. E., Howe, V., & Douglas Hoffman, K. (2016). Multiple paths to customer delight: the impact of effort, expertise and tangibles on joy and surprise. Journal of Services Marketing.

Cousins, J., Foskett, D., Graham, D., & Hollier, A. (2014). Food and beverage management: for the hospitality, tourism and event industries. Goodfellow Publishers Ltd..

Chun, S. H., & Nyam-Ochir, A. (2020). The effects of fast-food restaurant attributes on customer satisfaction, revisit intention, and recommendation using DINESERV scale. Sustainability.

Dyatmika, S. W., & Firdaus, L. M. (2021). the Effect of Price, Service Quality, and Company Image on Purchase Decisions on Jalanjalan. Id Gresik. International Journal of Economics, Business and Accounting Research (IJEBAR), 5(2).

Feinberg, B., & Wooton, I. (2020). The Effect of Price on Purchase Decision with Service Quality as an Intervening Variable (Case Study on American Medical Health and Shop Store).

MEDALION JOURNAL: Medical Research, Nursing, Health and Midwife Participation, 1(3), 114-120.
Kristiawan, Y., Hartoyo, H., & Suharjo, B. (2021). Customer satisfaction: Service quality or product quality (case study at fast food restaurant in Jabodetabek). Binus Business Review, 12(2), 165-176.
Kukanja, M., Planinc, T., & Jakulin, T. J. (2020). RESTAURANT MANAGERS'PERCEPTIONS OF SERVICE QUALITY: THE MEDIATING ROLE OF RESTAURANT SIZE AND SEATING CAPACITY. International Journal for Quality Research, 14(1), 237.
Pakurár, M., Haddad, H., Nagy, J., Popp, J., & Oláh, J. (2019). The service quality dimensions that affect customer satisfaction in the Jordanian banking sector. Sustainability, 11(4), 1113.
Parasuraman, A. (2020). On repositioning customer support services: some food for further thought. European Journal of Marketing, 54(7), 1809-1811.
Ramya, N., Kowsalya, A., & Dharanipriya, K. (2019). Service quality and its dimensions. EPRA International Journal of Research & Development.
Schneider, B., & Bowen, D. E. (1999). Understanding customer delight and outrage. Sloan management review, 41(1), 35-45.
Setiono, B. A., & Hidayat, S. (2022). Influence of Service Quality with the Dimensions of Reliability, Responsiveness, Assurance, Empathy and Tangibles on Customer Satisfaction. International Journal of Economics, Business and Management Research.
Suciptawati, N. L. P., Paramita, N. L. P. S. P., & Aristayasa, I. P. (2019, October). Customer satisfaction analysis based on service quality: case of local credit provider in Bali. In Journal of Physics: Conference Series (Vol. 1321, No. 2, p. 022055). IOP Publishing.
Surucu, L., Yesilada, F., & Maslakci, A. (2020). Purchasing intention: Research on mobile phone usage by young adults. The Journal of Asian Finance, Economics and Business, 7(8), 353-360.
Torres, E. N., Zhang, T., & Ronzoni, G. (2020). Measuring delightful customer experiences: The validation and testing of a customer delight scale along with its antecedents and effects. International Journal of Hospitality Management, 87, 102380.
Torres, E. N. (2014). Deconstructing service quality and customer satisfaction: Challenges and directions for future research. Journal of Hospitality Marketing & Management, 23(6), 652-677.
Umasuthan, H., Park, O. J., & Ryu, J.H. (2017). Influence of empathy on hotel guests' emotional service experience. Journal of Services Marketing. doi:10.1108/jsm06-2016-0220
Wijoyo, H., Suherman, S., & Khiong, K. (2022). Service Quality Pandita Lokapalasraya and Dharmaduta Indonesian Buddhian Assembly. EARR (Educational Administration Research and Review).
Zygiaris, S., Hameed, Z., Ayidh Alsubaie, M., & Ur Rehman, S. (2022). Service quality and customer satisfaction in the post pandemic world: A study of Saudi auto care industry.

APA Citation:

Sundo, A. F. (2024). IMPROVING DINING SERVICE TO FOSTER CUSTOMER DELIGHT IN RESTAURANTS: AN EXAMINATION OF KEY INFLUENTIAL FACTORS. Ignatian International Journal for Multidisciplinary Research, 2(8), 816–834. https://doi.org/10.5281/zenodo.13311177

anaformento975@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

IMPROVING THE READING LEVEL OF GRADE VI GRAPPLING READERS THROUGH PROJECT SEL-P (Strategic Enhancement Learning-Package)

Juvy M. Bataliran, Loida M. Villasin, Dr. Joy SB Gaza

Graduate Studies, University of Nueva Caceres, Naga City, Philippines

https://doi.org/10.5281/zenodo.13584277

ABSTRACT

The main objective of this study is to help build the reading level of the Grade 6 Grappling readers of Maximino S. Lazaro Integrated School through Project SEL-P (Strategic Enhancement Learning-Package), a contextualized reading material crafted by the proponents themselves. The research addressed the following questions: the reading level of the Grade 6 learners before and after the implementation of the intervention, the effectiveness of Project SEL-P in improving the reading level of Grade 6 Grappling readers and the insights gained of the parents and Grade 6 learners on Project SEL-P. Using pre-experimental one group pretest-posttest design, 9 out of 35 learners assessed during the pretest (who scored 0-10 of reading words or Level 1) were selected. Data was collected using the Quick RAP tool developed by the Curriculum Implementation Division (CID) of Masbate Province. Using paired sample T-Test, with 95% confidence level, result shows that there is a significant difference between the pretest scores and posttest scores. Posttest results show that 9 out of 9 learners under the Grappling Level showed significant improvement in their reading level. Seven (7) learners are on Advancing which means that their reading level is on Level 4 while two (2) learners belong to Establishing and/or the reading level is on Level 3. The pupils reading level improve from Level 1 to Level 3 and Level 4 with a descriptive level of Establishing and Advancing. It indicates that learners reading level had improved after the reading intervention. Based on this finding, it is recommended that this study be widely implemented among schools with struggling readers. Embracing this method can lessen non-readers in school. Teachers are advised to benchmark, adopt and adapt this method in reinforcing learner's reading level as it has demonstrated effectiveness in facilitating meaningful reading experience.

Keywords: *Reading Level, Grappling Readers and Strategic Learning Enhancement Package*

INTRODUCTION

Reading plays a vital role in the learning process. It is one of the macro skills of communication that can be correlated to the academic performance of the students. Before the pandemic, it is a common struggle for teachers on how to uplift the reading performance of the pupils. It is indeed taxing for public school teachers to deliver quality education in a new normal setting. These readers require remedial training in skills that they were lacking in earlier grades. For many years, the pupils have been given assignments that are far too tough for them to satisfactorily complete alone. It is no surprise then, that they are scared. Thus, they avoid reading for the most part and have developed maladaptive coping techniques when presented with scholastic responsibilities.

Literature and studies pertaining to the challenges faced by grappling readers in Grade VI illuminate the multifaceted nature of reading difficulties within this demographic. Research indicates that factors such as insufficient vocabulary knowledge, limited fluency, inadequate comprehension strategies, and socio-emotional barriers contribute to the reading struggles experienced by these students (Guthrie et al., 2012; National Center for Education Statistics, 2020). Moreover, the transition to middle school often exacerbates these challenges, as students confront increasingly complex texts and academic expectations (Kamil et al., 2008).

Concurrently, literature exploring the intersection of literacy instruction and Social and Emotional Learning provides compelling evidence for the efficacy of integrated approaches in addressing the needs of struggling readers (Durlak et al., 2011; Elias et al., 1997). SEL frameworks, characterized by their emphasis on self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, offer a holistic lens through which to scaffold literacy development (CASEL, 2020).

By nurturing students' socio-emotional competencies alongside targeted reading instruction, interventions like SEL-P possess the potential to engender enduring improvements in both academic performance and socio-emotional well-being. Lastly, Bonganciso (2016) found out that Contextualized Teaching and Learning's effects on the reading comprehension performance of thirty-three Bachelor of Science in Information Technology students were investigated. The pupils' reading comprehension performance improved significantly from the pretest to the posttest. As a result, when reading activities are contextualized, positive benefits on learners' reading comprehension ability can be seen.

To address literacy issues, reading programs are essentials. Designing a high-quality primary grade reading programs is essentials to ensuring a pipeline of learners who remain in school, achieve educational success, and contribute to economic growth.

As stated in DO 14, s. 2018, the Department of Education (DepEd) supports Every Child a Reader Program, which aims to make every Filipino child a reader and a writer at his/her grade level. Thus, the DepEd through the Bureau of Learning Delivery-Teaching and Learning Division (BLD-TLD) shall continue to administer reading programs in public schools.

Reading success is crucial to academic success. Reading difficulties on the other hand hamper every aspect of a child's academic accomplishment. Thus, early reading is critical. Early reading instruction helps children develop superior reading skills and achieve greater academic success. When children fall behind in reading, they will struggle in other subjects and with schooling. They feel frustrated, lose motivation, and fall further behind, creating a downward spiral (Quimbo, 2021).

The Schools Division Office of Masbate Province launched and implemented different interventions to help improved the reading performance of the learners. Brigada PAGBASA (BP) was one of its intervention as a form of Brigada Eskwela, an after-school reading program in response to Hamon: Bawat Bata ay Bumabasa or DepEd 3B Initiative issued under DM 173, s. 2019. The Brigada Pagbasa program aimed to make every learner a reader by engaging partners and stakeholders to promote the culture of reading. All BE implementers are encouraged to conduct this partnership initiative for reading which serves as a platform to synergize education- related endeavors that immediately addresses literacy and numeracy learning gaps. This reading advocacy served as an avenue for all stakeholders to contribute possible solutions to improve the country's education system, especially in equipping the learners with 21st century skills. This program was religiously done in our school to cater the needs and to lessen the problem of our struggling readers.

Project SAGWAN (Shelve Achievement Gaps thru Wider Academic Networking) was also implemented in the SDO Masbate Province. It is a flagship program of the Curriculum Implementation Division (CID) that aimed to address the existing achievement gaps in literacy and numeracy. SAGWAN in English, PADDLE symbolizes the continued collaborative efforts of the SDO Masbate top management, supervisors, school heads and teachers in sailing with synergy towards the desired performance "port of destination".

Also with the BriGADA BASA (Bridging Generated Assistance from dedicated Advocates for Books Appreciation towards Students' Advancement), it is SDO Masbate reading program that provided various activities for the learners to read and learn while in the comfort of their homes. Parents and stakeholders are empowered to expand support to schools by extending assistance in cash, in-kind and workforce.

Every child deserves a STAR (Support Towards Advancement in Reading) is a program under the umbrella of BriGADA BASA with the following objectives: first is to augment needed intervention of K to 3 learners along reading, second is to address the learning and reading gaps caused by pandemic, third is to help learners of K to 3 meet grade level standards and last is to acknowledge and appreciate the effort of the school reading team and the stakeholders thru proper and recognizable forum.

In every intervention comes with a good result. For us to know the result, SDO Masbate Province implemented the Comprehensive Rapid Literacy Assessment (CRLA) with the partnership of the DepEd Central Office. It was initially conceived as a 5-minute start-up reading assessment designed to help teachers quickly determine the reading profiles of their G1-G3 learners and develop appropriate reading instructional strategies. The main goal of CRLA is to identify children who need additional support for learning.

Also the ABC+ Project was implemented in close collaboration with DepEd and focused on improving outcomes in early literacy, numeracy and socio-emotional learning in the country. USAID, through the ABC+ Project, has been supporting DepEd in implementing innovative approaches to ensure access to a quality education with interventions focusing on improving early reading, math and social and emotional skills for early grade children (kindergarten to grade 3 or K-3) in the Philippines. The said partnership is still on going as of today which as of now, USAID trained teachers on Early Grade Instructional for Multilingual Classrooms.

Based on the Division Memorandum No. 280, s. 2022, all schools in Masbate Province are mandated to utilize and administer the **Q**uick **RAP** (**R**eading **A**ssessment **P**ackage) for Grades 4-6 learners upon the opening of In-person classes for School Year 2022-2023. Quick RAP is an instrument used to assess the reading ability of grades four (4) to grade six (6) in all schools of Masbate Province Division.

This tool is crafted to quickly wrap up the reading aptitude of the learner within a 5-minute duration. The objective of this tool are (1) to determine the reading ability of the learners in grades 4-6 respectively, (2) to measure the learners' reading levels, abilities, disabilities, (3) to bridge the reading and comprehension gaps of the learners, (4) to support the learners' growth in the acquisition of the English language and (5) to utilize the sample remediation and intervention activities provided in the package.

Reading fluency is fundamental for academic development more broadly, the researchers said, because problems with this skill can interfere with students' ability to learn other subjects as they make their way through later grades. Maximino S. Lazaro Integrated School of San Pascual South District conducts regular reading assessment to determine the reading fluency of the learners and provide them with the necessary interventions.

However, the results of Schools Program Implementation Review and Performance Assessment (PIRPA) in terms of Quality of the School Key Performance Indicators indicates that there are non-readers in the intermediate classes and teachers shared sentiments with regards to the reading fluency of their learners. The results provide evidence about the pandemic's impact on learning especially among learners receiving less contact time with the reading teachers and/or subject teachers.

In Maximino S. Lazaro Integrated School, specifically in Grade 6, the learners' literacy rate in English is alarming based on the result of the Beginning of the School Year Administration of the Quick RAP. Quick RAP Administration categorized four reading profiles: LEVEL 1 **Grappling** (If WORDS' score is 0 to 10), LEVEL 2 **Coping** (If WORDS'

score is 11 to 20) LEVEL 3 **Establishing** (If the PHRASES score is 0 to 5) and LEVEL 4 **Advancing** (If PHRASES' score is 6 to 10).

Given the situation of the Grade 6 Grappling Readers in Maximino S. Lazaro Integrated School on literacy, this project aimed to help build the reading level of the grappling readers using the Project **SEL-P** (**Strategic Enhancement Learning-Package**). This project provided reading activities using contextualized reading materials crafted by the proponents themselves.

Research Questions:

This study aims to improve the reading level of the Grade VI Grappling Readers of Maximino S. Lazaro Integrated School, Pinamandayan, San Pascual Masbate Province, School Year 2022-2023.

Specifically, it seeks to answer the following questions:

1. What is the reading level of the Grade VI learners before and after the implementation of the intervention?
2. How effective is Project SEL-P in improving the reading level of Grade VI Grappling Readers of Maximino S. Lazaro Integrated School?
3. What are the insights gained by the Grade VI learners on Project SEL-P?

METHODOLOGY

This section presents the research design, the respondents, the procedure of investigation, the tools used in data gathering, and the statistical tools applied in evaluating effectiveness of contextualized reading package to the reading level of grade 6 learners.

Methods Used

The proponents implemented the Project SEL-P (Strategic Enhancement Learning Package) in Improving Reading level of Grade VI Grappling Readers a contextualized tool kit to help build the reading level of struggling readers. The 9 Grade 6 Grappling readers of Maximino S. Lazaro Integrated School had a 30-minute session from 4:00 to 4:30 for 12 weeks. It started from February 5, 2024 up to April 29, 2024. They have been taught phonemic awareness, alphabet knowledge and decoding through the use of the Contextualized SEL-P. The proponents met with the parents of the identified participants and explained about the research study. The proponent provided the checklist and monitoring tool to see if they were able to keep track of their children (please refer under gathering methods). They met every Friday and in the absence of the proponents, the parents continued their weekly monitoring.

The proponents used the 3 methods for teaching reading by Dr. Orton and Dr. Gillingham, namely:

The Phonics Method

This concerned with helping pupils how to break words down into sounds, translate sounds into letters and combined letters to forms new words. In the beginning, progress maybe slow and reading out loud halting, but eventually the cognitive processes involved in translating between letters and sounds are automatized and become more fluent. The primary focus of phonics instruction is to help readers understand how letters are linked to sounds (or phonemes) to: (1) form letter-sound correspondences and spelling patterns and (2) help them learn how to apply this knowledge to their reading. Phonics instruction may be provided systematically or incidentally. This will be done by the proponents individually or with partners. In this part, the proponents will give the pupils the SEL-P tool for the first 1-3 weeks and allow the child to read on his own. The pupils can bring the provided SEL-P tool to his/her home to read and re-read with the help of guardian.

The Whole-word Method

This teaches reading at the word level. Because it skips the decoding process, pupils were not sounding out words but rather learning to say the word by recognizing its written form. Context was important and providing images can help. Familiar words here may initially be presented on their own, then in short sentences and eventually in longer sentences. In reality, 70-80% of content comprehension is based on knowing the meaning of words (Pressley, M. 2002). The proponents checked and monitored if their vocabulary increases or grow weekly for 3 weeks, because in this part, pupils begun to extract rules and patterns that they can use to read new words. This was strictly monitored by the proponents for 4-8 weeks to check the development of the Grappling readers using the contextualized SEL-P tool.

The Language Experience Method

Fluency is defined as the capacity to read quickly, accurately, and with suitable expression. In this part, pupils were able to read fluently, whether aloud or silently, in order to comprehend what they read. They were monitored by the proponents to determine if there is a significant improvement on the level of reading of the pupils using the contextualized SEL-P tool.

Fluent readers read in sentences and use appropriate intonation while reading aloud. Their delivery was fluid and expressive. Pupils who cannot read fluently have a choppy and unnatural tone to their voice. The remaining 4 weeks was done in this method. Those pupils may struggle with phonetic skills or just need additional practice with reading speed and smoothness. Fluency becomes increasingly critical as readers progress through the grades, as the amount of reading required increases considerably.

The table below showed the week number, reading materials to be read and methods of reading to be done. Reading materials were quality assured by the School

Quality Assurance Team, School Head as the chairman, 1 Master Teacher II as the Vice-Chairman, LR coordinator and reading teacher as the members.

During the validation of the contextualized SEL-P tool, the validators suggested that the contextualized materials should be done considering the context or level of the learners, that's why we used the method of Dr. Orton and Dr. Gillingham which started in the phonics method.

Spiral progression was reinforced in crafting the intervention tools.

Week Number	Reading Materials	Methods of Reading
Week 1	Word Family List	The Phonics Method
Week 2	Word Family List	The Phonics Method
Week 3	Basic Sight Words	The Phonics Method
Week 4	Basic Sight Words	The Whole-word Method
Week 5	Phrases	The Whole-word Method
Week 6	Phrases	The Whole-word Method
Week 7	Sentences	The Whole-word Method
Week 8	Sentences	The Whole-word Method
Week 9	Short Stories	The Language Experience Method
Week 10	Short Stories	The Language Experience Method
Week 11	Short Stories with Comprehension	The Language Experience Method
Week 12	Short Stories with Comprehension	The Language Experience Method

For Quantitative part, the literacy level of the respondents who fall under the Level 1 Profile (Grappling) in terms of Quick RAP reading profile was identified by utilizing the pretest and posttest Quick RAP Tools using the Division automated Class Record and Class Summary Scoresheets.

The proponents analyzed the significant improvement of both the Quick RAP result and Fluency test result by the end of the completion of the intervention by using the T-test which compare the means of two groups.

The T-test was used to determine whether there is a substantial difference between the pupils' pre-test and post-test results. This statistical test also was used to determine whether a process or treatment which is the Innovative Project SELP had effect on the reading fluency of the respondents.

For the Qualitative part, to analyze the data from the interviews during the FGD, transcriptions were used. This involved close observation of data through repeated careful listening (and/or watching). This assisted the proponents in identifying emerging themes. This familiarity with data and attention to what is actually there rather than what is expected can facilitate realizations or ideas which emerge during analysis.

To be able to effectively implement Project SEL-P, close monitoring was done through FGD's and the use of Monitoring Tool for parents. Every Friday during the Focus Group Discussion, the proponents collected the monitoring tool given to the parents ahead of time and each parent was asked of their experience in that particular week. Responses on whether the respondents finish the task for the day and the problems encountered during the session were noted.

Respondents of the Study

The participants of this study who received the 12-week intervention are the nine (9) Grade 6 pupils who belong to the Level 1 (Grappling) in English during the administration of Quick RAP of Maximino S. Lazaro Integrated School, Pinamandayan, San Pascual, Masbate Province, School Year 2022-2023. Purposive sampling was used to identify the respondents. Table 1 shows the frequency distribution and percentage of the participants.

Table 1
Distribution of Participants

Reading Level	Frequency	Percentage
Grappling	9	100%
Total	**9**	**100%**

There were 9 participants identified as grappling level during the pretest of QUICKRAP among grade 6 learners. They are the pupils who had difficulty in decoding words and reading phrases and needs assistance for them to build their reading fluency. Purposive sampling was used to identify the respondents. Table 1 shows the frequency distribution and percentage of the participants.

Data Gathering Tools

The proponents used the pre- experimental one group pretest-posttest design. The dependent variable is measured once before the intervention is implemented and once after the it is implemented.

Before the implementation of the Project SEL-P, the respondent underwent pretest first, after the 12 weeks' implementation, the proponent will conduct posttest to measure if the treatment is really helpful in improving the reading level of the identified respondent.

In gathering data to solve the problem, the proponents used the reading assessment tools such as the Quick RAP (CID, Masbate Province Division) and the Fluency Rubric (modified from Tim Rasinski-Creating Fluent Readers). The proponents utilized the Quick RAP pretest and posttest which will be answered by the respondents before and after the implementation of the Project SEL-P.

The results of the Quick RAP Administration were used to determine if there is a significant improvement on word accuracy and reading aptitude because it was only given a 5-minute duration. The Fluency rubric will also be used to monitor the progress of the fluency of the respondent especially once they have completed the intervention.

After the data were gathered, the proponents used the Quick RAP Class Record and Quick Rap class summary for tabulation and analysis provided by the CID, Masbate Province as data analyzing tool to determine the outcomes of the study.

The proponents gave a *Modified Study Lesson Monitoring Tool for Parents* to provide the parents a checklist to see if they were able to keep track of their children. This also determined whether they able to assist their children with the execution of the intervention. The proponents watched the respondents closely as they attempt to emulate the intervention study guide.

Table 2
Sample Monitoring Tool for Parents

WEEK & SESSION	Did the pupils finish the task for today? Yes or No, if not please leave a comment.	What problem or problems encountered during the session?
Week 1 Session 1 or W1 S1	*No!* *My child has to do his/her assignment in other subject.*	*Time management*

Every Friday, with the presence of the proponents and the parents of the respondents had the Focus Group Discussion**.** Parents' comments on intervention implementation, as well as research difficulties and concerns, were gathered. This is important because the proponents selected whether or not to depart from the intervention study guide that has been created.

After twelve weeks, a posttest along with phonological awareness, alphabet knowledge, decoding, word recognition, reading fluency were conducted to the learners.

Procedure of Investigation

The following were the processes that were observed by the researchers in order to realize the goals of the study.

Conceptualization of the Research Problem. The researcher identified why a study on a particular topic is needed. Since ideas generated were still broad and vague, the researcher had to redefine them. This process included identification and definition of the variables to be studied, development of the theoretical and conceptual framework of the study, formulation of the major and specific problems to be investigated and the formulation of hypothesis.

Approval of PROBE Research Title. Conceptualized study was then presented to the adviser for checking and for further corrections before it was presented to learning supervisor for its approval.

Securing Permit to Conduct the Study. After the approval of the paper, a letter securing permit and MOA from the school head of Maximino A. Lazaro Integrated School was made.

Preparation of the Instrument and Contextualized Reading Material. After the permit was approved, the researcher immediately prepared the data gathering tool based of
the specific problems of the study. And create a contextualized reading material to be used in this research.

Administering and Retrieval of Questionnaires. The tool Quick RAP (CID, Masbate Province Division) and the Fluency Rubric (modified from Tim Rasinski-Creating Fluent Readers) used on the conduct of pretest and posttest. This were distributed personally to the respondents. Also, the monitoring tool for parents were also administered. This facilitated the researchers to answer and clarify questions needing further explanations. Besides, it was an opportunity to interview them. After they were accomplished, they were also collected personally. Hence, the questionnaires were retrieved, coded, tallied, and tabulated in order for appropriate statistical treatment can be applied.

Processing of the Data Gathered. The data were treated using appropriate statistical tools to ensure that correct analysis and interpretation of data be made. Analysis of the Result. The quantified results were placed in tabular form to facilitate

analysis and discussion. The analysis and interpretation were made to answer the specific problems raised in this study.

Writing and Submission of the Manuscript. After completing the data analysis and interpretation, the researcher prepared the manuscript and was submitted to the Learning Supervisor for approval and publication.

Statistical Tools

There were two statistical tools used to treat the data gathered for analysis and interpretation. A statistical software available in the internet was used.

Percentage. This tool was used to determine reading level of the respondents.

Paired sample T-Test. This was used to determine the significant difference between the pretest scores and posttest scores.

RESULTS AND DISCUSSION

This section is a discussion of the results of the study. Data were placed in tabular form to facilitate analysis and discussion.

To address literacy issues, reading programs are essentials. Designing a high-quality primary grade reading programs is essentials to ensuring a pipeline of learners who remain in school, achieve educational success, and contribute to economic growth. As stated in DO 14, s. 2018, the Department of Education (DepEd) supports Every Child a Reader Program, which aims to make every Filipino child a reader and a writer at his/her grade level. Thus, with reference to the said memorandum, a reading intervention was implemented.

A. Reading Level of Grade 6 Learners Before and After the Implementation of Project SEL-P

Several reading interventions were implemented in Maximino S. Lazaro Integrated School but still the existence of struggling readers is evident. For this reason, the proponents implemented the Project SEL-P (**Strategic Enhancement Learning Package**) in Improving Reading Level of 9 Grade 6 Grappling Readers using a contextualized reading learning package to improve English reading fluency of Grade 6 learners.

This study is in line with researches conducted by Bonganciso (2016) who found out that Contextualized Teaching and Learning's effects on the reading comprehension performance of thirty-three Bachelor of Science in Information Technology students were investigated. The pupils' reading comprehension performance improved significantly from the pretest to the posttest.

As a result, when reading activities are contextualized, positive benefits on learners' reading comprehension ability can be seen. Krause et al. (2016) stated that the three principles that support the use of content contextualization: prior knowledge, fostering conceptual change, and boosting metacognition, according to the author.

The table below shows the result before and after the implementation of the project.

Table 3

Reading Level of Learners Before and After the Implementation of the Intervention through Project SEL-P

Learners	**Pretest Score**			**Reading Level**	**Posttest Score**			**Reading Level**
	Words 20	Phrases 10	Sentences 17		Words 20	Phrases 10	Sentences 17	
A	3	2	1	Level 1	20	9	14	Level 4
B	2	3	1	Level 1	20	9	13	Level 4
C	1	3	2	Level 1	20	10	17	Level 4
D	1	2	1	Level 1	20	7	13	Level 4
E	0	2	0	Level 1	19	10	14	Level 4
F	0	1	0	Level 1	19	4	4	Level 3
G	0	2	0	Level 1	20	9	17	Level 4
H	0	1	0	Level 1	18	5	6	Level 3

I	1	2	1	Level 1	20	6	12	Level 4

Table 4
Reading Profile of Learners Before and After the Implementation of the Intervention through Project SEL-P

Learners	Pretest Score (TOTAL SCORE 47)	Reading Profile	Posttest Score (TOTAL SCORE 47)	Reading Profile
A	6	Grappling	43	Advancing
B	6	Grappling	42	Advancing
C	6	Grappling	47	Advancing
D	4	Grappling	40	Advancing
E	2	Grappling	43	Advancing
F	1	Grappling	27	Establishing
G	2	Grappling	46	Advancing
H	1	Grappling	29	Establishing
I	3	Grappling	38	Advancing

The posttest results showed that out of 9 respondents who fall under Grappling or Level 1 during the pre-test, 7 or 77.78% were able to move to Level 4 or Advancing and 2 or 22.44 were able to move to Level 3 or Establishing. These results suggest the effectiveness of the implementation of Project SEL-P in improving the reading level of learners in any grade level and can also be used by other teachers.

As to the pretest result of the Quick RAP Administration for the Academic Year 2022-2023 of Maximino S. Lazaro Integrated School Grade 6 learners, out of 35 learners assessed, 25.71% or 9 are under Grappling; 2.86% or 1 is Coping; 34.29% or 12 are Establishing; and 48.57% or 17 are Advancing.

It was also observed by the teacher during the administration of Quick RAP that learners who fall under Grappling have word recognition problems and discovered that they had problems with consonant blends and consonant digraphs.

They maybe small in number but the results are quite alarming. Quimbo (2021) findings that when children fall behind in reading, they will struggle in other subjects and with schooling. They feel frustrated, lose motivation, and fall further behind, creating a downward spiral. Thus, it is important to assist the learners to improve their reading level.

For this reason, the proponents implemented the Project SEL-P (**Strategic Enhancement Learning-Package**) in Improving Reading Level of 9 Grade 6 Grappling Readers using a contextualized reading learning package to improve English reading fluency of Grade 6 learners. This project is in line with researches conducted by

Bonganciso (2016) who found out that Contextualized Teaching and Learning's effects on the reading comprehension performance of thirty-three Bachelor of Science in Information Technology students were investigated.

The pupils' reading comprehension performance improved significantly from the pretest to the posttest.

As a result, when reading activities are contextualized, positive benefits on learners' reading comprehension ability can be seen. Krause et al. (2016) stated that the three principles that support the use of content contextualization: prior knowledge, fostering conceptual change, and boosting metacognition, according to the author.

For starters, contextualized content training helps learners to use their past knowledge and solve problems more effectively. If topics can be tied to their daily lives, students will remember more knowledge. Second, when content contextualization exercises are participatory and engaging, students are motivated by the concept's relevance, which results in improved learning.

Finally, content contextualization allows students to reflect on their learning by connecting ideas from a familiar tangible context of an abstract thought, allowing them to distinguish their own personal associations with these ideas.

B. Effectiveness of Project SEL-P in Improving the Reading Level of Grade 6 Grappling Readers

Reading tools can be highly effective in improving the reading levels of grappling readers when tailored to their specific needs and implemented in a supportive context or it is within the context of the reader.

The effectiveness of this contextualized SEL-P (Strategic Enhancement Learning-Package) tool was very evident after the 12-weeks of implementation. This helped the grappling readers improved their literacy skills because the package was in accordance with the level of each learner.

During the implementation of this research, identified grappling readers showed progress every week and it was religiously monitored with the use of the monitoring tool and evaluated during the weekly Focus Group Discussion (FGD).

Blasoto and Manzanero (2019) observed the effectiveness of worksheets from tool kits in improving the reading comprehension of pupils. The Group Screening Test (GST) and the Philippine Informal Reading Inventory (PHIL-IRI) show that students' reading performance in Filipino has improved.

Figure 1 below shows the result using paired sample T-test.

Figure 1: Paired Sample T-test Result

```
T-TEST PAIRS=Pre WITH Post (PAIRED)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.
```

T-Test

```
[DataSet0]
```

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest Score	3.44	9	2.128	.709
	Posttest Score	39.56	9	7.038	2.346

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest Score & Posttest Score	9	.641	.063

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Pretest Score - Posttest Score	-36.111	5.904	1.968	-40.650	-31.573	-18.348	8	.000

In this study, the posttest results show that out of 9 learners under the Grappling Level showed significant improvement in their reading level. Seven (7) learners are on Advancing which means that their reading level is on Level 4 while two (2) learners belong to Establishing and/or the reading level is on Level 3. The pupils' reading level improved from Level 1 to Level 3 and Level 4 with a descriptive level of Establishing and Advancing.

It indicates that learners reading level had improved after the reading intervention. If on the pretest they can hardly recognize sounds, in the posttest, they can now read sentences with comprehension through the use of Phonics Methods, Whole- word Method and Language Experience Method.

Using paired sample T-Test, with 95% confidence level, result shows that there is a significant difference between the pretest scores and posttest scores.

The result is supported by the study of Snowling and Hulme (2015) cited in Brooks (2016) proposed that it is possible to help struggling learners' oral language skills through strategies that focus on listening, vocabulary, and narrative skills. Higgins et al, (2017) recommend purposeful speaking and listening activity tools and strategies like giving them; books to read out loud and discussing them, activities to improve and broaden expressive and receptive language skills; collaborative learning where children can share thought processes; and students talking through their writing ideas, before beginning to

write. And Javed et al., (2015) commented that to increase students' comprehension skills, educators must use educational practices that foster critical thinking and pre-reading. Oral language is a crucial component of literacy development at every stage of a child's development. A focus on oral language abilities in early children, particularly those from impoverished families, can help both reading and writing (Educational Endowment Foundation, 2016 & 2017).

The result of this project offers a compelling evidence in favor of three methods of teaching reading by Orton and Dr. Gilllingham technique significantly improve the Grappling Readers of 9 grade 6 learners. The findings unequivocally showed that Grade 6 reading level significantly improved as a direct result of the intervention. Orton and Dr. Gilllingham methods of teaching reading shows to be successful method in promoting reading level, reading comprehension and facilitating meaningful learning experience especially that it had paired with the contextualized learning materials that is within the context of the learners.

After the conduct of interview with the parents as shown on their Monitoring Tool, it was discovered that the parent's collaboration and assistance in teaching listening, repeated, oral and pair reading as their children read the words, phrases and sentences contributed to the increased of reading level of the learners. Snowling and Hulme (2015) cited in Brooks (2016) proposed that it is possible to help struggling learners' oral language skills through strategies that focus on listening, vocabulary, and narrative skills. Higgins et al, (2017) recommend purposeful speaking and listening activity tools and strategies like giving them; books to read out loud and discussing them, activities to improve and broaden expressive and receptive language skills; collaborative learning where children can share thought processes; and students talking through their writing ideas, before beginning to write.

Conclusions

From the foregoing findings, the following conclusions were drawn:

1. It is concluded that teachers and parents' collaboration is important on improving the learners reading level. As DepEd 2021 reiterated teachers, parents, and other reading professional's collaboration foster and measure learners' reading skills.

2. Reading intervention strategies are crucial for supporting struggling readers and helping them improve their literacy skills. As proponents of this intervention, it is essential to reflect on the effectiveness of these strategies in order to make informed decisions about which interventions to implement and how-to best support learners.

3. This project with the support of the parents and school head, resulting in noticeable improvements in their reading level and fluency. From a word reader, they become phrase readers and later became sentence and paragraph readers. The proponents, reading teachers and parents work hand and hand for the successful implementation of Project SEL-P. It is therefore

concluded in this reflection that commitment, passion and perseverance are the most important things to accomplish a task like this.

Recommendations

Based on the conclusions, the following recommendations are offered:

1. It is highly recommended that teachers can adopt the three method of teaching reading by Orton and Dr. Gilllingham coupled with the contextualized learning package as their preferred reading intervention to the struggling learners. By integrating this method to their reading intervention, it can help to effectively uplift the literacy rate and learning loss.

2. School and district-wide can use of this method as part of their reading intervention to improve the reading level of the struggling learners is advocated. Embracing this method can lessen non-readers in school. Teachers are advised to benchmark, adopt and adapt this method in reinforcing learner's reading level as it has demonstrated effectiveness in facilitating meaningful reading experience. The effectiveness of this study was very evident. During the conduct of District Reading Assessment which was done after the last week of the implementation of this research, the assessment resulted that there is no identified non-reader in the Grade 6 class.

3. The perception of reading intervention implementation can vary depending on factors like effectiveness, accessibility and adaptability to individual needs. This intervention greatly helped the grappling readers to improve their reading skills which helped them to move to the next grade level. This greatly implies that the effectiveness of this intervention is evident. Teachers are advised to adopt this intervention to help lessen the struggling readers in the class. However, in contextualizing or crafting reading materials, teachers should consider the level of learners or their materials should be within the context of the learners. Overall, this project helped addressing reading difficulties and improving literacy skills among grappling readers.

4. To ensure their children's success in the intervention, parents must commit themselves to play their roles in the implementation of reading program. Thus, it is recommended to establish teacher-parent partnership to develop their children's love for reading and helped developed their reading skills.

Compliance with Ethical Standards

Prior to the implementation of the intervention, proponents secured parent consent to the child-participants. The proponents informed the beneficiary of the intervention as well as the adviser. Parents were informed of the status of their children in the literacy level that is why they immediately signed the parent consent considering that their

children will benefit the intervention. They fully entrusted the welfare of their children to the proponents provided that due care and precaution will be observed to ensure their safety.

Acknowledgments

This has been a chance of a lifetime experience, and we truly believe that people come into your life for a reason. There are no words to express the “thanks” that we owe to all of you who truly made the learnings and experience we gained a worthwhile.

Our utmost gratitude to our Learning Supervisor Dr. Joy SB Gaza to the technical assistance given to us starting the conceptualization of the PROBE Proposal up to its implementation. She had kept us enlighten throughout our entire endeavor.

Maximino S. Lazaro Integrated School Teaching Staff spearheaded by Sir Pablo S. Reveral for the support and partnership towards the accomplishment of the PROBE Research. He gave us the confidence to believe that we can accomplish our goals.

Ma’am Fina O. Nobleza who undoubtedly extend guidance and serve as our ears and eyes when we can’t attend to class due to internet connection and school’s intervening activities.

To our families for the love and support to our school’s undertakings. They had provided us the inspiration and care for us to accomplish this feat. We couldn’t have done it without them.

Mostly, the one and above all, the omnipresent God, this PROBE Research has been a long but worthwhile journey. We couldn’t realize this without His guidance.

To all of you, a heartfelt and very genuine words, “Thank You!”

J.M.B & L.M.V

REFERENCES

Bongancisco, R. (2016). Effects of contextualization on the reading comprehension performance of Filipino learners. ASIA Pacific Higher Education Research Journal. Volume 3, Issue No. 1. Available from https://www.researchgate.net/publication/310671685

Brooks, G. (2016), What Works for Children with Literacy Difficulties? (fifth edition) Dyslexia- SpLD Trust

CASEL. (2020). 2020 CASEL Guide: Effective Social and Emotional Learning Programs—Preschool and Elementary School Edition**.** Collaborative for Academic, Social, and Emotional Learning.

Deped (2021) DepEd encourages teachers, parents to use Reading Progress Tool to assess learners’ reading skills.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A

meta-analysis of school-based universal interventions. Child Development, 82(1), 405-432.
Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., ... & Shriver, T. P. (1997). Promoting social and emotional learning: Guidelines for educators**.** ASCD.
Education Endowment Foundation. (2016). Improving Literacy in Key Stage One. London: Education Endowment Foundation.
Education Endowment Foundation. (2017). Improving Literacy in Key Stage Two. Guidance Report. London: Education Endowment Foundation.
Educational Endowment Foundation. (2016). Improving Literacy in Key Stage 1**.** Retrieved from https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learning-toolkit/literacy/
Educational Endowment Foundation. (2017). Improving Literacy in Key Stage 2**.** Retrieved from https://educationendowmentfoundation.org.uk/evidence-summaries/teaching-learning-toolkit/literacy/
Guthrie, J. T., Wigfield, A., & Klauda, S. L. (2012). Motivation for reading: Conceptualization, measurement, and behavioral implications. Educational Psychologist, 47(3), 168-189.
Higgins, E., Fitzgerald, J. and Howard, S. (2015). 'Literacy Lift-Off': an experimental evaluation of a reading recovery program in literacy skills and reading self-concept. Educational Psychology in Practice, Vol 31 (3), 247-264.
Javed, M., Eng, L. S. & Mohamed, A. R. (2015). Developing Reading Comprehension Modules to Facilitate Reading Comprehension among Malaysian Secondary School ESL Students. International Journal of Instruction, 8(2), 139-154. https://doi.org/10.12973/iji.2015.8211a
Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T., & Torgesen, J. (2008). Improving adolescent literacy: Effective classroom and intervention practices: A Practice Guide (NCEE #2008-4027). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
Krause, S. J., et al. (2016). Effect of Contextualization of Content and Concepts on Students' Course Relevance and Value in Introductory Materials Classes. American Society for Engineering Education 123rd Annual Conference & Exposition. New Orleans, LA. Paper ID # 14943. Available from Effect of Contextualization of Content and Concepts on Students' Course Relevance and Value in Introductory Materials Classes American Society for Engineering Education (asee.org)
National Center for Education Statistics. (2020). The Condition of Education 2020. U.S. Department of Education, Institute of Education Sciences.
Quimbo (2021) Contextualized English Reading Proficiency Toolkit (CERPT): Enhance Learners' English Reading Proficiency. https://www.intechopen.com/chapters/78938
Phil-IRI Manual (2018). Available from www.deped.gov.ph/
Pressley, M. (2002). Reading instruction that works: The case for balanced teaching**.** Guilford Press.

Snowling, M.J. and Hulme, C. (2015). Evidence-based interventions for reading and language difficulties: Creating a virtuous circle. British Journal of Educational Psychology 81, 1-23.

APA Citation:

Bataliran, J. M., Villasin, L. M., & Gaza, J. S. (2024). IMPROVING THE READING LEVEL OF GRADE VI GRAPPLING READERS THROUGH PROJECT SEL-P (Strategic Enhancement Learning-Package). Ignatian International Journal for Multidisciplinary Research, 2(8), 1699–1718. https://doi.org/10.5281/zenodo.13584277

Corresponding author: *joy.gaza@unc.edu.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

IN-SERVICE TRAINING PROGRAM AND ACADEMIC QUALITY: BASIS FOR TEACHER DEVELOPMENT PLAN

Marivic B. Priolo, Gina F. Labitad, Ph.D.

PHINMA-Cagayan De Oro College, Philippines

https://doi.org/10.5281/zenodo.13150021

ABSTRACT

Academic quality and in-service training are crucial in ensuring effective teaching and learning processes. This study is conducted to determine the teacher's level of in-service training program and academic quality as a basis for the teacher development plan. It aimed to examine the respondents' characteristics, assess the perception of in-service training and academic quality levels, explore the significant relationship between the effect of the in-service training program on the teachers and their observance of academic quality, and determine the significant difference between academic quality and in-service training program. The respondents were the three hundred forty (340) public elementary teachers where the study was conducted. The methods used were descriptive correlational, universal sampling, and the questionnaire was researcher-made. Descriptive statistics such as frequency, percentage, mean and standard deviation were used. Pearson r was used to determine the significant relationship between the teachers' in-service training program and the academic quality. T-test was utilized to test the significant difference in the academic quality when grouped according to their characteristics. Findings reveal that the highest mean score for the in-service training program is associated with values and practices in the professional dimension. On the other hand, the highest mean in academic quality is observed in professional development. Notably, a significant relationship exists between in-service training programs and academic quality. The study also identified significant differences in in-service training programs and academic quality based on teaching position, highest educational attainment, and related training/ seminars attended. It is concluded that this research has highlighted the significant impact of in-service training programs on the enhancement of academic quality, particularly in technological integration and

professional development. It is recommended that teachers should utilize the development plan to improve the academic quality within educational institutions.

Keywords: *in-service training program, academic quality*

INTRODUCTION

Ensuring the effectiveness of teaching and learning processes in an educational system depends on the quality of academic programs and in-service training. It's crucial to create training programs that meet educators' immediate professional demands and promote lifelong learning and ongoing development within the teaching community. Understanding the effects of in-service training on academic excellence is vital for developing a teacher development plan. Scholarly investigations highlight the significance of ongoing professional development for educators in maintaining benchmarks and enhancing instruction quality. Studies indicate that in-service teacher preparation programs correlate positively with student achievement and that factors like professional development, pedagogical techniques, technology integration, academic quality standards, assessment strategies, and learning opportunities impact teacher quality and student outcomes (Siu-Cheung Kong et al., 2022).

In-service training and academic quality are fundamental to providing quality education. Republic Act 10533 mandates globally competitive academic quality based on a sound curriculum. However, the 2018 PISA results show poor performance among Filipino pupils in key literacy domains, implying the need for urgent action to raise academic standards. DepEd Order No. 8, s. 2017, emphasizes the necessity of top-notch teacher education programs to support new teachers in becoming skilled educators. Teacher performance significantly influences the quality of education, impacting student motivation, engagement, and learning outcomes.

DepEd Order No. 32, s. 2011, established guidelines for training and development activities, aiming to set clear expectations for employees and emphasizing the importance of high-quality teacher education programs. Teachers' performance is a key determinant of academic quality, directly affecting student learning outcomes. The Department of Education is actively working on strategies to enhance education quality, as seen in DepEd Order No. 21, s. 2019. The K to 12 program's implementation enhanced academic quality through technological integration, equipping students with critical thinking, communication, and technological abilities.

Improving academic quality requires a multifaceted approach, focusing on academic performance and other factors affecting learning outcomes. Initiatives like in-service training (Ashraf et al., 2023) are essential for academic success. This is a primary goal of the Division of Bukidnon and crucial for the teacher development plan. DepEd Order No. 42, s. 2017, highlights the importance of professional standards in teachers' advancement and ongoing development. Creating a teacher development plan is essential to raise

academic standards, provide quality education for Filipino children, help them compete globally, and equip them with lifelong learning skills.

This study investigates the effects of in-service training programs on academic quality in the Schools Division of Bukidnon, specifically in the Pangantucan Districts. By identifying teachers' diverse needs and aligning them with established educational standards and best practices, the research aims to enhance education quality in the district.

Research Questions

1. How are the respondents' characterized in terms of age, sex, position, highest educational attainment, related trainings/ seminars attended?
2. What is the level of the teachers' in-service training program considering professionalism dimensions: knowledge, skills, values and practices; and pedagogical components: competence and needs assessment, designing, resources delivery and learning evaluation?
3. What is the level of teachers' academic quality with regard to standards, assessment strategies, technological integration, pedagogical techniques
and professional development?
4. Is there a significant relationship between the teachers' in-service training program and the academic quality?
5. Is there a significant difference in the teachers' academic quality when grouped according to their characteristics?
6. Based on the findings of the study, what teacher's development plan on teacher in-service training program can be designed?

METHODOLOGY

Research Design

This research employed a descriptive survey research method, utilizing a descriptive design to gather data and information about current situations and conditions, which is suitable for teachers' training for academic quality and is the basis for the teacher development plan. This method demands data gathering, tabulating, and computation and involves the analysis and interpretation of the gathered data (Fluet, 2020). Furthermore, this research was descriptive since it attempts to find whether the independent variables, such as the in-service training and its academic quality.

Study Setting

This study was conducted in the Pangantucan District, which is well-known for its commitment to BASA Pangantucan implementation in the Division of Bukidnon. An annual celebration is organized to promote academic quality among the schools, which is essential for the holistic development of every learner, aligning with the broader goal of

enhancing educational quality in the division as well as the teaching performance of the teachers.

The Division of Bukidnon in the Province of Bukidnon, Philippines, serves as the research setting for teachers' training in academic quality. This diverse educational division houses a variety of schools and students and is a microcosm of the broader Philippine education system. The research aims to assess and improve academic quality through teachers' training. This research is important, as its findings have the potential to not only enhance the quality of education in every school but also inform education policies and practices at the national level.

The Division of Bukidnon offers a unique backdrop for teachers' training in academic quality and teaching performance. The outcomes of this research can positively impact the local educational landscape, contribute to the improvement of the broader Philippine education system, and highlight the contributions of effective teachers and school heads, leading to professional recognition and career advancement opportunities.

In this study, public schools in the district of Pangantucan, from elementary schools, were included in the research. This comprehensive sampling strategy ensured that data would be gathered from every public school within the specified district, providing a representative and inclusive sample.

Research Respondents

The respondents were the three hundred forty (340) elementary school teachers from Pangantucan District, Pangantucan North, Pangantucan South, and Pangantucan West, for the School Year 2023-2024.

The researcher adhered to the proper protocol by obtaining a recommendation letter from the Dean of the School of Graduates and Professional Studies at PHINMA-Cagayan De Oro College. Subsequently, a letter co-signed by the researcher and her adviser requesting permission to distribute the questionnaire within the Division of Bukidnon was forwarded to the Schools Division Superintendent, for approval. Upon receiving approval, the researcher submitted a formal request to the School Heads, seeking permission for the teachers of their respective schools to participate in the study. The researcher emphasized voluntary participation and assured respondents of the confidentiality of their responses. Data collection commenced using survey questionnaires, with questionnaires typically taking 20-30 minutes to complete.

Sampling Technique

The universal sampling procedure was employed in this study where all elementary school teachers in the population were involved. The respondents included all teachers from elementary schools. To ensure that every teacher in the Pangantucan District can be included in the study, contributing to the universality of the sample selection.

Subsequently, the data were collected and analyzed from these selected teachers, allowing them to draw meaningful conclusions based on the research objectives.

Research Instruments

The research questionnaire was designed to gather valuable insights into the in-service training program and academic quality in the Pangantucan District Division of Bukidnon. The researcher-made instrument was used. The questionnaire is divided into three parts:

The first part of the questionnaire deals with the respondents' characteristics in terms of age, sex, position, highest educational attainment, length of service, and training/ seminars attended on in-service training program.

The second part of the questionnaire deals with in-service training, considering the professionalism dimension in terms of knowledge, skills, values, and practice and pedagogical components in terms of competence and needs assessment, designing, resource delivery of the program, and learning evaluation. A researcher-made questionnaire was used.

The last part of the questionnaire measures academic quality in terms of the following standards: assessment strategies, technological integration, pedagogical techniques, and professional development.

This research employed a descriptive survey research method, utilizing a descriptive design to gather data and information about current situations and conditions, which is suitable for teachers' training for academic quality and is the basis for the teacher development plan.

Validity and Reliability of Instrument

In this study, a researcher-made instrument was utilized. The instrument was tried out to thirty (30) public elementary school teachers who were not part of the respondents at Pangantucan North district on April 4, 2024. They were tried out but did not participate in the actual conduct of the study. It was done to ensure that the questionnaire is simple, easily administered, and adequate in collecting the needed data. This was done to obtain accurate and reliable data in the procedure of investigation. The result of the validation was good since there were no questions about the instrument.

As to the reliability of the questionnaire, Cronbach's alpha was used to measure the reliability scale; the questionnaire demonstrated high internal consistency with a result of .893. Cronbach's alpha coefficient was obtained using SPSS software. Analysis of the data indicates that all items from respondents' characteristics, in-service training program and academic quality range from "excellent" to "good" This procedure suggests that the instrument in suitable in the data gathering.

Data Gathering Procedure

The researcher adhered to the proper protocol by obtaining a recommendation letter from the Dean of the School of Graduates and Professional Studies at PHINMA-Cagayan De Oro College. Subsequently, a letter co-signed by the researcher and her adviser requesting permission to distribute the questionnaire within the Division of Bukidnon was forwarded to the Schools Division Superintendent, for approval. Upon receiving approval, the researcher submitted a formal request to the School Heads, seeking permission for the teachers at their respective schools to participate in the study. The researcher emphasized voluntary participation and assured respondents of the confidentiality of their responses. Data collection commenced using survey questionnaires, with questionnaires typically taking 20-30 minutes to complete.

In gathering data, the researcher floated questionnaires in every school in Pangantucan Districts in the Division of Bukidnon. The questionnaires were distributed to the teachers in every school who participated in the study and retrieved after a day they answered the questionnaire. After the questionnaires were collected, it was tallied, analyzed and interpreted accordingly.

Statistical Treatment of Data

The following statistical tools were used in the analysis and interpretation of data. Descriptive statistics such as frequency, percentage, mean, and standard deviation were employed to answer Problem 1 and to describe the variables in this study. For Problems 2 and 3, mean and standard deviation was utilized. For Problem 4 on the significant relationship between the opportunities and challenges in the utilization of ICT, Pearson Product Moment of Correlation was used. For Problem 5, on the significant difference in the respondent's opportunities and challenges in the utilization of ICT and their characteristics, the T-test and F-test were employed.

This study focused on the teachers' in-service training program and academic quality in the Pangantucan North District for the School Year 2023- 2024. The respondents were the three hundred forty (340) public elementary school teachers in the schools where this study was conducted. The study focused on understanding the current state of in-service training and academic quality with the intention of proposing a development plan to improve the academic quality among learners.

The independent variables are limited to in-service training, specifically the professionalism dimension and pedagogical components. Indeed, the dependent variables are the academic quality of standards, assessment strategies, technological integration, pedagogical techniques, and teacher professional development.

RESULTS AND DISCUSSION

Research Question 1. How are the respondent's characteristics distributed in terms of age, sex, position, highest educational attainment, and related trainings/seminars attended?

Table 1 Distribution of Respondents' Characteristics

Variables	Category	Frequency	Percentage
Age	41 years old and above	119	35.00
	31-40 years old	133	39.12
	21-30 years old	88	25.88
	Total	**340**	**100**
Sex	Male	64	18.82
	Female	276	81.18
	Total	**340**	**100**
Position	Master Teacher II	24	7.06
	Master Teacher I	25	7.35
	Teacher III	58	17.06
	Teacher II	98	28.82
	Teacher I	135	39.71
	Total	**340**	**100**
Highest Educational Attainment	Doctorate Degree holder	13	3.82
	With Doctorate Degree Units	34	10.00
	Master's Degree Holder	49	14.41
	With master's degree Units	161	47.35
	Baccalaureate Degree	83	24.41
	Total	**340**	**100**

Table 1 presents the distribution of the respondents according to age. The data revealed that 133 (39.12%) belonged to the 31 to 40-year-old category, which obtained the highest frequency. This means that the dominance of 31- to 40-year-old teachers in the respondent poll suggests a high presence of educators in their prime professional years. This age bracket typically represents a stage where educators have accumulated substantial experience, possibly striking a balance between enthusiasm and maturity in their teaching practices.

This implies that academic institutions should recognize the importance of catering to educators' specific needs and aspirations in the 31- to 40-year-old category. Tailored professional development programs, mentorship opportunities, and career advancement

pathways can be instrumental in harnessing the potential of this demographic segment to drive positive change and innovation in education.

This finding holds true to the study Mehta et al. (2020) that individuals between the ages of 31 and 40 often experience a period of career consolidation and advancement, during which they seek opportunities for professional growth, skill development, and leadership roles. Moreover, the study highlighted the importance of work-life balance and family considerations among individuals in this age group as they navigate the demands of both their careers and personal lives.

On the other hand, data revealed that out of 340 respondents, 88 (25.88%) of the respondents were 21-30 years old, which was the lowest frequency. This means that the respondent pool's lower frequency of 21 to 30-year-old teachers indicates a relatively smaller representation of early-career educators within the sample. This age group often comprises newer individuals, possibly in the initial stages of their teaching careers, and may still be gaining experience and refining their pedagogical skills.

Arnett (2020) highlighted that individual in the 21- to 30-year-old category often experience a period of exploration, identity formation, and transition as they navigate various life domains, including education, career, relationships, and personal values. Moreover, the study emphasized the importance of understanding young adults' unique challenges and opportunities in this developmental stage.

Further, the same table presents the distribution of the respondents according to sex. The data revealed that 276 (81.18%) belonged to the female category, which obtained the highest frequency. Female teachers bring valuable perspectives, skills, and experiences to the classroom, contributing to the diverse and inclusive learning environments essential for student success. Acknowledging and leveraging the strengths of female educators can lead to enhanced teaching practices, improved student outcomes, and a more equitable education system. The dominance of female teachers may reflect societal trends and historical patterns in the recruitment and retention of women in the education sector. Women have traditionally played a significant role in education, and their presence in teaching positions may align with cultural expectations and the nurturing and empathetic qualities often associated with female educators.

This finding is in consonance with that of Topchyan et al. (2021) that female teachers play a vital role in shaping educational practices and student outcomes. Their research highlighted the unique contributions of female teachers, including their nurturing and empathetic teaching styles, ability to create inclusive and supportive learning environments, and commitment to social justice and equity in education. Additionally, the study underscored the importance of valuing and supporting the diverse perspectives and experiences that female teachers bring to the profession.

On the other hand, data revealed that out of 340 respondents, 64 (18.82%) of the respondents were male, which was the lowest frequency. It implies a need for greater attention to gender diversity and inclusivity within the teaching workforce. Institutions and

educational organizations should work towards creating environments that encourage men to enter and remain in the teaching profession, addressing any barriers or biases that may discourage their participation. As observed, the lower frequency of male teachers among the respondents indicates a smaller representation of men within the surveyed population.

This suggests a potential gender disparity within the teaching profession, with fewer men than women participating in the study. This finding corresponds with the study of McGrath et al. (2019) that while male teachers represent a minority within the teaching profession, they are crucial in serving as positive male role models for students, particularly those from diverse or disadvantaged backgrounds. Moreover, the study emphasized the importance of promoting greater gender diversity in the teaching workforce to reflect student populations' diversity better and address gender-related stereotypes and biases.

Moreover, the same table presents the distribution of the respondents according to teaching position. The data revealed that 135 (39.71%) belonged to the Teacher 1 category, which obtained the highest frequency. This indicates that many educators hold this position within the surveyed population. It suggests that Teacher 1 is the most common teaching position among the respondents, reflecting its prevalence within the educational system. As perceived, the dominance of Teacher 1 positions may indicate a hierarchical structure within the teaching profession, where individuals typically start their careers at this level before advancing to higher positions. It may also suggest a larger pool of entry-level teachers than more senior or specialized professional roles.

This finding is congruent with the study of Bardelli et al. (2022) that the effectiveness of Teacher 1 is influenced by various factors, including their prior preparation, classroom assignments, and school working conditions. Additionally, the study underscored the role of school leadership in creating a supportive and conducive environment for the professional growth and success of the Teacher 1 category.

On the other hand, data revealed that out of 340 respondents, 24 (4.06%) of the respondents were Master Teacher II, which obtained the lowest frequency. It implies that Master Teacher II positions may represent a level of mastery and excellence in teaching, with individuals in this role serving as exemplary educators and leaders within their respective schools or districts. They may play key roles in providing guidance, mentorship, and professional development support to other teachers. As observed, the lowest frequency of Master Teacher II positions among the respondents indicates a relatively small representation of educators holding this rank within the surveyed population. It suggests that Master Teacher II is a less common teaching position than others, reflecting its rarity or exclusivity within the educational system.

According to Urbán and Szivák (2022) and Chieng (2024), Master Teachers, regardless of specific designations, typically possess extensive subject matter expertise, pedagogical knowledge, and instructional strategies that contribute to enhanced student learning outcomes. Their research emphasizes the importance of mentorship,

collaboration, and continuous professional development in cultivating master teachers and supporting their ongoing growth and effectiveness.

Furthermore, studies on teacher leadership by Kamaruzaman, Musa and Hashim (2020) shed light on the roles and responsibilities of master teachers in instructional leadership, professional development, and school improvement efforts. These studies highlight the influence of master teachers in mentoring and coaching colleagues, leading professional learning communities, and promoting a culture of collaboration and innovation within educational settings.

Another from the same table is the distribution of the respondents according to highest educational attainment. The data revealed that 161 (47.35%) belonged to the master's degree unit's category, which obtained the highest frequency. It implies a potential correlation between higher educational attainment among teachers and the quality of education delivered. Teachers with advanced degrees or units may possess deeper subject matter knowledge, pedagogical skills, and research capabilities, which can positively impact student learning experiences. As observed, many teachers have master's degree units, indicating a trend towards higher education attainment within the teaching profession. It suggests a commitment to professional development and a desire to enhance expertise in their fields.

A study by Losada et al. (2021) examined the structure and content of master's degree programs across various disciplines. The research highlighted the diverse range of master's degree units offered by institutions, including core courses, electives, research seminars, and practicum experiences. Moreover, the study emphasized aligning master's degree units with program goals, student interests, and professional standards to ensure meaningful and relevant learning experiences. Furthermore, a meta-analysis by Dunst et al. (2020) synthesized findings from multiple studies on the effectiveness of master's degree programs in preparing graduates for career advancement and professional success. The meta-analysis revealed that master's degree units, when designed and delivered effectively, contribute to developing advanced knowledge, skills, and competencies in specialized fields. Additionally, the study identified factors such as faculty expertise, instructional methods, and program coherence as critical for optimizing the impact of master's degree units on student learning outcomes.

Furthermore, data revealed that out of 340 respondents, 13 (7.06%) of the respondents were doctorate holders, which obtained the lowest frequency. As observed, a relatively small proportion of teachers in the sample hold doctorate degrees, indicating that attainment of the highest level of academic qualification within the teaching profession is less common than those with master's degrees or units. The low frequency of doctorate holders among teachers may reflect various factors such as limited opportunities for doctoral study, financial constraints, or career preferences. It may also suggest that while advanced degrees are valued, pursuing a doctorate is not as prevalent or accessible within the teaching profession.

A comprehensive study by McAlpine et al. (2020) investigated doctorate holders' experiences and career paths across different fields and disciplines. The research highlighted the diverse range of roles and responsibilities of doctorate holders, including faculty, research positions in industry and government, and leadership roles in academia and beyond. Moreover, the study emphasized the importance of doctoral education in developing advanced expertise, critical thinking skills, and research competencies that are highly valued in the workforce.

This supports the meta-analysis by Healy et al. (2020) from multiple studies on the outcomes and impact of doctoral education on graduates' careers and professional development. It revealed that individuals with doctorate degrees often experience positive career outcomes, including higher earning potential, greater job satisfaction, and increased opportunities for leadership and advancement. Additionally, the study identified factors such as research productivity, professional networking, and mentorship as critical for maximizing the career benefits of doctoral education.

Research Question 2. What is the level of the teachers' in-service training program considering the professionalism dimensions: knowledge, skills, values and practices; and pedagogical components: competence and needs assessment, designing, resources delivery and learning evaluation?

Table 2.1 Summary of the Respondents' Level of In-service Training Program on Professionalism Dimension

Variables	Mean	SD	Interpretation
Knowledge	3.13	0.65	High
Skills	3.11	0.71	High
Values and Practices	3.57	0.71	Very High
Overall	**3.27**	**0.69**	**Very High**

Legend: 3.26-4.00 At all Times / Very High
2.51-3.25 Most of the Time/High
1.76-2.50Sometimes/Low
1.00-1.75 Never/ Very Low

Table 2 shows the summary of responses on the level of the in-service training program on the professionalism dimension with an overall mean of 3.27 (SD = 0.69), interpreted as very High. It means a strong commitment from educational institutions to support the ongoing professional development of educators in professionalism. The positive interpretation of the overall mean suggests that these institutions prioritize providing high-quality training programs that address key aspects of professionalism, such as ethical conduct, communication skills, and professional growth. As perceived from this interpretation, there is a prevailing perception among respondents that the in-service training programs on the professionalism dimension are highly effective and beneficial. It implies that educators value and appreciate the opportunities these training programs provide to enhance their professionalism and effectiveness in their roles.

According to Cochran-Smith et al. (2021), the professional dimension of teacher professionalism represents a comprehensive framework encompassing various competencies critical for effective teaching. The authors highlight that teachers are expected to possess diverse competencies within the professional dimension. These include pedagogical knowledge, instructional strategies, curriculum design, and assessment practices. Additionally, they emphasize the importance of reflective practice, whereby teachers analyze and evaluate their own teaching methods and outcomes to inform continuous improvement.

In line with this, the variable values and practices in the professional dimension got the highest mean of 3.57 (SD = 0.71), interpreted as High. It means that respondents highly prioritize and endorse professional values and practices contributing to their effectiveness and success in their respective roles. The high mean score indicates a strong consensus among respondents regarding the importance and impact of professional values and practices on their professional development and performance. As perceived, the high mean score reflects a collective recognition among respondents of the significance of upholding professional standards, ethics, and behaviors in their daily practice. This underscores the importance of maintaining integrity, professionalism, and ethical conduct in respondents' professional endeavors.

The study by Trujillo et al. (2021), delves into the critical aspect of aligning the values and practices within in-service training programs with the evolving needs of educators and the demands of the educational landscape. It meticulously examines the factors influencing educators' perceptions of program values and practices, shedding light on the implications for professional development outcomes. In their investigation, they likely employed mixed methods approaches, including surveys, interviews, or focus groups, to gather data from educators participating in various in-service training programs. Through these methodologies, they would have explored educators' perspectives on the values and practices embedded within the training programs and how these elements align with their professional needs and the broader educational context.

On the other hand, the variable Skills in Professional Dimension got the lowest mean of 3.11 (SD = 0.71), interpreted as High. It means a foundation of proficiency in key professional skills among educators. While the mean may be lower than other variables, the positive interpretation suggests that educators generally feel confident in their abilities to uphold professional standards and effectively fulfill their responsibilities. As perceived from this interpretation, there is a prevailing sense among respondents that they possess satisfactory skills in the professional dimension. This implies a baseline level of competence among educators in areas related to professionalism, such as communication, collaboration, and ethical conduct.

According to Havea and Mohanty (2020), skills within the professional dimension of teacher professionalism encompass the ability to enact ambitious and equitable teaching practices that effectively support student learning and development. Also, Havea and Mohanty delve into the intricate relationship between teacher knowledge, skills, and classroom practices, shedding light on the essential role of pedagogical expertise in

fostering positive educational outcomes. The authors emphasize that skills within the professional dimension extend beyond mere instructional techniques and strategies. Instead, they underscore the importance of teachers possessing the capacity to design and implement learning experiences that are rigorous, meaningful, and equitable for all students. This involves creating classrooms fostering critical thinking, inquiry, and collaboration, empowering students to engage deeply with content, and developing essential skills for success in school and beyond.

Table 2.2 Summary of the Respondents' Level of In-service Training Program on Pedagogical Components

Variables	Mean	SD	Interpretation
Competence and Needs Assessment	3.16	0.71	High
Designing	3.27	0.74	Very High
Resources Delivery of the Program	2.70	0.76	High
Learning Evaluation	2.85	0.72	High
Overall	**3.00**	**0.73**	**High**

Legend: 3.26-4.00 At all Times / Very High 1.76-2.50Sometimes/Low
2.51-3.25 Most of the Time/High 1.00-1.75 Never/ Very Low

Table 2.2 summarizes the respondents' level of in-service training programs on pedagogical components with an overall mean of 3.00(SD = 0.71), interpreted as High. It means a commitment from educational institutions to support the ongoing professional development of educators in pedagogical areas. The high interpretation of the overall mean suggests that these institutions prioritize providing high-quality training programs that address key aspects of pedagogy, such as competence and needs assessment, designing, resources delivery of the program, and learning evaluation. As perceived from this interpretation, respondents have a prevalent perception that the in-service training programs on pedagogical components are beneficial and effective. It implies that educators value and appreciate the opportunities these training programs provide to enhance their pedagogical skills and instructional practices.

According to Darling-Hammond (2019), pedagogical components are the cornerstone of in-service training programs to bolster teacher effectiveness. Their research delves into the intricate facets of teacher learning, highlighting the pivotal role of instructional strategies, curriculum development, and assessment practices in shaping teaching quality and student learning outcomes. The study underscores the significance of pedagogical knowledge and skills in equipping educators with the necessary tools to navigate the complexities of the classroom environment effectively. By focusing on instructional strategies, teachers can employ diverse teaching methods tailored to meet the diverse needs of their students. Furthermore, attention to curriculum development ensures educators access relevant and engaging instructional materials aligned with educational standards and student learning objectives.

In line with this, the variable, designing in pedagogical components, got the highest mean of 3.57 (SD = 0.71), interpreted as Very High. It means that respondents highly prioritize and endorse professional values and practices contributing to their effectiveness and success in their respective roles. It indicates a strong consensus among respondents regarding the importance and impact of professional values and practices on their professional development and performance. As perceived, the high mean score reflects a collective recognition among respondents of the significance of upholding professional standards, ethics, and behaviors in their daily practice. This underscores the importance of maintaining integrity, professionalism, and ethical conduct in respondents' professional endeavors.

According to Trujillo et al. (2021), the study delves into the critical aspect of aligning the values and practices within in-service training programs with the evolving needs of educators and the demands of the educational landscape. Their study meticulously examines the factors influencing educators' perceptions of program values and practices, shedding light on the implications for professional development outcomes. In their investigation, they likely employed mixed methods approaches, including surveys, interviews, or focus groups, to gather data from educators participating in various in-service training programs. Through these methodologies, they would have explored educators' perspectives on the values and practices embedded within the training programs and how these elements align with their professional needs and the broader educational context.

On the contrary, the variable, resources delivery of the program in pedagogical components, got the lowest mean of 2.70 (SD = 0.76), interpreted as High. This means a potential opportunity for enhancing the delivery of resources in pedagogical components. Despite the positive interpretation, there may still be areas where the delivery of resources can be improved to meet the needs and preferences of educators better. This could involve providing a wider range of resources, offering more tailored support, or improving accessibility to resources. As perceived from this interpretation, there is a prevailing sense among respondents that the resources delivered as part of the program in pedagogical components are satisfactory. This implies that while there may be areas for improvement, educators generally find the resources adequate for supporting their professional development in pedagogical areas.

Sarder and Haider (2023) emphasized the critical role of effective resource delivery in maximizing the impact of pedagogical components within educational settings. Their research underscores the importance of strategic resource allocation and utilization to support teachers in implementing effective teaching practices and ultimately enhance student engagement and achievement. The study delves into various strategies and approaches to optimize resource delivery. This may include ensuring equitable access to instructional materials, technology tools, professional development opportunities, and support services for educators. Educational institutions can create conducive learning environments where pedagogical innovations can thrive by providing teachers with the necessary resources and support.

Research Question 3. What is the level of teachers' academic quality with regard to standards, assessment strategies, technological integration, pedagogical, techniques and professional development?

Table 3 Summary of the Respondents' Level of Academic Quality

Variables	**Mean**	**SD**	**Interpretation**
Standards	3.14	0.81	High
Assessment Strategies	3.17	0.83	High
Technological Integration	2.81	0.75	High
Pedagogical Techniques	3.08	0.79	High
Professional Development	3.20	0.78	High
Overall	**3.08**	**0.79**	**High**

Legend: 3.26-4.00 At all Times / Very High
2.51-3.25 Most of the Time/High
1.76-2.50Sometimes/Low
1.00-1.75 Never/ Very Low

Table 3 shows the summary of the respondents' level of academic quality with an overall mean of 3.08 (SD = 0.79), interpreted as High. This means that respondents value the alignment of academic practices with established standards, the effectiveness of assessment strategies in evaluating student learning, the integration of technology to support teaching and learning, the adoption of innovative pedagogical techniques, and the provision of meaningful professional development opportunities. The positive mean score reflects a collective perception among respondents of the overall quality and effectiveness of their academic programs and practices in meeting educational objectives and promoting student success.

The overall mean suggests that respondents generally perceive academic quality across various dimensions, including following standards, assessment strategies, technological integration, pedagogical integration, and professional development, favorably. This indicates moderate to high satisfaction among respondents with the quality of their academic programs and institutional practices.

According to a study by Johnson et al. (2019), assessing academic quality requires a comprehensive approach considering multiple dimensions, including curriculum relevance, learning resources, faculty expertise, and program outcomes. By systematically evaluating these aspects, institutions can identify areas for improvement and implement evidence-based practices to enhance academic quality and student success.

Moreover, a meta-analysis by Wong et al. (2023) synthesized findings from multiple studies on academic quality assessment and its impact on student learning outcomes.

The meta-analysis revealed that educational quality is positively associated with student engagement, satisfaction, and retention rates.
Additionally, the study identified key indicators of academic quality, such as faculty-student interactions, rigorous academic standards, supportive learning environments, and effective student support services.

In line with this, the variable, professional development, got the highest mean of 3.20 (SD = 0.78), interpreted as High. This means that respondents place significant value on professional growth and development opportunities within their academic institutions. This indicates a recognition among respondents of the importance of continuously improving skills, knowledge, and competencies to enhance their effectiveness as educators and professionals. As perceived, the positive interpretation of the mean score reflects a collective understanding among respondents of the benefits of engaging in professional development activities. It suggests that respondents perceive professional development as essential for staying current with industry trends, improving teaching practices, and advancing their careers.

According to a Williams et al. (2020), study, professional development effectiveness aligns learning opportunities with teachers' instructional goals and needs. Initiatives tailored to address specific challenges and support teachers in achieving their professional goals are more likely to yield positive outcomes. By focusing on the highest variable of alignment, educators can maximize the impact of professional development on their practice and student learning.

On the other hand, the variable, technological integration, got the lowest mean of 2.81 (SD = 0.75), interpreted as High. This means that respondents recognize the importance of technology in education, but the mean score indicates that there may be challenges or limitations to fully integrating technology into academic practices. It could include technological access, training opportunities, or institutional support for technological initiatives. As perceived, the positive interpretation of the mean score reflects a recognition among respondents of the potential benefits of technological integration in education. However, it also suggests that barriers or obstacles may hinder more extensive adoption and effective use of technology within the academic setting.

Turugare et al. (2020) explored the factors influencing teachers' technology integration into their instructional practices. The research highlighted that technological integration is influenced by various factors, including teachers' beliefs and attitudes toward technology, their perceived competence in using technology, the availability of technological resources, and the support provided by school administrators and colleagues. Moreover, the study emphasized the importance of teacher professional development in building capacity and confidence for effective technological integration in the classroom.

Research Question 4. Is there a significant relationship between the level of in-service training program and academic quality?

Table 4 Result of the Test on Relationship between the Respondents' In-service Training Program and Academic Quality

Respondents In-service Training Program	Respondents Academic Quality					
	Standards	**Assessment Strategies**	**Technological Integration**	**Pedagogical techniques**	**Professional Development**	**Overall**
	r-value p-value	r-value p-value	r-value p-value	r-value p-value	r-value p-value	r-value p-value
Professionalism Dimension Knowledge	0.63 **0.0243*** **S**	0.43 **0.0469*** **S**	0.87 **0.0164*** **S**	0.19 **0.0480*** **S**	0.83 **0.0205*** **S**	**0.59** **0.0312*** **S**
Skills	0.32 0.1609 NS	0.57 0.0597 NS	0.93 **0.0486*** **S**	0.63 0.2450 NS	0.77 0.1006 NS	**0.64** **0.1229** **NS**
Values and Practices	0.43 **0.0286*** **S**	0.76 **0.0476*** **S**	0.77 **0.0186*** **S**	0.15 0.3209 NS	0.76 **0.0380*** **S**	**0.57** **0.089** **NS**
Pedagogical Components Competence and Needs Assessment	0.43 0.1769 NS	0.75 0.3076 NS	0.86 **0.0159*** **S**	0.67 0.3064 NS	0.73 **0.0328*** **S**	**0.69** **0.1679** **NS**
Designing	0.57 0.1760 NS	0.73 0.0504 NS	0.84 0.1690 NS	0.64 0.0571 NS	0.84 0.0998 NS	**0.72** **0.1105** **NS**
Resources Delivery of the Program	0.91 **0.0369*** **S**	0.90 0.1540 NS	0.65 **0.0176*** **S**	0.54 0.1784 NS	0.56 **0.0156*** **S**	**0.71** **0.0805** **NS**
Learning Evaluation	0.89 0.2380 NS	0.76 0.0569 NS	0.29 **0.0158*** **S**	0.76 0.1659 NS	0.76 **0.0134*** **S**	**0.69** **0.098** **NS**
Overall	**0.54** **0.1202** **NS**	**0.70** **0.1038** **NS**	**0.74** **0.0431*** **S**	**0.51** **0.1888** **NS**	**0.75** **0.0468*** **S**	**0.66** **0.100** **NS**

Legend: S – Significant at p<0.05 **S- Not Significant**

Table 4 shows the correlation coefficients (r-values) and p-values of the relationship between the in-service training program and their level of academic quality in terms of standards, assessment strategies, technological integration, pedagogical techniques, and professional development. The test was utilized to investigate whether a statistically significant relationship existed between the in-service training program and their level of academic quality.

The data illustrate the significant relationship in the knowledge in professional dimension with standards (r-value = 0.63 and p-value = 0.0243*), assessment strategies (r-value = 0.43 and p-value = 0.0469*), technological integration (r-value = 0.87 and p-value = 0.0164*), pedagogical techniques (r-value = 0.19 and p-value = 0.0480*), and

professional development (r-value = 0.83 and p-value = 0.0205*). In the values and practices in the professional dimension with standards (r-value = 0.43 and p-value = 0.0286*), assessment strategies (r-value = 0.76 and p-value = 0.0476*), technological integration (r-value = 0.77 and p-value = 0.0186*), and professional development (r-value = 0.76 and p-value = 0.0380*). As perceived, these significant relationships underscore the multifaceted nature of effective teaching and the interconnectedness between different dimensions of teacher professionalism, as evidenced by p-values less than 0.05.

Further, these findings have important implications for teacher education and professional development programs. They highlight the need to provide pre-service and in-service teachers with opportunities to develop both their professional knowledge and their values and practices. By fostering a strong foundation in educational theories, subject matter expertise, and pedagogical content knowledge, while also cultivating positive attitudes and effective practices aligned with the teaching profession, teacher education programs can better prepare teachers to deliver high-quality instruction and contribute to the overall academic quality of educational institutions.

Moreover, the significant relationships between different dimensions of teacher professionalism and aspects of academic quality underscore the importance of adopting a holistic approach to teacher development. Rather than focusing on isolated skills or knowledge areas, professional development programs should aim to address the interconnected nature of teacher professionalism, helping teachers to develop a comprehensive understanding of their role and the impact they can have on student learning and academic success

According to Cochran-Smith et al. (2021), a comprehensive understanding of pedagogical components, including knowledge, skills, and practices, is essential for promoting academic quality and student success. Their research emphasizes the multifaceted nature of teacher professionalism and its influence on instructional effectiveness.

Similarly, for skills in the professional dimension and designing in pedagogical components, the correlation coefficients with standards, assessment strategies, technological integration, pedagogical techniques, and professional development are not statistically significant ($p > 0.05$). The lack of significance suggests no substantial relationship exists between in-service training programs and academic quality in skills in the professional dimension and designing in pedagogical components.

In conclusion, the data from Table 17 provide valuable insights into the relationship between in-service training programs and various dimensions of academic quality. The significant correlations observed in the professional domain's knowledge and values/practices dimensions indicate that these aspects of educators' expertise and approach to teaching are strongly influenced by the training they receive. Specifically, in-service training programs positively impact educators' understanding and application of standards, assessment strategies, technological integration, pedagogical techniques, and professional development. These findings suggest that investing in targeted professional development initiatives can lead to tangible improvements in these areas,

ultimately enhancing the overall quality of education provided. However, the lack of significant correlations in the skills dimension and the designing of pedagogical components underscores the need for further investigation and refinement of training approaches in these areas. It may indicate that existing training programs must sufficiently address certain aspects of educators' skill development and instructional design practices.

Research Question 5. Is there a significant difference between academic quality and the respondent's characteristics?

Table 5 Test of Difference between Academic Quality and the Respondents' Characteristics

	Academic Quality					
Respondents Characteristics	**Standards**	**Assessment Strategies**	**Technological Integration**	**Pedagogical techniques**	**Professional Development**	**Overall**
	r-value p-value	r-value p-value	r-value p-value	r-value p-value	r-value p-value	r-value p-value
Age	0.89 0.1032 NS	0.79 0.1302 NS	0.80 0.1043 NS	0.65 0.1032 NS	0.89 0.1022 NS	**0.81** **0.1086** **NS**
Sex	0.55 0.1265 NS	0.58 0.1045 NS	0.51 0.1001 NS	0.67 0.1015 NS	0.45 0.1012 NS	**0.61** **0.1068** **NS**
Position	0.60 **0.0156*** **S**	0.54 **0.0196*** **S**	0.67 **0.0134*** **S**	0.61 **0.0151*** **S**	0.64 **0.0176*** **S**	**0.61** **0.0163*** **S**
Highest Educational Attainment	0.71 **0.0154*** **S**	0.87 **0.0214*** **S**	0.77 **0.0064*** **S**	0.67 **0.0102*** **S**	0.70 **0.0100*** **S**	**0.74** **0.0127*** **S**
Trainings and Seminars Attended	0.65 **0.0109*** **S**	0.75 **0.0159*** **S**	0.61 **0.0110*** **S**	0.60 **0.0139*** **S**	0.65 **0.0119*** **S**	**0.65** **0.0127*** **S**

Legend: S – Significant at p<0.05 S- Not Significant

Table 5 presents the differences between the respondents' observance of academic quality and in-service training programs. The data revealed that the respondents' teaching

position, highest educational attainment, related training/ seminars attended have significant correlations with either academic quality or in-service training program.

It implies that individuals in different teaching positions may have varying levels of exposure to academic quality standards and in-service training programs. Similarly, those with higher educational attainment may have different perspectives and needs regarding academic quality and professional development than their counterparts. Additionally, the correlation with attendance at trainings and seminars suggests that participation in professional development activities may influence perceptions of academic quality and effectiveness of in-service training programs. Educators actively engaging in training opportunities may be more likely to perceive higher academic quality and derive greater benefits from in-service training initiatives.

On the other hand, a notable finding is that there is no significant correlation between age and sex. This finding implies that while age and gender are important demographic characteristics, they may not directly influence how educators perceive academic quality or participate in in-service training programs. Other factors such as teaching position, educational attainment, and participation in specific training opportunities may substantially impact educators' experiences and perceptions.

While certain factors such as teaching position, educational attainment and participation in specific training opportunities appear to play significant roles in shaping educators' experiences and perceptions of academic quality and in-service training programs, other demographic characteristics like age and sex do not seem to exert direct influence. These findings emphasize the importance of ongoing assessment and evaluation of professional development efforts to gauge their effectiveness and address areas for improvement. By identifying and leveraging the factors that correlate with perceptions of academic quality and engagement in professional development, educational institutions can better support their faculty members in achieving their full potential and ultimately enhance the quality of education provided to students.

Research Question 6. Based on the findings of the study, what teacher's development plan can be designed?

In-service training is pivotal for educators' professional development, enriching their skills and knowledge to adapt to the evolving demands of education. These programs update instructors' pedagogical approaches, content understanding, and instructional methodologies to improve student learning outcomes and teaching effectiveness. The importance of this kind of training cannot be overstated; it must be thoroughly relevant and in line with learning goals. To guarantee engagement and learning, effective in-service training combines a variety of delivery modalities, evidence-based techniques, and the assistance of knowledgeable facilitators. In the end, these programs support the development of a culture of lifelong learning and growth within educational institutions by enhancing academic quality and continuously improving teaching techniques.

Table 6 Matrix of Development Plan

Year 1: Foundational Framework							
Areas of Concern	**Specific Objectives**	**Strategies/ Activities**	**Time Frame**	**Person/s Involved**	**Source of Fund**	**Estimated Budget**	**Expected Outcome**
Skills in Professional Dimension	To maintain a positive attitude in professional interactions	Promote self-care practices and maintain a positive mindset throughout the school day.	Throughout the academic year.	School head, teachers, students, parents' administrator	MOOE PTA Fund	₱20,000	Maintaining a positive attitude in professional interactions leads to improved staff morale and job satisfaction, creating a more enjoyable and fulfilling work environment for educators.
Resources Delivery	To accommodate diverse backgrounds and experiences	Incorporate culturally relevant content, examples, and perspectives into lesson plans	Throughout the academic year.	Teachers, students, school community	MOOE	₱20,000	Improved understanding, retention, and academic performance across diverse student populations
Learning Evaluation	To evaluate methods used accurately measure the participants' learning progress	Essays, projects, presentations, and portfolios	Throughout the academic year.	Teachers, students	MOOE	₱10,000.00	Assessment process, as evaluation methods are designed to be meaningful, relevant, and aligned with their learning needs and interests.

Year 2: Facilitate Collaborative Activities							
Areas of Concern	Specific Objectives	Strategies/ Activities	Time Frame	Person/s Involved	Source of Fund	Estimated Budget	Expected Outcome
Technological Integration	To utilize online platforms for student engagement and learning	Create digital portfolios on online platforms	Throughout the academic year.	Teachers, students	MOOE	₱10,000	Enhanced accessibility and engagement through multimedia
Pedagogical Techniques	To familiarize with a variety of pedagogical techniques	Action research projects	Throughout the academic year.	Teachers, students, school heads	MOOE	₱20,000	Increased effectiveness of teaching practices

Year 3: Integration and Tailoring							
Areas of Concern	Specific Objectives	Strategies/ Activities	Time Frame	Person/s Involved	Source of Fund	Estimated Budget	Expected Outcome
Technological Integration	To equip teachers with the skills and confidence to integrate technology tools and resources effectively into their instruction, enhancing student engagement, collaboration, and learning outcomes.	Conduct workshops and training sessions focused on various educational technology tools and platforms,	Throughout the academic year.	School head, Teachers, students, speaker, ICT coordinator.	MOOE	₱20,000	Improved digital literacy skills as they learn to navigate and utilize different technology tools and platforms effectively.
		Provide teachers with hands-on training opportunities to explore and experiment with different technology tools and resources in a supportive environment.	Throughout the academic year.	School head, teachers, students, facilitator	MOOE	₱10,000	Developed greater comfort and confidence in using a variety of technology tools and resources after engaging in hands-on training.
		Offer online courses, webinars, or self-paced modules on topics related to technology integration in teaching	Throughout the academic year.	School head, teachers, students	MOOE	₱20,000	Enhanced their proficiency in using various technology tools and platforms relevant to teaching and learning.

Conclusions

Teachers in the Division of Bukidnon impart values and practices that promote academic quality to their students. By incorporating these values and practices into their teaching methods, educators in the division foster a culture of excellence and continuous improvement. The teachers in-service training program gave emphasis on professional development ensures that teachers stay updated with the latest teaching methods, technologies, and curricula, enabling them to provide high-quality education to their

students. Moreover, this approach not only enhances student learning outcomes but also encourages teachers to adopt innovative and effective teaching strategies.
Ultimately, the Division of Bukidnon's commitment to values and practices, and professional development contributes to the overall improvement of academic quality and student achievement.

The “Bukidnon Shared Vision and Goals” is a theory that In-service training programs should align with the school's vision and goals for academic excellence. By ensuring that all educators are working towards a common purpose, the quality of teaching and learning can be elevated.

Recommendations

1. The Division of Bukidnon may adopt the proposed teacher development plan based on the skills and technological integration to regularly monitor and evaluate the impact of technological integration on student learning outcomes, providing feedback and support teachers to refine their practices.
2. Teachers should actively engage in all in-service training sessions and professional development opportunities provided by the school. Take ownership of your professional growth by seeking out relevant workshops, seminars, and courses that align with your teaching goals and areas for improvement.
3. DepEd officials may implement in-service training for technological integration and professional development and allocate funds for the resource delivery of the program.
4. Students should take an active interest in understanding the purpose and benefits of in-service training for teachers. Recognize that these training programs are designed to enhance teaching quality and ultimately improve your learning experience in the classroom.

Compliance with Ethical Standards

Ethical considerations are paramount in undertaking this research, particularly concerning the involvement of all participants. To ensure the integrity of the research, the researcher explicitly informed consent from the teachers participating in the study. The consent process outlined the study's purpose, methodologies, potential risks, and

benefits, emphasizing the voluntary nature of participation and the assurance of confidentiality.

To further protect the participants, the researcher ensured that all data collected was anonymized and stored securely. This measure prevents any potential breaches of confidentiality and maintains the privacy of the teachers involved. Additionally, the

Acknowledgments

The researcher would like to extend her heartfelt gratitude and sincere thanks to the persons who contributed and extended valuable support to the completion of the research work.
Dr. Braziel L. Ongcachuy, Dean of the School of Graduate and Professional Studies, for her guidance and words of encouragement.
Dr. Gina F. Labitad, her adviser, for the thorough support and guidance during the research process.
The Panel of Examiners: Dr. Gerlinda G. Corpuz, Dr. Carmelita O. Elbanbuena, Dr. Pepa V. Pontillas, and Dr. Estrella Ferenal for their extensive evaluations, constructive critiques, and insightful contributions.
Dr. Miguela Napiere, for her encouragement, support, and assistance.
Lantay ES CARES family, STAR family and PBCC family for their moral support and encouragement.
Dr. Victoria Gazo, Schools Division Superintendent of the Division of Bukidnon, for granting her the permission to conduct the study.
To her father Allie, siblings, her husband Ryan, sons namely Keith Arvin, Kherby Dale and Kurt Nexon, daughter Keziah Astrid, all her in-laws, nieces, nephews especially Yxcyll Khlive for the assistance and support, and relatives for their unwavering love and support.
Most importantly to God Almighty for providing everything needed for the success of this endeavour.

REFERENCES

Arnett, J. J., & Mitra, D. (2020). Are the features of emerging adulthood developmentally distinctive? A comparison of ages 18–60 in the United States. Emerging Adulthood, 8(5), 412-419.

Ashraf, H., Ata, G., & Rizwan, A. (2023). Training need analysis model for teachers and managers: a case of trainings at quaid e azam academy for educational development, punjab. Global Educational Studies Review, VIII, 8, 445-461.

Bardelli, E., Ronfeldt, M., & Papay, J. P. (2022). Teacher preparation programs and graduates' growth in instructional effectiveness. American Educational Research Journal, 60(1), 183–216. https://doi.org/10.3102/00028312221137798

Chieng, S. M. M. B. M. L. P., PhD. (2024, May 13). LOOKING INTO THE INSTRUCTIONAL LEADERSHIP OF MASTER TEACHERS DURING THE IN-

PERSON CLASSES: A PHENOMENOLOGY. http://eprajournal.com/index.php/IJMR/article/view/150
Cochran-Smith, M., & Reagan, E. M. (2021). " Best Practices" for Evaluating Teacher Preparation Programs. Evaluating and Improving Teacher Preparation Programs. National Academy of Education.
Darling-Hammond, L., Oakes, J., Wojcikiewicz, S., Hyler, M. E., Guha, R., Podolsky, A., Kini, T., Cook-Harvey, C., Mercer, C., & Harrell A. (2019). Preparing Teachers for Deeper Learning (research brief). Palo Alto, CA: Learning Policy Institute
Dunst, C. J., Hamby, D. W., Howse, R. B., Wilkie, H., & Annas, K. (2020). Research synthesis of meta-Analyses of preservice teacher preparation practices in higher education. Higher Education Studies, 10(1), 29-47.
Fluet, C. (2020). Social norms and legal design. The Journal of Law, Economics, and Organization, 36(1), 139-169.
Havea, P. H., & Mohanty, M. (2020). Professional development and sustainable development goals. In Encyclopedia of the UN sustainable development goals (pp. 654–665). https://doi.org/10.1007/978-3-319-95870-5_53
Healy, M., Hammer, S., & McIlveen, P. (2020). Mapping graduate employability and career development in higher education research: a citation network analysis. Studies in Higher Education, 47(4), 799–811. https://doi.org/10.1080/03075079.2020.1804851
Kamaruzaman, N. L., Musa, K., & Hashim, Z. (2020). Teacher leadership: Concept and framework. International Journal of Academic Research in Progressive Education and Development, 9(2), 574-587.
Kong, Siu-Cheung & Lai, Ming. (2022). Effects of a teacher development program on teachers' knowledge and collaborative engagement, and students' achievement in computational thinking concepts. British Journal of Educational Technology. 54. 10.1111/bjet.13256.
McAlpine, L., Castello, M., & Pyhaltö, K. (2020). What influences PhD graduate trajectories during the degree: a research-based policy agenda. Higher Education, 80(6), 1011–1043. https://doi.org/10.1007/s10734-019-00448-7
Mehta, C. M., Arnett, J. J., Palmer, C. G., & Nelson, L. J. (2020). Established adulthood: A new conception of ages 30 to 45. American Psychologist, 75(4), 431.
Sarder, D., & Haider, M. Z. (2023). IMPACT OF PEDAGOGICAL PRACTICES ON ACADEMIC PERFORMANCE: PERCEPTIONS OF THE STUDENTS OF

KHULNA UNIVERSITY. Khulna University Studies. https://doi.org/10.53808/kus.2023.20.02.313-ss
Topchyan, R., & Woehler, C. (2021). Do teacher stactus, gender, and years of teaching experience impact job satisfaction and work engagement?. Education and Urban Society, 53(2), 119-145.
Trujillo, C. C., Calvo, L. C., Gil, D. G., & Valles, C. B. (2021). Mixed methods research in service-learning: an integrative systematic review. Quality and Quantity, 56(4), 2361–2386. https://doi.org/10.1007/s11135-021-01218-3
Turugare, M., & Rudhumbu, N. (2020). Integrating technology in teaching and learning in universities in Lesotho: Opportunities and challenges. Education and Information Technologies, 25(5), 3593-3612.
Urbán, K., & Szivák, J. (2022, October 1). Interrelation between Reflective Thinking and Organizational Knowledge with Master Teachers in Hungary. https://e-iji.net/ats/index.php/pub/article/view/265
Williams, R. (2020). A systematic review of the continuous professional development for technology enhanced learning literature. Engineering International, 8(2), 61-72.
Wong, Z. Y., Liem, G. A. D., Chan, M., & Datu, J. A. D. (2023). Student engagement and its association with academic achievement and subjective well-being: A systematic review and meta-analysis. Journal of Educational Psychology.

APA Citation:

Priolo, M. B., & Labitad, G. F. (2024). IN-SERVICE TRAINING PROGRAM AND ACADEMIC QUALITY: BASIS FOR TEACHER DEVELOPMENT PLAN. Ignatian International Journal for Multidisciplinary Research, 2(8), 1–26. https://doi.org/10.5281/zenodo.13150021

Corresponding author: *maba.priolo.coc@phinmaed.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

KAKAYAHAN SA PAGBIGKAS, PALATULDIKAN AT PAG-UNAWA SA PAGBASA SA FILIPINO

Jessamae V. Recto

College of Arts and Sciences, Mindoro State University- Bongabong Campus, Labasan, Bongabong, Oriental Mindoro, Philippines

https://doi.org/10.5281/zenodo.13310548

ABSTRAK

Ang pag-aaral na ito ay naglalayong tukuyin ang antas ng kakayahan sa pagbigkas, palatuldikan at pag-unawa sa pagbasa sa Filipino ng mga mag-aaral. Layunin din ng pag-aaral na ito na sagutin ang sumusunod na katanungan: Ano ang antas ng kakayahan sa pagbigkas sa Filipino ng mga mag-aaral? Ano ang antas ng kakakayahan sa palatuldikan sa Filipino ng mga mag-aaral? Ano ang antas ng kakayahan sa pag-unawa sa pagbasa sa Filipino ng mga mag-aaral? Mayroon bang makabuluhang pagkakaiba sa antas ng pag-unawa sa pagbasa sa kakayahan sa pagbigkas sa Filipino ng mga mag-aaral? Mayroon bang makabuluhang pagkakaiba sa antas ng kakayahan sa pag-unawa sa pagbasa sa palatuldikan sa Filipino ng mga mag-aaral? Mayroon bang makabuluhang kaugnayan sa antas ng kakayahan sa pagbigkas, sa palatuldikan at pag-unawa sa pagbasa sa Filipino ng mga mag-aaral? Ang pag-aaral na ito ay gumamit ng survey correlational na pamamaraan ng pananaliksik. Ang survey correlational na pamamaraan ay naglalarawan at nagbibigay kahulugan sa mga pangyayari. Ito ay may kinalaman sa mga kalagayan/kaugnayan ng talagang nangyayari. Ang kagamitang pang istadistika na ginamit sa pagsusuri ng palarawang datos ay ang frequency count, percentage, mean, standard deviation, Pearson'r at ang kabuluhang pagkakaiba nito ay itinakda sa 0.05. Ang mga kalahok sa pag-aaral na ito ay mga mag-aaral sa Grado 8 ng Mataas na Paaralang Nasyonal ng Manocmanoc, Malay, Aklan. Sila ay binubuo dalawang daan tatlumpu't siyam (239) na mag-aaral sa Grado 8 na nakapagtala sa Taong Panuruan 2018-2019. Sila ay pinili sa pamamagitan ng quota purposive sampling gamit ang lottery teknik. Pumili lamang ng tig sa sampu (10) sa bawat seksyon ng Jade, Ruby, Tourmaline, Turquoise, at Beryl. Ang mga kagamitang ginamit sa pananaliksik ay dalawampu't limang (25) pangungusap na may pares na salita para sa pagsusulit sa

pagbigkas, dalawampu't isang pangungusap na pares na salita na sinalungguhitan para sa (21) palatuldikan at dalawampung (20) pagsusulit mula sa tulang binasa ng mga mag-aaral upang masukat ang kanilang pag-unawa sa pagbasa. Kalakip nito ang mga katanungan kaugnay sa personal na katangian ng mga mag-aaral. Sa kabuuan, ang antas ng kakayahan sa pagbigkas sa Filipino ng mga mag-aaral ay "napakahusay". Ang antas ng kakayahan sa palatuldikan sa Filipino ng mga mag-aaral ay "katamtaman". Ang antas ng kakayahan sa pag-unawa sa pagbasa sa Filipino ng mga mag-aaral ay "mahusay". Ang resulta ng Pearson'r ay nagpapakita ng "walang makabuluhang kaugnayan" ang antas ng kakayahan sa pagbigkas at palatuldikan, kakayahan sa pagbigkas at pag-unawa sa pagbasa sa Filipino gayundin ang kakayahan sa palatuldikan at pag-unawa sa pagbasa sa Filipino.

Keywords: *kakayahan sa pagbigkas, mag-aaral sa grado 8, palatuldikan, pag-unawa sa pagbasa, Paaralan Nasyonal ng Manocmanoc, Malay, Aklan*

PANIMULA NG PAG-AARAL

Isa sa nakitang dahilan sa kahirapan sa pag-unawa sa pagbasa ay hindi lamang nakatuon sa bokabularyo kundi sa proseso ng pagbigkas sa mga salita dahil sa Filipino maraming salita na pareho ang baybay subalit magkaiba ang bigkas at kahulugan gaya ng hamon (ham), hamon (challenged), Hapon (Japanese), hapon (afternoon), bukas (tomorrow) at bukas (open).

Ang pagbigkas o pasalitang pakikipagtalastasan ay isang sining. Nilalayon nito na magpahayag ng damdamin na maaaring malungkot o nakatutuwa, kaisipan, opinyon, mensahe o kaalaman, saloobin, paninindigan o paniniwala, hinggil sa isang paksang pinag-uusapan. Ang pagbigkas o pagpapahayag ay mahalaga sa dahilang nais na ipaunawa sa nakikinig ang naisin o layunin ng nagsasalita. Sa tuwing tayo ay nakikipag-usap, nakikisalamuha at nakikipagpalitan ng kurukuro ng ating sariling kaisipan o tinatawag na aspetong sosyal. Sa araw-araw patuloy tayong nakikisalamuha, nakikisama o nakiki-ugnay sa tao at sa ating paligid. Maaaring sa loob ng ating tahanan ay nagkakaroon ng sariling pagtatanong, pagpapaliwanag o paglilinaw kaya minsan nama'y naggigiit tayo ng katuwiran o nagbibigay ng halimbawa sa silid aralan o opisina. Isa pang makahulugang tunog sa pagbigkas ng tula ay ang ponema. Ang tulang Filipino ay may sadya at natatanging kanyang palatunugan at palabigkasan lamang. Maaaring magkatulad ang baybay ng salita subalit sa impit sa dulo ng ponemang patinig ay naiiba ang kahulugan. Halimbawa: aso(dog) aso (smoke), ako (I), pito (whistle) pito (seven). Isa pang dapat isaalang-alang ang intonasyon, ang pagbaba o pagtaas ng tinig. Ang makasining na paraan ng pagbigkas ay magbibigay ng wastong pagpapahayag sa diwa ng tula o ng pahayag. Mendoza, (2009)

May mga salita sa Filipino na iisa ang baybay ngunit may isa o dalawa ang kahulugan. Ang suliraning ito ay malulunasan sa pamamagitan ng paggamit ng tuldik dahil sa tuldik ay nabibigkas nang maayos ang isang salita at natitiyak ng bumabasa ang kahulugan nito. Hindi natin malalaman ang tiyak na kahulugan ng salitang baga,

halimbawa, kung hindi ito tutuldikan lalo na kung ito'y nag-iisa at hindi bahagi ng pangungusap. Ngunit kung ito'y tutuldikan, kahit hindi gagamitin sa pangungusap ay malalaman natin ang wastong bigkas at kahulugan, gaya ng makikita sa sumusunod: bagà (lungs) malumi, bagâ (tumor) maragsa, baga (live ember) malumay, bagà (ibang anyo ng katagang ba) mabilis.

Bagama't hindi na kailangang tuldikang lahat ang salita sa isang pangungusap, may pagkakataon na ang isang salita ay kailangan pa ring tuldikan kung hindi nagiging malinaw ang kahulugan nito. Sa pangungusap na, "Nasalubong nina Susan ang mama". Hindi na kailangang tuldikan pa ang mga salitang nasalubong, nina Susan at ang. Ngunit ang mama ay kailangang tuldikan upang matiyak kung ang ibig sabihin ng sumulat ay mama (mother) o mamà (male mature person). Samakatuwid, upang makapagtipid at upang hindi maging lubhang mahirapan ang mga palimbagan dahil sa dami ng kakailanganing tipo ng mga patinig na may tuldik, ang isang salita ay tutuldikan lamang kung magkakaroon na higit sa isang kahulugan ang salita sa pangungusap. Kung nag-iisa ang salita, tulad sa diksyunaryo ang pagtutuldik ay kailangang-kailangan. Ang isa pang dahilan kung bakit hindi praktikal na tuldikan lahat ang mga salita sa isang pangungusap ay ito: Ang glottal na pasara na inirerepresenta ng tuldik na paiwa sa posisyong pinal ng salita ay isang ponemang masasabing hindi matatag na tulad ng ibang ponema sa Filipino. Dito natin makikita na magaganda ang ginawa ni Lope K. Santos "Ama ng Balarilang Tagalog/Filipino". Naisama sa palatuldikan ang ponemang ito sa halip na bigyan ng kaukulang letra sa palabaybayan.

Isa pa sa mga kakayahan na dapat taglayin ng isang mag-aaral ay ang kakayahan sa pag-unawa sa pagbasa sa Filipino sapagkat ito ang magiging daan niya upang maging mulat ang isipan sa mga nangyayari sa lipunan at upang maging matagumpay sa hinaharap. Ang lubos ng pagkatuto ng mag-aaral ay nakasalalay sa kakayahang ito.

Gaya ng tinuran ni Tumangan Sr.et al, na binanggit ni Llaban, (2009) na ayon sa mga dalubhasa," wala raw pagbabasa kapag walang pag-unawa."

Ayon kay Goodman na binanggit ni Austero et al. (2009) na kung lubos ang pag-unawa sa pagbasa ay isang saykolinggwistiks na paghinuha (guessing game) kung saan ang nagbabasa ay bumuong muli ng isang mensahe o kaisipang hango sa tekstong binasa. Naniniwala siya na ang pagbabasa ay kinapapalooban ng interaksyon sa pagitan ng wika at kaisipan at ang mga proseso ng pagbabasa ay ang pag-ikot ng paghahalimbawa, paghihinuha, pagsubok at pagkilatis sa katotohanan.

Isang komplikado at masalimuot na proseso ang pagbasa sapagkat maraming kakayahan ang nalilinang at kailangang malinang dito upang maging epektibo ang pagbabasa. Isa kang mahusay at epektibong mambabasa kung natutukoy mo ang layunin ng iyong binabasa, nagagamit ang mga estratehiya at teknik sa pagbasa, nakabubuo ng hinuha sa susunod na pangyayari at iniuugnay ang dating kaalaman at karanasan upang maunawaan ang kahulugan ng binabasang teksto. Ang pagbasa kung gayon ay napakahalaga sa isang indibidwal sapagkat ito ang tutugon sa kanyang pagkatuto tungo sa mas malawak na kaalaman sa kanyang kapaligiran, sa bansa at

marami pang iba na huhubog sa kanyang pagkatao. (thesilentlearner2014,blogspot.com) 08.25.17

Ayon sa pag-aaral ni Perfetti et. Al (2020), ay gumagamit ng neuroimaging upang suriin kung paano pinoproseso ng utak ang pag-unawa sa pagbasa. Natuklasan nila na ang iba't ibang bahagi ng utak ay aktibo sa iba't ibang aspeto ng pagbasa, tulad ng decoding at comprehension.

Napakahalagang kakayahan na dapat matutuhan ng mga mag-aaral ang isang matibay na pag-unawa sa proseso ng pagbasa. Ang pag-aaral na ito ay ibinatay sa teoryang "inside-out model, concept-driven at whole to part". Ayon kay kina Goodman at Smith, ang teoryang ibaba-pataas ay pananaw ng pagbasa na naniniwalang ang pag-unawa sa teksto ay batay sa napupunta sa itaas, sa utak ng mambabasa matapos maproseso sa tulong ng mata at utak. Ang kaisipang ito ay batay sa teoryang behaviorist at paniniwalang ang utak ay isang blankong papel o tabula raza. Ayon pa kay Smith, ang impormasyon ay hindi nagmumula sa mambabasa kundi sa teksto. Ang teoryang ito ay tinatawag ding data-driven model o part to whole model. Ibig sabihin, higit na umaasa ang mambabasa sa mga impormasyon nasa teksto. Ang teoryang interaktibo ay ang kombinasyon ng teoryang (bottom- up at top-down) sapagkat ang proseso ng komprehensyon ay may dalawang direksyon sa paggamit ng dalawang paraan (bottom-up at top-down), nagaganap ang interaksyon sa pagitan ng teksto at ng mambabasa. Ito ay nabubuo mula sa kaalaman at ideya na dala ng mambabasa sa pag-unawa sa pagbasa sa Filipino. Magracia et al., na binanggit ni Aguil, (2018)

Pinag-aralan ng mananaliksik ito upang matukoy ang kakayahan nila sa pagbigkas, palatuldikan at pag-unawa sa pagbasa sa Filipino dahil ang pagbigkas ng mag-aaral sa isang salita o teksto ay nakaapekto kung paano nila ito tutuldikan at kung paano nila maunawaan ang isang akda gayundin ang paglalagay ng tuldik ay nakabatay kung paano nila binigkas ang isang salita na makakaapekto rin sa kanilang pag-unawa sa pagbasa.

Ang malayang baryabol sa pag-aaral na ito ay kakayahan sa pagbigkas at palatuldikan sa Filipino. Samantala, ang di malayang baryabol sa pag-aaral na ito ay ang kakayahan sa pag-unawa sa pagbasa sa Filipino ng mga mag-aaral.

METODO

Ang mga kalahok sa pag-aaral na ito ay ang mga mag-aaral sa grado 8 ng Mataas na Paaralang Nasyonal ng Manocmanoc. Sa kabuuan ay may dalawandaan at tatlumpu't siyam (239) na mag-aaral sa grado 8. Ang mananaliksik ay kukuha lamang ng limampu (50) sa pamamagitan ng quota purposive sampling. Sa Jade ay may limampung (50) mag-aaral ngunit kumuha lamang ng sampung (10) mag-aaral. Sa Ruby ay may limampung (50) mag-aaral ngunit kumuha lamang ng sampung (10) mag-aaral. Sa Tourmaline ay may apatnapu't siyam na (49) mag-aaral ngunit kumuha lamang ng sampung (10) mag-aaral. Sa Torquoise ay may apatnapu't isang (41) mag-aaral ngunit

kumuha lamang ng sampung (10) mag-aaral. Sa Beryl ay may apatnapu't siyam na (49) mag-aaral ngunit kumuha lamang ng sampung (10) mag-aaral.

Mga Kagamitan sa Pananaliksik

Profayl ng mga Kalahok. Ang unang bahagi ay profayl ng mga kalahok. Ito ay binubuo ng apat na bahagi: edad, kasarian, edukasyong natamo ng magulang at hanapbuhay ng magulang.

Pagsusulit sa Kakayahan sa Pagbigkas- Ito ay binubuo ng dalawampu't limang (25) aytem na pagsusulit sa pagbigkas ng mga pares na salita na pareho ang baybay ngunit magkaiba ang bigkas at kahulugan. Ang mga pares ng salitang ito ay ginamit sa pangungusap at binigkas ng mga mag-aaral ayon sa kahulugan nito sa harap ng guro. Ang mga salitang kabilang sa pag-aaral na ito ay hinalaw sa pag-aaral ni Tupaz (2016). Sila ay minarkahan ng napakahusay, mahusay, katamtaman, kasiya-siya at kailangang paunlarin.

Iskala	Deskripsyon
20.01- 25.00	Napakahusay
15.01- 20.00	Mahusay
10.01- 15.00	Katamtaman
5.01- 10.00	Kasiya-siya
0.00- 5.00	Kailangang Paunlarin

Pagsusulit sa Kakayahan sa Palatuldikan- Ito ay binubuo ng dalawampu't isang (21) aytem na pagsusulit sa palatuldikan. Nilagyan ng mga mag-aaral nang angkop na tuldik ang mga salitang nakasalungguhit sa pangungusap na inihanda ng mananaliksik. Ang mga salitang inilakip sa pag-aaral na ito ay hinalaw sa aklat ni Bernales, et. al. (2014). Sila ay minarkahan ng napakahusay, mahusay, katamtaman, kasiya-siya, at kailangang paunlarin.

Iskala	Deskripsyon
16.01- 21.00	Napakahusay
12.01- 16.00	Mahusay
8.01 - 12.00	Katamtaman
4.01 - 8.00	Kasiya-siya
0.00 - 4.00	Kailangang Paunlarin

Ang resulta computer processed statistic ng pilot testing ng pagsukat at pagkapani-paniwala at pagkabalido ng pagsusulit sa palatuldikan ay nagpakita na mula sa dalawampu't limang (25) na pagsusulit ay iwinaksi ang apat na aytem (4) at dalawampu't isa (21) lamang ang natira o kapani-paniwala at balido upang ibigay sa mga kalahok sa pag-aaral na ito.

Pagsusulit sa Kakayahan sa Pag-unawa sa Pagbasa - Ang mananaliksik ay nagpabasa ng isang tula na orihinal na ginawa ng mananaliksik. Pagkatapos basahin ang

tula ay nagbigay siya ng dalawampung (20) aytem na mga katanungan na sinagutan ng mga mag-aaral upang masukat ang kakayahan ng mga mag-aaral sa pag-unawa. Ang mga test aytem na kabilang sa pag-aaral na ito ay personal na ginawa ng mananaliksik. Ito ay ipinaylot test sa mga mag-aaral na hindi kabilang sa pag-aaral na ito upang masukat ang pagkapani-paniwala at pagkabalido ng pagsusulit. Sila ay minarkahan ng napakahusay, mahusay, katamtaman, kasiya-siya at kailangang paunlarin.

Iskala	Deskripsyon
16.01- 20.00	Napakahusay
12.01- 16.00	Mahusay
8.01 - 12.00	Katamtaman
4.01 - 8.00	Kasiya-siya
0.00 - 4.00	Kalangang Paunlarin

Ang resulta computer processed statistic ng pilot testing ng pagsukat at pagkapani-paniwala at pagkabalido ng pagsusulit sa pag-unawa sa pagbasa sa Filipino ay nagpakita na mula sa tatlumpu't limang (35) pagsusulit ay iwinaksi ang labing limang aytem (15) at dalawampu (20) lamang ang natira o kapani-paniwala at balido upang ibigay sa mga kalahok sa pag-aaral na ito.

MGA KINALABASAN AT PAGTALAKAY

Ang kabanatang ito ay nahahati sa dalawang bahagi: (1) Palarawang Pagsusuri ng mga Datos at (2) Inferensyal na Paglalahad ng mga Datos.

Unang Bahagi, Palarawang Pagsusuri ng mga Datos, naglalahad ng mga kalikasan at katangian ng mga natuklasang mga datos sa pananaliksik na ito. Ang mga datos sa survey correlational na pananaliksik ay natamo sa pamamagitan ng kakayahan sa pagbigkas, palatuldikan at pag-unawa sa pagbasa sa Filipino ng mga mag-aaral sa Grado 8. Isinama sa instrumentong ginamit sa pananaliksik ang personal na katangian ng mga kalahok.

Ikalawang Bahagi, Inferensyal na Pagsusuri ng mga Datos, naglalahad ng mga natuklasang mga datos sa pananaliksik gamit ang mga sumusunod na kagamitang pang-istadistika sa computer processed statistics katulad ng frequency count, percentage mean, standard deviation, One-way Analysis of Variance at ang Pearson'r. Ang 0.05 alpha level ng kahalagahan ang siyang ginamit na krayteryon sa pagtanggap o di pagtanggap ng mga ipotesis.

Palarawang Pagsusuri ng mga Datos

Kakayahan sa Pagbigkas sa Filipino
ng mga mag-aaral sa Grado 8

Ang mga datos sa Talahanayan 1 ay nagpapakita na ang kakayahan sa pagbigkas sa Filipino ng mga mag-aaral sa kabuuan ay may “napakahusay” na may (M=20.66, SD 2.83).

Talahanayan 1
Mean at Standard Deviation ng Kakayahan sa Pagbigkas

Baryabol	Mean	Deskripsyon	SD
Kakayahan sa Pagbigkas	20.66	Napakahusay	2.83

Iskala	Deskripsyon
16.01-21.00	Napakahusay
12.01-16.00	Mahusay
8.01 -12.00	Katamtaman
4.01 -8.00	Kasiya-siya
0.00 -4.00	Kailangang Paunlarin

Nangangahulugan lamang ito na napakahusay ng mga mag-aaral sa pagbigkas dahil ang mga pares na salita na binigkas nila ay ginamit sa mga pangungusap. Malamang madali nilang maibigkas dahil ginamit ito sa pangungusap at alam nila ang kahulugan ng mga bawat pares na salita. Gayundin pamilyar sa kanila ang mga ito dahil ginagamit nila sa pang-araw-araw na pakikipagtalastasan o sa kanilang pakikipag-usap sa ibang tao at dadalawang pares lamang ng salita ang kanilang binigkas gaya ng malumay, malumi, mabilis at maragsa kaya hindi mahirap para sa kanila ang pagbigkas ng mga salitang ito. Malamang lagi nila itong naririnig sa kanilang pakikipagtalastasan at inoobserbahan nila ang pagbuka ng bibig ng guro nila at ng kanilang kausap. Isa pang dahilan nito lagi silang nanonood ng mga programa sa telebisyon kung kaya madali nila itong nagagaya lalo na ang paggamit at pagbigkas ng mga pares na salita. Dagdag pa rito ang lugar ng mga mag-aaral ay dinadayo ng mga turismo kaya ang ginagamit nilang salita ay wikang Filipino upang magkaunawaan lahat ng tao at dahil iba-iba ang dumadayo sa kanilang lugar ay nasanay silang magsalita ng wikang ito upang madali silang magkaunawaan.

Ang resulta ng pag-aaral na ito ay sang-ayon sa resulta ng pag-aaral ni Tupaz (2016), na ang antas ng kakayahan o artikulasyon ng mga mag-aaral sa elementarya ay “napakahusay” kapag sila pinangkat sa baitang edad, kasarian, grado sa Filipino, edukasyon ng ama’t ina at hanapbuhay ng ama’t ina.

Taliwas naman sa pag-aaral ni Poli na binanggit sa pananaliksik ni Tupaz (2016) na ang kahusayan sa oral na pagbasa sa Filipino ay “katamtaman”. Ang mga mag-aaral na nasa ikalawa, ikatlo at ikaapat na antas sa sekundarya at ang may lubhang napakagaling, kasiya-siya, katamtaman at pagbutihin ang grado sa unang markahan; ang

mga batang mataas, katamtaman at mababang antas ng sosyo-ekonomiko at ang may sapat at mas sapat na kahantaran sa mass media ay “katamtaman” ang kahusayan sa oral na pagbasa sa Filipino.

Kakayahan sa Palatuldikan
ng mga Mag-aaral sa Filipino

Ang mga datos sa Talahanayan 2 ay nagpapakita na ang performans ng mga mag-aaral sa Filipino sa kabuuan ay “Katamtaman” na may (M= 12.20, SD= 2.88).

Talahanayan 2
Mean at Standard Deviation ng Kakayahan sa Palatuldikan

Baryabol	Mean	Deskripsyon	SD
Kakayahan sa Palatuldikan	12.20	Katamtaman	2.88

Iskala	Deskripsyon
20.01-25.00	Napakahusay
15.01-20.00	Mahusay
10.01-15.00	Katamtaman
5.01 -10.00	Kasiya-siya
0.00 -5.00	Kailangang Paunlarin

Nangangahulugan lamang ito na ang kakayahan nila sa palatuldikan ay katamtaman malamang hindi sila gaanong magaling sa paglalagay ng tuldik dahil hindi sila masyadong pamilyar sa kahulugan ng bawat pares na salita at hindi nila masyadong natutukoy kung ang bawat salita ay malumi, malumay, mabilis at maragsa dahil ginamit ito sa pangungusap. Hindi nila masyadong nakilala ang mga salitang dapat lagyan ng angkop na tuldik kahit ang mga salitang nilagyan nila ng tuldik ay payak lamang na mga salita. Kahit ang pagsusulit na binigay sa palatuldikan ay pareho rin sa pagsusulit na binigay sa pagbigkas ay hindi masyadong pamilyar sa kanila ang mga salitang dapat na tutuldikan.

Ayon kay Santiago na binanggit ni Gener (2017). Napakahalaga ng tuldik lalong-lalo na sa asignaturang Filipino sapagkat maraming salita sa Filipino na pareho ang baybay subalit magkaiba ang kahulugan. Napakahalagang malaman din kung paano gamitin ang mga tuldik at kung paano ito bibigkasin. May apat na pangunahing pangkat ng salita sa Filipino ayon sa diin. Ang pangalang ibinigay sa matandang balarila sa bawat pangkat ay magandang modelo o halimbawa sa pagbigkas sa mga salita kasama sa bawat pangkat: malumay, malumi, mabilis at maragsa. Ang diing malumay ay hindi tinutuldikan samantala ang diing mabili ay ginagamitan ng tuldik na pahilis (/), ang diing malumi ay ginagamitan ng tuldik na paiwa (\) at ang diing maragsa ay ginagamitan ng tuldik na pakopya (ˆ).

Kakayahan sa Pag-unawa sa
Pagbasa sa Filipino ng mga mag-aaral

Ang mga datos sa Talahanayan 3 ay nagpapakita na ang performans ng mga mag-aaral sa Filipino sa kabuuan ay “Mahusay” na may (M= 14.82, SD= 2.47).

Talahanayan 3

Mean at Standard Deviation ng Kakayahan sa Pag-unawa sa Pagbasa sa Filipino

Baryabol	Mean	Deskripsyon	SD
Kakayahan sa Pag-unawa sa Pagbasa sa Filipino	14.82	Mahusay	2.47

Iskala	Deskripsyon
16.01-20.00	Napakahusay
12.01-16.00	Mahusay
8.01 -12.00	Katamtaman
4.01 -8.00	Kasiya-siya
0.00 -4.00	Kailangang Paunlarin

Nangangahulugan lamang ito na ang kakayahan nila sa pag-unawa sa pagbasa sa Filipino ay “mahusay” dahil ang mga salitang ginamit sa tula ay payak lamang at ang bawat pares na salita ay hinalaw din sa pagsusulit sa palabigkasan at palatuldikan kung kaya mas madali nilang maunawaan ang ibig sabihin ng mga salitang ito gayundin ang binasang tula. Ang tula ay hindi ginamitan ng mga tayutay at idyomatikong pagpapahayag kaya mas madali nilang maunawaan ang tula sapagkat wala itong malalalim na mga kahulugan o di kaya’y nakatagong pahayag. Sapat din ang oras na nakalaan sa kanilang pagbabasa kung kaya binasa nila itong may pag-unawa at dagdag pa rito ay pinalalahanan sila agad bago magsimula sa pagbabasa na may sasagutan silang mga tanong pagkatapos nito. Gayundin malinaw ang pagpapaliwanag ng panuto ng guro kaya madali nila itong naunawaan.

Ang resulta ng pag-aaral na ito ay sang-ayon sa resulta ng pag-aaral ni Legarda (2017), marahil ang antas ng komprehensiyon ay nagpapakita na sa kabuuan ay “mahusay”. Nangangahulugan lamang ito na mahusay ang istilo ng guro sa klase binibigyan niya ng atensyon ang komprehensyon ng mga mag-aaral tulad sa pagbibigay ng iba’t ibang babasahin gaya ng mga aklat, nobela, maikling kuwento,tula at sanaysay na pinababasa nang may sapat na oras upang madaling maunawaan ng mga mag-aaral pinupukusan naman nila ito ng atensyon at inuunawa nang mabuti ang seleksyon o materyal na ibinigay sa kanila ng guro upang may isasagot sila sa mga katanungan kapag may talakayan sa klase. Marahil madaling maintindihan ng mga mag-aaral ang kanilang binabasa dahil gumagawa sila ng mga talaang salita para madali nilang maintindihan ang mahirap na salitang Filipino o di kaya’y sumasangguni sila sa diksyunaryo upang lubusan nilang maunawaan ang kanilang binabasa.

Malamang mayaman din ang kanilang talasalitaan, binibigyan nila nang halaga ang itinakda ng guro sa bahay kaya lubos nilang nauunawaan ang kanilang binabasa. Ang mga salita, pangungusap at seleksyon ay payak kaya madaling intindihin. Malinaw ang pagpapaliwanag ng guro sa aralin at mahusay ang estratehiyang ginamit sa oras ng talakayan kaya madaling maunawaan ng mga mag-aaral.

Nagpapakita lamang ito na ang mga mag-aaral ay may mahusay na komprehensyon sa wikang Filipino. Malamang ang mga mag-aaral ay nagbabasa nang may pag-unawa. Gayundin, sila ay may librong Filipino, diksyunaro sa kanilang tahanan at gumagamit sila ng wikang Filipino sa kanilang komunikasyon.

Taliwas naman sa pag-aaral ni Almendralejo na binanggit sa pananaliksik ni Legarda (2017) na natuklasan sa pag-aaral na ito na ang lebel ng komprehensyon ay hindi umabot sa mataas na antas na pagkatuto na siyang pinakamahalagang salik sa pag-unawa at pagbabago ng pananaw sa bawat mambabasa sa kanyang sarili at sa lipunang kanyang ginagalawan.

Ayon naman sa pag-aaral kina Ymas at Acas na binanggit sa pananaliksik ni Legarda (2017) ang pagbasang may komprehensyon ay ang pagbuo ng mambabasa ng mga tulay na mag-uugnay sa kanyang dating kaalaman at karanasan sa bagong impormasyong kanyang makukuha mula sa tekstong binasa. Ang pagbasa ay hindi pangmata o pagtingin lamang sa nakaimprentang simbolo, kundi isang pagtuklas sa mga kahulugang nakapaloob dito. Sinasabing kung walang pag-unawa ay wala ring pagbasang nagaganap. Ipaalam sa mga estudyante na ang komprehensyon o pag-unawa ay isang kakayahan sa pagkuha ng mensahe o kahulugan sa akdang binasa. Nakabatay ito sa kakayahan sa pagkilala ng gamit ng mga salita at pagkaka-ugnay ng mga ito sa mga iba pang mga salita sa teksto (context clues). Halimbawa, ang salitang pula “pula” ay may iba’t ibang gamit at kahulugan depende sa konteksto nito: “Pula ang kulay ng kanyang lipstik.” (kulay red) “Pinupulaan siya dahil sa kanyang masamang ugali.” (puna, kritika) Isa siyang pulahang manunulat.” (makakaliwa, komunista) “Mapula ang lupa sa aming probinsya kaya’t maalwan magtanim ng halaman” (kulay brown, mabunga) Nauunawaan ng mambabasa kung ano ang kahulugan ng salitang “pula” sa iba’t ibang pangungusap sa itaas sapagkat naiuugnay niya ito sa iba pang salita sa detalyeng di-lantad o yaong ipinahayag sa paraang patalinghaga.

Inferensyal sa Pagsusuri sa mga Datos

T-test sa Pagitan ng Kakayahan sa
Pag-unawa sa Pagbasa sa Filipino at Pagbigkas
ng mga Mag-aaral sa Filipino

Talahanayan 4

Sources of Variation	T	df	Sig
Kakayahan sa Pag-unawa sa Pagbasa sa Filipino - Kakayahan sa Pagbigkas	(-)10.23*	49	.000

* p<0.05 significant @ 5% alpha level
ns p>0.05 bot significant @ 5% alpha level

Ang resulta ng T-test sa kakayahan sa pag-unawa sa pagbasa sa Filipino at pagbigkas sa Talahanayan 4 ay nagpapakita na may “makabuluhang pagkakaiba” pabor sa pagbigkas na mas mataas ang kakayahan nila sapagkat mas madalas silang makapagsalita kaysa sa pagbabasa sa madaling salita mas nahubog ang kanilang kakayahan sa pagbigkas kaya mas madali sa kanila na bigkasin ang mga pares na salita. Dagdag pa rito ang lugar ng mga kalahok ay maraming mga dayuhan kaya mas nalinang sa kanila ang pakikipag-usap o pakikipagtalastasan sa kapwa upang mahikayat na dayuhin ang lugar at mas tangkilikin pa lalo ito. Sanay din sila gumamit ng wikang Filipino sa pasalitang anyo dahil ang wikang Filipino ay wikang panlahat kaya mas gamitin nila ang wikang ito upang magkaintindihan ang lahat ng tao. Gayundin dalawang pares lamang na salita ang kanilang binigkas at ang mga salitang ito ay mga payak.

Sa pag-unawa sa pagbasa sa Filipino ay iilan sa kanila ay hindi matandaan ang bahagi ng pangyayari ng tula dahil ito ay binubuo ng apat na saknong. Malamang nalito rin sila sa mga pagpipiliang sagot at nakatuon lamang sila sa mga pares na salita at hindi sa diwa ng tula.

Taliwas sa pag-aaral ni Tupaz (2016) ang resulta ng t-test sa antas ng kasanayan sa artikulasyon o pagbigkas ng mga mag-aaral sa Filipino. Ipinakita sa resulta ng pag-aaral na “walang makabuluhang pagkakaiba” kapag sila ay pinangkat ayon sa kasarian. Lalaki man o babae ay pareho lamang ang kasanayan sa artikulasyon. Nangangahulugan lamang ito na may napakahusay na antas ang lalaki at babaeng mag-aaral sa palabigkasan.

Ang ipotesis ay nagsasaad ng walang makabuluhang pagkakaiba ang kakayahan sa pagitan ng pag-unawang pagbasa at pagbigkas ay iwaksi.

Talahanayan 5
T-test sa Pagitan ng Kakayahan sa
Pag-unawa sa Pagbasa sa Filipino at Palatuldikan
ng mga Mag-aaral sa Filipino

Sources of Variation	t	df	Sig
Kakayahan sa Pag-unawa sa Pagbasa sa Filipino - Kakayahan sa Palatuldikan	5.38*	49	.000

* p<0.05 significant @ 5% alpha level
ns p>0.05 bot significant @ 5% alpha level

Lumabas sa pag-aaral na ito na may makabuluhang pagkakaiba sa pagitan ng kakayahan pag-unawa sa pagbasa sa palatuldikan. Nangangahulugan ito na kailangan nilang intindihing mabuti ang diwa o kahulugan ng bawat taludtod, saknong at ang buong tula samantala ang palatuldikan ay nakatuon lamang sa pares na salita na lalagyan

lamang nilang ng tuldik. Malamang ang dalawang kakayahang pangwikang ito ay magkaiba. May mga mag-aaral na magaling sa palatuldikan ngunit mahina sa pag-unawa sa pagbasa. Mayroon ding mahina sa palatuldikan ngunit mahusay sa pag-unawa sa pagbasa.

Taliwas sa pag-aaral ni Tupaz (2016) na ang resulta ng t-test sa antas ng kasanayan sa komprehensyon ng mga mag-aaral kapag pinangkat sa kasarian. Ipinakita sa resulta ng t-test na may makabuluhang pagkakaiba pabor sa mga babae na may napakahusay na komprehensyon sa Filipino ngunit ang lalaki na may mahusay lamang.

Ang ipotesis ay nagsasaad ng walang makabuluhang kaugnayan sa pagitan ng pag-unawang pagbasa at paglatuldikan ay iwaksi.

Pearson'r sa Pagitan ng
Pagbigkas, Palatuldikan
at Pag-unawa sa Pagbasa
sa Filipino ng mga mag-aaral

Talahanayan 6

Baryabol	R	Sig
Kakayahan sa Pagbigkas at Palatuldikan	(-)0.250^{ns}	.080
Kakayahan sa Pagbigkas at Pag-unawa sa Pagbasa sa Filipino	(-)0.158^{ns}	.273
Kakayahan sa Palatuldikan at Pag-unawa sa Pagbasa sa Filipino	0.177^{ns}	.218

* p<0.05 significant @ 5% alpha level
ns p>0.05 not significant @ 5% alpha level

Ang kakayahan sa pagbigkas ay walang makabuluhang kaugnayan sa palatuldikan. Kung mahusay man sila sa palabigkasan ay walang kinalaman ito sa kanilang palatuldikan. Malamang ang dalawang baryabol na ito ay walang koneksyon sa kadahilanan ang pagbigkas ay pa oral o pagbigkas, malamang maganda ang boses niya, ang artikulasyon niya, enunciation, ang haba, ang hinto ay ginagamit sa pagbigkas ng mga pares na salita at kung magaling sila sa pagbigkas maaari hindi sila magaling sa palatuldikan. May mga mag-aaral na mahusay sa pa oral o pagbigkas ngunit mahina pagdating palatuldikan o di kaya'y magaling sa palatuldikan ngunit mahina sa pa oral o pagbigkas.

Lumabas sa pag-aaral na walang makabuluhang kaugnayan sa pagitan ng pag-unawa sa pagbasa sa pagbigkas. Malamang may mga mag-aaral na magaling sa pagbigkas ngunit mahina sa pag-unawa sa pagbasa sa Filipino. Malamang ang pag-unawa ay nakatuon sa diwa ng tula samantala ang pagbigkas ay nakatuon lamang sa pagbigkas sa pares na salita at ito ay madaling bigkasin. Nagpapatunay lamang dito na

ang pag-unawa at pagbigkas ay dalawang magkaibang kasanayang o kakayahang pangwika.

Nangangahulugan lamang ito na ang kakayahan ng isang tao sa palatuldikan ay walang kinalaman sa pag-unawa sa isang pahayag o teksto. Malamang kung mahusay siya sa palatuldikan walang kinalaman ito sa pag-unawa sa mga teksto na kanyang nabasa. Hindi man siya magaling sa palatuldikan hindi naman apektado ang kanyang pag-unawa. Malamang ang pagsusulit sa pag-unawa ay tula at diwa ang binigyang kahulugan samantala ang sa palatuldikan ay pangungusap ang ginamit at dadalawang salita lamang ang tutuldikan kaya walang makabuluhang kaugnayan.

Ayon kina Constantino at Atienza na binanggit ni Fayo (2015), kung lubos ang pagkaunawa ng isang tao sa mga wikang kanyang ginagamit, nangangahulugan lamang na mas madali niyang matutunan ang iba pang kaalaman sa mundo na nasusulat sa wikang nauunawaan niya.

Ang pag-aaral na ito ay sumasang-ayon sa pag-aaral ni Faeldonea (2018) na walang makabuluhang kaugnayan ang kasanayan sa pagsasalin sa artikulasyon. Nangangahulugan lamang ito na mahusay man sila sa kasanayan sa pagsasalin, ay walang makabuluhang kaugnayan sa artikulasyon nila. Walang kaugnayan ang kahusayan nila sa pagsasalin sa artikulasyon dahil hindi maaapektuhan ng pagsasalin ang pagbibigkas. Gaanuman kahusay o napakahusay ng artikulasyon nila, walang makabuluhang kaugnayan sa kanilang pagsasalin dahil ito ay pasulat. Ang pagsasalin ay talagang naiiba sa artikulasyon. Gayundin, ang kasanayan sa pagsasalin ay walang makabuluhang kaugnayan sa komprehensyon. Mahusay man sila sa pagsasalin, walang makabuluhang kaugnayan ito sa kanilang komprehensyon. Mahusay man sila sa komprehensyon, walang makabuluhang kaugnayan ito sa kanilang kahusayan sa pagsasalin. Gayundin, napakahusay man nila sa artikulasyon, walang makabuluhang kaugnayan ito sa kanilang kahusayan sa komprehensyon.

Ang ipotesis ay nagsasaad ng walang makabuluhang kaugnayan ang kakayahan sa pagbigkas at palatuldikan, kakayahan sa pagbigkas at pag-unawa sa pagbasa at kakayahan sa palatuldikan at pag-unawa sa pagbasa sa Filipino ay tanggapin.

MGA KONKLUSYON

1. Lumabas sa pag-aaral na ito na ang antas ng kakayahan sa pagbigkas sa Filipino ng mga mag-aaral ay “napakahusay”.Bunga nito kaya niyang ipahayag ang kanyang naiisip o nais sabihin sa kanyang kapwa kamag-aral at magiging aktibo siyang mag-aaral dahil kaya niyang makilahok sa klase na may tiwala sa sarili. Magiging mahusay siyang tagapagpaliwanag sa kanilang grupo at magaling siyang tagapagsalita, lider, taga-ulat at maaari siyang sumali sa talumpati at maging kalahok sa debate. Dahil din dito maaari silang maging isang magaling na “tour guide” lalong-lalo na ang lugar na kung saan sila nakatira ay kilala sa buong mundo, maaaring dumami pa ang mga turista dahil sa angking galing nilang ito. Gayundin magiging magaling sila na ispeker sa iba’t

ibang pagkakataon at okasyon. Kaya nilang makikipagsabayan sa mga magagaling na ispeker sa buong bansa kapag nakapagtapos sila ng pag-aaral. Maaari silang kumuha ng kursong Edukasyon dahil sa kahusayan nila palabigkasan sa Filipino. Ibig sabihin magiging magaling sila na guro sa Filipino dahil sa kahusayan nila sa palabigkasang Filipino. Ang kahusayan nila sa pagbigkas ay isang kalamangan para sa isang mag-aaral. Malamang magaling din siya mananalumpati sa iba't ibang pagkakataon at okasyon. Maaari silang magtrabaho bilang "sales representative" ng isang produkto pagkatapos nila ng kurso dahil sa kahusayan nila sa pagbigkas sa Filipino lalo na kahit sila ay ganap ng propesyunal.

2. Lumabas sa pag-aaral na ito na ang kakayahan sa palatuldikan sa Filipino ng mga mag-aaral ay "katamtaman". Dahil dito wala sila masyadong sapat na kaalaman na matukoy ang kahulugan ng mga salita at kung paano ito gamitin sa pangungusap at dahil may kunti silang kaalaman sa paglalagay ng tuldik hindi sila masyadong magiging mahusay na tagapagsalita sapagkat hindi sila gaanong marunong kumilala at bumigkas ng mga salitang malumi, mabilis, maragsa at malumay. Maaaring mahahalata silang taga probinsiya kung pupunta sila ng Maynila dahil hindi nila kayang makipagsabayan sa mga taong taga roon ayon sa kung paano sila bumigkas na naaayon sa tono. Gayundin hindi nila madaling maunawaan ang teksto, akda o mga sulatin na kanilang babasahin dahil wala silang sapat na kaalaman kung paano bigkasin ang mga salita batay sa tuldik nito.

3. Lumabas sa pag-aaral na ito na ang antas ng kakayahan sa pag-unawa sa pagbasa sa Filipino ng mga mag-aaral ay "mahusay". Bunga nito madali nilang maunawaan ang nilalaman o diwa ng akda o teksto na kanilang binabasa kaya tataas ang marka na makukuha nila sa bawat pagsusulit at dahil din dito maraming impormasyon o kaalaman ang matutunan nila sa paaralan at kaya nilang makisali sa mga timpalak na may malaking premyo dahil ganap na maunlad ang kaalaman nila sa wikang Filipino lalo na sa talakayan sa klase. Kaya rin nilang makipagpalitan ng kaalaman sa mga matatalino sa klase dahil sa mahusay ang komprehensyon nila. Magiging mataas ang resulta ng kanilang pagsusulit, ang kanilang grado sa Filipino. Naisasagawa din nila ang kanilang takdang aralin nang tama. Hindi mahihirapan ang guro sa pagpapaunawa ng aralin dahil mahusay ng kanilang komprehensyon sa Filipino at gayundin sila ay makakakuha ng karangalan sa pagtatapos ng klase. Maaari rin silang sumali sa mga dagliang talumpati dahil madali nilang maunawaan ang mga tanong na ibibigay sa kanila at mas mapapabilis ang talakayan sa loob ng silid aralan sapagkat ang mga mag-aaral ay mabilis na makaunawa.

4. Lumabas sa pag-aaral na "may makabuluhang pagkakaiba" sa pagitan ng kakayahan sa pag-unawa sa pagbasa sa Filipino sa kakayahan sa pagbigkas. Kung magkagayon tataas din ang kanilang pag-unawa dahil sa kahusayan nila sa pagbigkas ng mga salita at nakakatulong nang malaki ang kakayahan nila sa pagbigkas sa pag-unawa sa teksto o babasahin. Ang matutunan nila sa palagbigkasan ay maaaring magagamit nila sa pag-unawa ng mga tekstong babasahin nila.

5. Lumabas sa pag-aaral na "may makabuluhang pagkakaiba" sa pagitan ng kakayahan sa pag-unawa sa pagbasa sa Filipino sa kakayahan sa palatuldikan. Bunga

nito ang kahusayan nila sa palatuldikan ay maaari nilang magamit sa tekstong kanilang babasahin. Bunga rin nito madaming impormasyon ang matutunan dahil sa kahusayan nila sa palatuldikan kaya kung magkagayon tataas ang grado nila sa pag-aaral ng Filipino.

6. Lumabas sa pag-aaral na “walang makabuluhang” kaugnayan sa kakayahan sa pagbigkas at palatuldikan, kakayahan sa pagbigkas at pag-unawa sa pagbasa sa Filipino gayundin ang kakayahan sa palatuldikan at pag-unawa sa pagbasa sa Filipino. Bunga nito tataas man ang marka nila sa pag-unawa ay walang kinalaman o kaugnayan sa kanilang pagbigkas o palatuldikan. Samakatuwid maaaring matutunan muna ng mag-aaral ang pagbigkas saka magpakadalubhasa sila sa pag-unawa. Sa pag-unawa sa pagbasa dadami ang impormasyon at kaalaman ang matutunan nila. Sa panig naman ng pagbigkas, ganap na malinang ang gawaing ito sa mga mag-aaral. Pwede silang maging isang magaling na ispeker, taga-ulat, mamimigkas, tagapagpapaliwanag, kalahok sa debate, newscasting, broadcasting at sabayang pagbigkas.

REKOMENDASYON

Ayon sa kinalabasan at kongklusyon na nabuo sa pananaliksik na ito, iminumungkahi ang mga sumusunod na rekomendasyon:

1. Lumabas sa pag-aaral na ito na ang antas ng kakayahan sa pagbigkas sa Filipino ng mga mag-aaral ay “napakahusay”. Para sa mga mag-aaral ay kailangang gagawa ng paraan upang mapanatili ang kahusayan nila sa artikulasyon o pagbigkas. Araw-araw na magbasa ng mga akdang pampanitikan sa paraang pagbigkas nang sa gayun ay mapanatili na napakahusay ang kakayahan sa pagbigkas ng mga salita. Magsanay sila sa pagbigkas ng mga tongue twisters, tula, bugtong, diyalogo, at iba pa para mapanatiling maunlad ang pagbibigkas nila ng mga salita. Iminumungkahi rin sa kanila na sumali sa mga gawaing pasalita upang lalong uunlad ang pagbigkas nila. Sumali sa mga patimpalak gaya ng spoken poetry, broadcasting, sabayang pagbigkas, tulaan, sining ng pagkukwento, dulaan at iba pa.

Iminumungkahi rin sa mga guro na bigyang pagsasanay ang mga mag-aaral sa wastong pagbigkas ng mga salita, parirala o pangungusap sa Filipino bago magsimula ang talakayan nang sa gayun maaaring mapanatili nilang napakahusay ang antas ng kakayahan sa pagbigkas. Magdaos ng paligsahan sa pagsagot, diyalogo na may kinalaman sa paksang aralin, magpaawit bago magsimula ang klase o magpasaulo ng bugtong para lalo pang mapahusay ang kakayahan sa artikulasyon. Magbigay ng mga pampadulas dila (tongue twister) upang lalong mahasa ang kahusayan ng mga mag-aaral sa pagbigkas ng mga salita sa Filipino lalo na yaong mga pares na salita.

Para naman sa mga magulang paglaanan ng oras ang mga anak sa bahay na turuan ng tamang pagbigkas ng mga salita, parirala, pangungusap o sanaysay upang mahasa ang kanilang dila sa tamang pagbigkas. Sanayin din na magsalita ng wikang

Filipino sa loob ng bahay upang masanay ang mga anak sa tamang diin at tono ng mga salitang Filipino.

Para sa mga namumuno ng DepEd upang mapanatili ang kahusayan ng mga mag-aaral sa pagbigkas ay maaaring magpatayo ng speech laboratory upang sa gayon ay mapakinggan ng mga mag-aaral kung ano ang tamang tono, diin, hinto, intonasyon at pagpapangkat-pangkat ng mga salita sa pagbigkas ng talata, tula at iba pang babasahin.

2. Lumabas sa pag-aaral na ito na ang kakayahan sa palatuldikan sa Filipino ng mga mag-aaral ay “Katamtaman”. Sa mga mag-aaral upang maging napakahusay ang kakayahan sa palatuldikan ay maaaring magkaroon ng diksyunaryo sa Filipino upang magkaroon ng sanggunian sa mga salitang hindi nauunawaan kung ano ang wastong tuldik nito at kung paano ito bibigkasin. Lalo pang magsanay sa paglalagay ng tuldik sa mga salitang mabilis, malumi, malumay at maragsa upang maging napakahusay ang kakayahan sa palatuldikan.

Para naman sa guro ay magbigay ng mga pagsusulit na huhubog sa kakayahan ng mga mag-aaral sa palatuldikan katulad ng pagtutuldik ng mga salita o di kaya’y mga laro na kung saan madaling matandaan ng mga mag-aaral ang tamang tuldik ng mga salita, maaring mag-uunahan sila sa pagbigay ng mga salitang tinutuldikan gamit ang diksyunaryo.

Para naman sa mga magulang para maging napakahusay ang kanilang kakayahan sa palatuldikan ay magkaroon ng laro na kung saan magbibigay sila ng mga salitang malumi, maragsa, malumay at mabilis. Maaari ring magbigay ng mga pares na mga salita na lalagyan nila ng tamang tuldik upang magkaroon ng retensyon ang inyong mga anak.

3. Lumabas sa pag-aaral na ito na ang antas ng kakayahan sa pag-unawa sa pagbasa sa Filipino ng mga mag-aaral ay “mahusay”. Sa mga mag-aaral iminumungkahi sa kanila na magbasa ng iba’t ibang babasahin upang lalong mahasa ang kakahayan sa pag-unawa sa pagbasa. Magsanay sila upang maging napakahusay ang komprehensyon nila sa Filipino. Ugaliing magbasa ng mga aklat upang mas mapahusay pa ang komprehensyon lalong-lalo na sa asignaturang Filipino. Maglaan ng oras sa pagbabasa sa mga bakanteng oras upang mas mahasa ang kakayahan sa komprehensyon.

Iminumungkahi rin sa mga guro na bigyan ang mga mag-aaral ng iba’t ibang seleksyon o babasahin at ang guro ay laging may nakahanda na katanungan upang lalong mapataas ang antas ng kakayahan ng mga mag-aaral sa pag-unawang pagbasa. Bigyan sila ng pagsasanay sa mga talasalitaan at wastong pagbabaybay ng mga salita nang sa gayon ay lalawak at uunlad ang talasalitaan ng mga mag-aaral, gayundin magagamit nila ito sa ikadadali ng gawaing komprehensyon. Magbigay ng mga pangungusap na maiikli at ipabigay sa kanila ang kahulugan nito. Magparinig o magpabasa ng isang maikling seleksyon at magtanong tungkol dito upang mahasa ang kakayahan nila sa pag-unawa.

Iminumungkahi rin sa mga magulang na maglaan ng maraming aklat o mga babasahin na maaaring mabasa ng mga mag-aaral kapag sila ay nasa bahay at maghanda rin ng mga tanong na magpapaulad ng kanilang komprehensyon.

Para sa mga namumuno ng DepEd, maglaan ng sapat na pondo sa pagbili ng mga aklat, ensayklopedya, magasin, pahayagan, mga aklat na nauukol sa mga kwento at iba pang materyales na maaaring magamit ng mga mag-aaral sa pag-aaral nang sa gayon, lalong uunlad ang komprehensyon nila.

4. Lumabas sa pag-aaral na “may makabuluhang” pagkakaiba sa pagitan ng kakayahan sa pag-unawa sa pagbasa sa Filipino sa kakayahan sa pagbigkas.

Iminungkahi sa mga mag-aaral na palaging magsanay sa pagbigkas ng mga salita upang mapanatili na napakahusay at laging magbasa ng mga aklat o iba’t ibang uri ng babasahin upang mas lalong mapaunlad ang kakayahan nila sa pagbigkas lalo na sa mga salitang pareho ang baybay ngunit magkaiba ng kahulugan. Gayundin sumali sa mga gawaing pampadulas ng dila- Paunlarin ang kakayahan sa pagbigkas sa tulong ng pagbasang paoral/pabigkas para lalong makapagsanay at maging napakahusay ang kakayahan sa pagbigkas.

5. Lumabas sa pag-aaral na “may makabuluhang pagkakaiba sa pagitan ng kakayahan sa pag-unawa sa pagbasa sa Filipino sa kakayahan sa palatuldikan. Iminumungkahi para sa mga mag-aaral na lalo pang magsanay sa paglalagay ng tuldik sa mga salitang malumi, maragsa, malumay at mabilis upang lalong mapahusay ang kakayahan sa paltuldikan. Magkaroon din ng diksyunaryo sa Filipino upang magkaroon ng sanggunian sa mga salitang hindi maunawaan kung ano ang wastong tuldik nito at kung paano ito bibigkasin.

Para naman sa guro ay magbigay ng mga pagsusulit na huhubog sa kakayahan ng mga mag-aaral sa palatuldikan katulad ng pagtutuldik ng mga salita o di kaya’y mga laro na kung saan madaling matandaan ng mga mag-aaral ang tamang tuldik ng mga salita, maaaring mag-uunahan sila sa pagbigay ng mga salitang tinutuldikan gamit ang diksyunaryo.

6. Lumabas sa pag-aaral na “walang makabuluhang” kaugnayan sa kakayahan sa pagbigkas at palatuldikan, kakayahan sa pagbigkas at pag-unawa sa pagbasa sa Filipino gayundin ang kakayahan sa palatuldikan at pag-unawa sa pagbasa sa Filipino. Para sa mga mag-aaral kailangang paunlarin nila ang pag-unawa sa pagbasa sa pamamagitan ng pagbasa ng iba’t ibang teksto sa Filipino upang lalong umunlad ang kakayahan sa pag-unawa. Kailangang paunlarin ang talasalitaan upang ganap na maunawaan ang mga binasang teksto. Di kaya’y magsanay sa paglalagay ng mga tuldik nang sa gayon maaari itong magamit sa pag-unawa sa mga tekstong nabasa. Sa tuwing nagbabasa ng mga teksto ay ugaliing magbasa na paoral o pabigkas upang marinig ng guro kung tama ang salitang iyong binibigkas upang kagyat na maituwid ito kung mali ang pagbigkas ng mga salita.

Para sa mga guro, maglaan nang maraming mga pagsasanay tungkol sa pagtutuldik upang madagdagan ang bokabularyo o talasalitaan na maaaring magagamit sa pag-unawa ng mga mag-aaral sa teksto at matukoy din nila ang tamang pagbigkas ng mga pares na salita. Gayundin bigyan ang mga mag-aaral ng mga babasahin at ipabasa ito nang malakas upang matukoy kung wasto ang mga salitang kanilang binabasa o binibigkas.

ETIKAL NA PAMANTAYAN

Ang pananaliksik na ito ay naglalahad ng mga hakbang at pamantayan na sinusunod upang matiyak na ang pananaliksik ay sumusunod sa mga etikal na pamantayan. Ito ay alinsunod sa mga patakaran at regulasyon ng aming institusyon at mga internasyonal na pamantayan. Ang pananaliksik na ito ay sinuri at inaprubahan ng Filamer Christian University at bago simulan ang pananaliksik, lahat ng kalahok ay binigyan ng detalyadong impormasyon tungkol sa layunin ng pag-aaral, mga pamamaraan, posibleng benepisyon. Ang lahat ng datos na nakolekta mula sa mga kalahok ay ituturing na kumpidensyal. Ang mananaliksik ay nainindigan sa pagiging tapat at transparent sa buong proseso ng pananaliksik. Ang disenyo ng pag-aaral, mga pamamaraan ng pagkolekta at pagsusuri ng datos, at mga resulta ay ipapahayag nang malinaw at buo. Ang anumang salungatan ng interes ay ihahayag din. Ang mananaliksik ay mahigpit na sumusunod sa mga patakaran laban sa plagiarism. Ang lahat ng ideya, datos, at imporamsyon na hiniram mula sa iba ay wastong binanggit at tinukoy.

PASASALAMAT

Isang dakila at taus-pusong pasasalamat ang nais ihandog ng mga mananaliksik bilang pagkilala at pagtanaw ng utang na loob sa lahat ng mga taong walang pag-aalinlangang tumulong at sumuporta upang mapagyari at maging matagumpay ang pananaliksik na ito.

Unang-una sa lahat sa Poong Maykapal**,** na nagbigay patnubay, liwanag, ibayong-lakas, tatag at talas ng kaisipan upang maisakatuparan ang pananaliksik na ito. Sa kalakasan, karunungan at pagmamahal na maluwalhating natapos ang pag-aaral na ito sa itinakdang panahon.

Kay Gng. Melody J. Blance, na siyang aking naging tagapayo sa pananaliksik na ito, sa matiyagang pagsubaybay, paglaan ng kaniyang oras at panahon, sa pag-unawa, pagbibigay ng mga makabuluhang mungkahi at positibong puna. Higit sa lahat, sa pagbabahagi ng kanyang mga ideya at ekspertis sa tamang hakbangin at mga pamamaraan hinggil sa paggawa ng pag-aaral na ito;

Kay Dr. Felimon A. Pimentel Jr., Dekano, Paaralang Gradwado ng Filamer Christian Univesity sa kanyang propesyunal na pamatnubay, pagbibigay ng ideya at pagsusuri ng pang-istadistikang kagamitan upang mabuo ang pananaliksik na ito;

Sa lupon ng Tagasuri: Gng. Maribel N. Buenavides, Gng. Cheryl Rose D. Alipongan at Dr. Felimon A. Pimentel Jr. sa pagbibigay ng magagandang ideya upang

mas lalong mapaganda ang pananaliksik, at pagbibigay ng mga mungkahi na makakatulong nang malaki sa pag-aaral na ito;

Kay Gina L. Iglesias, sa paglaan ng kaniyang oras upang maging hurado at walang humpay na pagsubaybay sa mga mag-aaral upang maging maganda ang kalalabasan ng pag-aaral na ito. Gayundin sa kanyang bukas-loob na pagtanggap at pahintulot na magamit ang kanyang mga mag-aaral sa Ikawalong Taong, bilang mga respondente o mga kalahok sa nasabing pananaliksik;

Kina Cynthia S. Buque at Maria Baby Gina Valcoba, na naglaan ng kani-kanilang makabuluhang oras at panahon sa pagbibigay-payo, motibasyon at pagbahagi ng kanilang mga kaalaman at ekspertis sa larangan ng pananaliksik upang maging mabisa, organisado at komprehensibo ang pananaliksik na ito.

Sa mga mag-aaral ng Ikawalong Taon, ng Mataas na Paaralang Nasyonal ng Manocmanoc, na naging kalahok at sumuporta upang mapagyari ang pananaliksik na ito;

Kay G. Val T. Casimero, Ulong guro ng Mataas na Paaralang Nasyonal ng Manocmanoc, sa pag-unawa at pahintulot na makapagbigay ng pagsusulit ang mananaliksik sa mga mag-aaral;

Sa mga awtor, editor, tagasalin, at mananaliksik ng mga akdang pinaghanguan ng mahahalagang impormasyon na nagamit sa pag-aaral kaugnay sa pagbuo ng ikalawang kabanata ng pananaliksik na ito, ang mga kaugnay na pag-aaral at literatura.

Sa aking mga pamilya lalo na sa aking mga una at pangalawang magulang, na silang nagbigay inspirasyon at lakas ng loob upang ipagpatuloy ang hamon ng buhay lalo na sa pananaliksik na ito, gayundin sa tulong pinansyal at oras na kanilang ibinigay na higit na nakatulong upang maisakatuparan ang pananaliksik na ito.

TALASANGGUNIAN

Admin. (n.d.). Rationalistic. TheSilentLearner. https://thesilentlearner2014.blogspot.com/2014/07/rationalistic.html

Answers Corporation. (n.d.). Ano Ang Diin at Tuldik? Answers. http://www.answers.com/Q/Ano_ang_kahulugan_ng_tuldik

Aguil, R.V (2018). Kasanayan sa Bokabularo, Kritikal na Pag-iisip at Pag-unawa sa Pagbasa Filipino ng mga Mag-aaral sa Grado 11, Di-nalathalang Tesis sa Master ng Sining ng Pagtuturo sa Filipino, Filamer Christian University, Lungsod ng Roxas.

Austero, C. S., Mateo, E. C, (2009). Pagbasa at Pagsulat Tungo sa Pananaliksik, #200-C Insilay Street, Pineda, Pasig City: Unlad Publishing House.

Bernales, R. (2014). Akademikong Filipino para sa Kompetitibong Pilipino. Grandwater Publications. Makati City.

Delfin, C. S. (2014). Kasanayan sa Tayutay at Pag-unawang Kontekstwal sa Filipino ng mga Mag-aaral sa Sekondarya.

Fayo, B. (2015). Epekto ng Multilinggwal sa Pagtuturo sa Pag-unawang Pampanitikan

sa Filipino ng mga Mag-aaral Sekundarya, Di-nalathalang Tesis sa Master ng Sining ng Pagtuturo sa Filipino, Filamer Christian University, Lungsod ng Roxas.
Faeldonea, S.F. (2018). Kasanayan sa Pagsasalin, Artikulasyon at Komprehensyon ng mga Mag-aaral sa Grado 11, Di-nalathalang Tesis sa Master ng Sining ng Pagtuturo sa Filipino, Filamer Christian University, Lungsod ng Roxas.
Gabay SA Pagtutuldik. (n.d.-a). https://kwfdiksiyonaryo.ph/public/files/gabay_tuldik.pdf
Gener, G. E. (2017), Preperensya sa Paggamit ng mga titik na C, F, J, N, Q, V, X at Z sa Pagbabaybay at Pagkatuto ng mga Salita sa Filipino ng mga Mag-aaral sa Grado 7, Di-nalathalang Tesis sa Master ng Sining ng Pagtuturo sa Filipino, Filamer Christian University, Lungsod ng Roxas.
Legarda, Cecil A. (2017), Istilo sa Pagkatututo, Interes at Komprehensyon sa Filipino ng mga Mag-aaral sa Grado 8. Di-nalathalang Tesis sa Master ng Sining ng Pagtuturo sa Filipino, Filamer Christian University, Lungsod ng Roxas.
Llaban, Donalyn F.S (2009), Bilis at Pag-unawa sa Pakikinig sa Filipino ng mga Mag-aaral sa Primarya, Di-nalathalang Tesis sa Master ng Sining ng Pagtuturo sa Filipino, Filamer Christian University, Lungsod ng Roxas.
Macmillan. Macmillan Science and Education and Macmillan Publishers. (n.d.). https://www.macmillan.com/
Malikhaing Pagsulat. MALIKHAING PAGSULAT. (n.d.). http://sirabbie.blogspot.com/
Mendoza, E.D. (2009). Pagbigkas at Pasulat na Pakikipagtalastasan, National Book Store, Quad Alpha CentrumBldg. 125 Pioneer Street Madaluyong City 1550.
Perfetti, C.A., & Stafura, J.Z. (2020). World Knowledge in a theory of reading comprehension. Scientific Studies of Reading, 24(1), 48-71.
Slideshare. (2013a, December 7). Pag unawa at Komprehensyon. SlideShare. https://www.slideshare.net/luvy15/pag-unawa-at-komprehensyon
Tupaz, Jocemar L. (2016), Kasanayan sa Pagsasalin, Artikulasyon at Komprehensyon ng mga Mag-aaral sa Elementarya, Di-nalathalang Tesis sa Master ng Sining ng Pagtuturo sa Filipino, Filamer Christian University, Lungsod ng Roxas.
Wikimedia Foundation. (n.d.). Tingnan Ang Wikitext ng Tuldik. Wikipedia. https://tl.wikipedia.org/w/index.php?title=Tuldik&action=edit&section=3

APA Citation:

Recto, J. V. (2024). KAKAYAHAN SA PAGBIGKAS, PALATULDIKAN AT PAG-UNAWA SA PAGBASA SA FILIPINO. Ignatian International Journal for Multidisciplinary Research, 2(8), 747–766. https://doi.org/10.5281/zenodo.13310548

jessamaevillaruel14@yahoo.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

LEVEL OF AWARENESS OF THE RESIDENTS IN THE IMPLEMENTATION OF DISASTER RISK REDUCTION AND MANAGEMENT PROGRAMS IN POBLACION 1, MABINI, BOHOL, PHILIPPINES

Ily Mae M. Bernales

Bohol Island State University- Main Campus, Tagbilaran City, Bohol, Philippines

https://doi.org/10.5281/zenodo.13270579

ABSTRACT

The study aimed to assess the Level of Awareness of the Residents in the Implementation of Disaster Risk Reduction and Management Programs in Poblacion 1, Mabini, Bohol, Philippines in terms of Policy and Plans, Human Resource, Programs and Activities, Structural Resilience, Risk Assessment and Vulnerability, and Disaster Preparedness and Response. 80 residents of Poblacion 1, Mabini, Bohol in different Puroks were assessed according to their knowledge and awareness level. The researcher used the descriptive survey method of research and use a survey questionnaire to gather the necessary data among respondents of the study. The result of the study on the Level of Awareness of the Residents in the Implementation of Disaster Risk Reduction and Management Programs in Poblacion 1, Mabini, Bohol in terms of Policy and Plans, Human Resource, Programs and Activities, Structural Resilience, Risk Assessment and Vulnerability, and Disaster Preparedness and Response was found to be Aware with a total of 3.07 as the computed mean among all variables.

Keywords: *Disaster Risk Reduction Management, Program, Activities, Residents, Poblacion 1, Mabini, Bohol, Philippines*

INTRODUCTION

In terms of disaster risk, Philippines ranked third among all of the countries with the highest risks worldwide according to the World Risk Report 2018, with index value of 25.14% (World Economic Forum, 2018). Considering the location and geographical context of the Philippines as the risk involving coastal hazards such as typhoons, storm surges, earthquakes and floods. Disaster Risk is the likelihood of loss of life, injury or destruction, and damage from a disaster in a given period (UNDRR Assessment Report, 2015).

Philippines has established risk reduction and management to mitigate the effects of disaster. Under Republic Act 10121, also known as "Philippine Disaster Risk Reduction and Management Act of 2010", which implies “An act strengthening the Philippine disaster risk reduction and management system, providing for the national disaster risk reduction and management framework and institutionalizing the national disaster risk reduction and management plan, appropriating funds therefor and for other purposes”. Under this law, it states to “Recognize and strengthen the capacities of LGUs and communities in mitigating and preparing for, responding to, and recovering from the impact of disasters”. Increasing public awareness about disaster preparedness is very important (Hargono, 2023).

Talplacido et. al (2022) also reveals in his study entitled “The Level of Disaster Awareness and Preparedness of Families in the Flood-Prone Barangays of San Leonardo, Nueva Ecija” that their level of disaster awareness and preparedness can be fully achieved through acquiring relevant technical activities and programs. Thus, reducing the negative impact of disasters on their families and the community. Exposure to newspapers and television was shown to be substantially associated to the level of disaster risk reduction knowledge (Perez, 2021).

Adhering to this, the NDRRMC forwarded four domains, wherein Barangay LGU of Poblacion 1, Mabini, Bohol is encouraged to enhance their disaster risk reduction and management activities. These are policy and plans, capability/capacity; emergency preparedness and response; and partner or stakeholder agreement.

Thus, this study outlines the level of awareness of the residents in the implementation of disaster risk reduction and management programs in Poblacion 1, Mabini, Bohol, Philippines.

Research Questions

The general objective of this study is to determine the Level of Awareness of the residents on the Implementation of Disaster Risk Reduction and Management Programs Poblacion 1, Mabini Bohol.

Specifically, it sought to answer the following question:

1. What is the level of awareness of the respondents on disaster risk reduction and management in terms of:
    1.1 policy and plans;
    1.2 human resource;
    1.3 programs and activities;
    1.4 structural resilience;
    1.5 risk assessment and vulnerability; and
    1.6 emergency preparedness and response

METHODOLOGY

The study used a quantitative approach and the research method was descriptive survey method to know the level of awareness of the residents in the implementation of disaster risk reduction and management programs in Poblacion 1, Mabini, Bohol.

A standardized questionnaire was used in gathering data. The questionnaire presented the profile characteristics and the level of awareness on DRRM of Poblacion 1, Mabini, Bohol residents in terms of policy and plans, human resource, programs and activities, structural resilience, risk assessment and vulnerability, and emergency preparedness and response.

The sampling process used was stratified random sampling wherein the respondents came from the 5 Puroks of Barangay Poblacion 1 which were Purok Upper Kulo, Purok Lower Kulo, Purok Kamansi, Purok Kaimito and Purok Mangga. The total number of respondents are 80 respondents ranges from 15 years- 60 years old as they were the ones who are fully matured and aware with the barangay activities.

.

RESULTS

The result of the Policy and Plans shows that the total mean is 3.11 interpreted as Aware. The result of the Human Resource shows that the total mean is 3.06 interpreted as Aware. On the Programs and Activities, the total mean is 3.01 interpreted as Aware. On the Structural Resilience, it shows the total mean is 3.06 interpreted as Aware. On the Risk Assessment and Vulnerability, it shows the total mean is 3.03 interpreted as Aware. And lastly, on the Emergency Preparedness and Response, the total mean is 3.13 interpreted as Aware.

DISCUSSION

On the Level of Awareness of the Residents in the Implementation of Disaster Risk Reduction and Management Programs in Poblacion 1, Mabini, Bohol

According to UNESCO (2010), preparedness plans are dynamic ventures that need to be reviewed, modified, updated, and tested regularly. Active disaster preparedness includes developing comprehensive response plans, monitoring hazards and threats, training emergency personnel, and training members of the communities at risk "to ensure the timely appropriate and effective delivery of relief"**.**

Table 1. Summary table extent is the implementation of Disaster Risk Reduction and Management (DRRM)

Variables	Mean	Interpretation
Policy and Plans	3.11	Aware
Human Resource	3.06	Aware
Programs and Activities	3.01	Aware
Structural Resilience	3.06	Aware
Risk Assessment and Vulnerability	3.03	Aware
Emergency Preparedness and Response	3.13	Aware
Overall Mean	**3.07**	**Aware**

The tables exhibit the level of awareness of the residents in the implementation of disaster risk reduction and management programs in Poblacion 1, Mabini, Bohol. Interestingly, all variables were interpreted as "Aware" with a computed overall mean of 3.07.

In particular, Emergency Preparedness and Response got the highest mean of 3.13 which is interpreted as "Aware", followed by Policy and Plans which got a computed mean of 3.11 which is interpreted as "Aware", meanwhile Programs and Activities got the lowest computed mean of 3.01 and Risk Assessment and Vulnerability with a computed mean of 3.03 but it was interpreted as "Aware". Additionally, Human Resource and Structural Resilience got an equal computed mean which is 3.06 and both were implemented as "Aware".

The results of the study conform with the study of Bayugo et. al (2016) that the residents in the Municipality of Rosario, Cavite is aware of the disaster risk reduction management (DRRM) programs of the locality. This means that the LGU 's programs related to disaster risk reduction and management are effective.

Moreover, this also aligns with the results of the study of Dignadice (2024) wherein the implementation of disaster risk reduction management (DRRM) programs is highly evident. With that, specific aspects were also found as highly evident such as knowledge building, awareness raising, and etc.

In addition, there is a need to assess and strengthen the awareness of the residents regarding disaster preparedness. Brochures and leaflets may be given to the residents for them to be more oriented and educated of the importance of being prepared during emergencies and disaster occurrences (Maminta, 2015).

Conclusions

The following conclusions are drawn based on the findings of the study.

The result of the study on the level of awareness of the residents in the implementation of disaster risk reduction and management programs in terms of Policy and Plans, Human Resource, Programs and Activities, Structural Resilience, Risk Assessment and Vulnerability, and Emergency Preparedness and Response was found to be Aware in all variables among the residents of Poblacion 1, Mabini, Bohol.

Recommendations

From the findings and conclusion of this study, the following are the recommendations:

The barangay LGU of Poblacion 1, Mabini, Bohol may continue to implement the Disaster Risk Reduction Activities. The barangay LGU may strengthen the DRRM through various programs for better preparation and protection to natural calamities. The barangay LGU may encourage the residents of Poblacion 1, Mabini, Bohol to be more aware and encouraged to participate in various activities.

Compliance with Ethical Standards

This study has a single author and written in her own words following the ethical standards. The author ensured that informed consent was obtained, participants had the freedom to withdraw at any time, their anonymity was preserved, their well-being was protected, there were no conflicts of interest in conducting the study, plagiarism was rigorously avoided, there was no bias in interpreting the results, and the findings were used solely for research purposes.

Acknowledgments

The researcher acknowledged the respondents for their time and contribution and Ms. Hazel Mae V. Eroy for the assistance in completing the research. Their cooperation contributed for the analysis of this study.

REFERENCES

Asio, J. M. R. (2021). Disaster awareness and level of compliance to disaster programs in a highly urbanized city. Asio, JMR (2021). Disaster Awareness and Level of Compliance to Disaster Programs in a Highly Urbanized City. Aquademia, 5(1).

Bayugo, M.A, Plaza A., Savillo, G., Gonzales R. (2016) The Implementation of the Disaster Risk Reduction and Management Programs in the Municipality of Rosario, Cavite: Basis for a Proposed Strategic Communication Plan.International Journal of Interdisciplinary Research and Innovations. Retrieved from www. researchpublish.com

Dignadice, J. L. (2024). IMPLEMENTATION OF DISASTER RISK REDUCTION AND MANAGEMENT (DRRM) PROGRAM AND ACTIVITIES AMONG SCHOOLS IN THE DIVISION OF SULTAN KUDARAT. Ignatian International Journal for Multidisciplinary Research, 2(3), 147–151. https://doi.org/10.5281/zenodo.10783940

Edhel P. Talplacido, Rick Donald S. Manzon, & Marites M. Cruz. (2022). The Level Of Disaster Awareness And Preparedness Of Families In The Flood-Prone Barangays Of San Leonardo, Nueva Ecija - A Case Study. International Journal of Progressive Research in Science and Engineering, 3(05), 245–251.Retrieved from https://journal.ijprse.com/index.php/ijprse/article/view/596

Hargono A, Artanti KD, Astutik E, Widodo PP, Trisnawati AN, Wardani DK, Lioni E. Relationship between disaster awareness and disaster preparedness: online survey of the community in Indonesia. J Public Health Afr. 2023 Oct 1;14(9):2376. doi: 10.4081/jphia.2023.2376. PMID: 37927360; PMCID: PMC10621481.

Maminta, L.G. (2019). Level of Awareness on Disaster Preparedness. Journal of Physics: Conference Series. 1254 012015. Doi: 10.1088/1742-6596/1254/1/012015

Perez, B.O. (2021). Level of Awareness on Disaster Risk Reduction of the University of Eastern Philippines Employees and Students. Alinteri Journal of Agriculture Sciences, 36(2): 265-269. doi:10.47059/alinteri/V36I2/AJAS21142

Republic Act No. 10121, (2010). Official Gazette of the Republic of the Philippines. https://www.officialgazette.gov.ph/2010/05/27/republic-act-no-10121/

UNDRR (2019). Disaster Risk Reduction in the Philippines: Status Report 2019. Bangkok, Thailand, United Nations Office for Disaster Risk Reduction (UNDRR), Regional Office for Asia and the Pacific

UNDRRAssessment Report, (2015). https://www.preventionweb.net/disaster-risk/risk/disaster-risk/. United Nations International Strategy for Disaster Reduction (UNISDR) Global Assessment Report, (2015).

APA Citation:

Bernales, I. M. M. (2024). LEVEL OF AWARENESS OF THE RESIDENTS IN THE IMPLEMENTATION OF DISASTER RISK REDUCTION AND MANAGEMENT PROGRAMS IN POBLACION 1, MABINI, BOHOL, PHILIPPINES. Ignatian International Journal for Multidisciplinary Research, 2(8), 347–353. https://doi.org/10.5281/zenodo.13270579

ilymaebernales@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

LEVEL OF COMPETENCE AND PERFORMANCE OF NON-TEACHING PERSONNEL IN THE CITY DIVISION OF ILAGAN: A BASIS FOR AN UPSKILLING PROGRAM

Ruby B. Guerrero, LPT, MPA, PhD

San Ignacio Elementary School, Schools Division Office of the City of Ilagan, Philippines

https://doi.org/10.5281/zenodo.13371291

ABSTRACT

This study assessed the competence and performance of non-teaching personnel in the Schools Division of the City of Ilagan as a basis for developing an upskilling program. The research employed a descriptive-inferential design, surveying 104 administrative employees. The study examined respondents' profiles, including sex, age, position, and educational attainment, and measured their competence in areas such as self-management, professionalism, ethics, and teamwork. Performance was evaluated based on Key Result Areas (KRAs) from their Individual Performance Commitment Review Forms. Findings revealed that the non-teaching personnel were highly competent and performed outstandingly, with some variation based on profile variables. The study identified a significant relationship between competence and performance, emphasizing the need for a sustainable upskilling program to maintain and enhance employee competence and performance. Recommendations include developing an appraisal system, increasing training opportunities, and implementing a tailored upskilling program.

Keywords: *Non-Teaching Personnel, Competence, Performance, Upskilling Program, Schools Division of the City of Ilagan*

INTRODUCTION

In the realm of public service and continuous improvement, non-teaching personnel have been involved in the mandate of quality, standard, and sustainable service for every Filipino. In the Department of Education, public service is attributed to the alignment of its mandate to educational goals and objectives. In lieu of this, administrative employees make huge contributions in the attainment of its lifetime goals.

As immersed in this field, the growing demands for continuous educational and professional growth and development ignited the spirit to alleviate conventional approaches in the service which are no longer applicable in the modern and changing times. Instead, an upskilling program that would cater to the needs, skills, competencies, and performance of every non-teaching employee is necessary to effectuate improved and innovative delivery of public service. This demand has led towards improvements in the education sector and school organizations where services are provided, and employees are trained to effectively deliver quality public services.

Including non-teaching staff members in the upskilling strategy may have the potential for improving school culture by galvanizing shared beliefs, attitudes, and practices amongst staff members, increasing employee engagement by communicating clear expectations and purpose in job responsibilities, promoting quality in the work environment through a cohesive organizational structure.

The non-teaching staff includes those individuals who are not immediate part-takes in a classroom for teaching but still play crucial roles in supporting the school system and its various functions. Their responsibilities range from administration and finance to maintenance and student support. According to Department of Education Memorandum No. 007 s. 2023, non-teaching position refers to a position whose primary duties and responsibilities contribute to the delivery of basic education services and achievement of agency outcomes, but do not involve nor directly support the actual conduct of teaching or delivery of instruction.

As Wanjiku (2021) mentioned that upskilling program represents a carefully designed plan to guide the actions and relationships of organizational members to achieve shared goals. In education, strategy affects policies, procedures, and the roles of every stakeholder, to have a positive impact on organizational achievement. Hence, demands for higher standards in education in recent decades have led to upskilling programs aimed at increasing accountability for administrators and non-teaching personnel to aid the current situations of organizational and institutional development. The Department of Education adopts mechanisms and programs to include non-teaching personnel through its mandate to elevate standards in the delivery of services.

Despite the importance and incorporation of staff development in basic education, there is limited research on the availability and use of learning opportunities for non-teaching personnel in the form of professional development. Without professional

development, upskilling programs, and engagement opportunities, non-teaching personnel lack visibility, disengage, and ultimately may separate from institutions of basic education. Deliberate organizational efforts to provide access to new learning opportunities and promote personal growth among non-teaching personnel is the development and institutionalization of centers for professional development, also called staff development centers, and staff training and professional development centers including upskilling programs.

In the study by Franks (2017), non-teaching personnel are integral to student success and educational development. Some non-teaching personnel help the schools' direction through administration and capability building towards an effective public institution and organization towards dispensing of public duties. Goot (2017), reinforced the importance of how non-teaching personnel influence an agency's overall development. In addition to serving as development navigators and helping the trajectory of most educational organizations, non-teaching personnel maintain campus operations so students can focus on learning, and teachers can focus on teaching. Thus, their engagement, professional development, and personal growth are instrumental to the functioning of higher education.

Initially, professional development aimed to improve employee performance deficiencies as mentioned by Rebore (2019). However, professional development has become a significant factor in connecting employees to their workplace and promoting group cohesiveness and a sense of community. Employee well-being, high employee engagement, and professional development are connected and correlate with organizational social capital. Hence, there is a need to navigate through the competencies of non-teaching personnel by providing an upskilling program to explore and catapult the road for educational development as drivers of leadership, administration, and internal and external processes. Organizational development is the key factor toward the effective delivery of services and duties and responsibilities toward the public good. Most organizations implement organizational and systemic mechanisms for the development of their employees in terms of personal and professional aspects and the improvement of the organization or agency.

Despite the number of research investigating the impact of training and upskilling on the performance of employees and in identifying the competencies of non-teaching personnel, few studies have tackled the issue at educational institutions involving non-teaching personnel, which are specific governmental agencies and organizations. In the Schools Division of the City of Ilagan, training development of teaching and non-teaching personnel has been an upward trend to navigate its employees' personal and professional efficacy. However, the question of the impact of training on the personal and professional development of non-teaching personnel has undeniably placed administrative improvement upon the extent of training improvement. The transformation of training into productivity and organizational development leads to numerous concerns about its alignment with the relevance and significance of such training.

Therefore, it is vital to understand the role of professional development and upskilling programs in shaping professional development experiences and employee engagement among non-teaching personnel. As immersed in the administrative works, the researcher is imbued with great fidelity to the thrusts and principles of this study as it manifestly implores work experiences and duties prescribed by the Department. In lieu of this, the role of non-teaching personnel is further enhanced upon technical assistance and other improvements provided by the Schools Division Office of the City of Ilagan. Hence, the necessity augments for a developmental and innovative upskilling program to address such work demands arising from the workplace.

This study examined the role of a specific type of non-teaching staff for a school's division and school organization, intending to promote and establish an improved upskilling program for the role of these valuable employees. This study aimed to identify and improve the competencies of non-teaching employees of elementary schools, secondary schools, and offices in the Schools Division of the City of Ilagan towards devising an upskilling program.

Conceptual Framework

The determination of the competencies of non-teaching personnel is an integral process of educational organizations' development as well as with the internal and external administrative processes of a school's division office. This study was anchored from the Strategic Performance Management System of the Civil Service Commission of the Philippines.

The Strategic Performance Management System (SPMS) is a mechanism that links employee performance with organizational performance to enhance the performance orientation of the compensation system. It ensures that the employee achieves the objectives set by the organization and the organization, on the other hand, achieves the objectives that it has set as its strategic plan.

The SPMS Objectives are: (a) to concretize the linkage of organizational performance with the Philippine Development Plan, Agency Strategic Plan, and Organizational Performance Indicator Framework OPIF; (b) to ensure organizational and individual effectiveness by cascading institutional accountabilities to the various levels of the organization; and (c) to link performance management with other HR systems.

The SPMS has the following basic elements: a) Goals that are aligned to agency mandate and organizational priorities; b) System that is outputs/outcomes-oriented; c) A team approach to performance management; d) Forms that are user-friendly and shows alignment of individual and organizational goals; e) Information systems that support monitoring and evaluation; and f) A Communication plan.

More importantly, the SPMS complements the Results-Based Performance Management System that is implemented by the Office of the President and that links organizational performance to societal goals. Just like the teaching personnel, non-

teaching personnel also have competencies that are anchored from the job descriptions according to their positions and described by their Key Result Areas or KRAs. The RPMS was designed with the intent of improving teacher quality. It aims to align performance targets and accomplishments with the PPST. In RPMS, teachers are provided with Key Result Areas (KRA), which are the general outputs or outcomes that are expected of them.

The past performance evaluation and appraisal systems that CSC implemented over the years have largely focused only on individual appraisals, which were used for personnel actions such as incentives, promotion, and separation. However, they have not shown how employee performance has contributed to or hindered organizational effectiveness. To address the gaps and weaknesses found in previous evaluation systems, the CSC recently introduced the Strategic Performance Management System (SPMS) after its pilot test in 2011. The SPMS incorporates the positive features of past initiatives. Like its predecessor, PMS-OPES, the SPMS seeks to link individual performance with the agency's organizational vision, mission, and strategic goals. With some adjustments, it also makes use of existing performance evaluation and management systems and links performance management with other human resource (HR) systems.

The study made use of the Input-Process-Output type. The input box in Figure 1 consists of the non-teaching personnel's profile including sex, age, position/designation, type of school/office assignment, highest educational attainment, and relevant trainings attended for the last three years. The input box also includes the Level of Competence of Non-Teaching Personnel in terms of Self-Management; Professionalism and Ethics; Result Focus, Teamwork; Service Orientation; and Innovation. Finally, it also includes the Level of Performance of Non-Teaching Personnel based on the Key Result Areas of their Individual/Office Performance Commitment Review Form.

The process box reflects the process phase which includes the analyses of the variables including respondents' profiles, the level of competence of non-teaching personnel, and the level of performance of non-teaching personnel based on the Key Result Areas. Finally, the output box contains the Level of Competence and Level of Performance of Non-Teaching Personnel as a basis for an upskilling program.

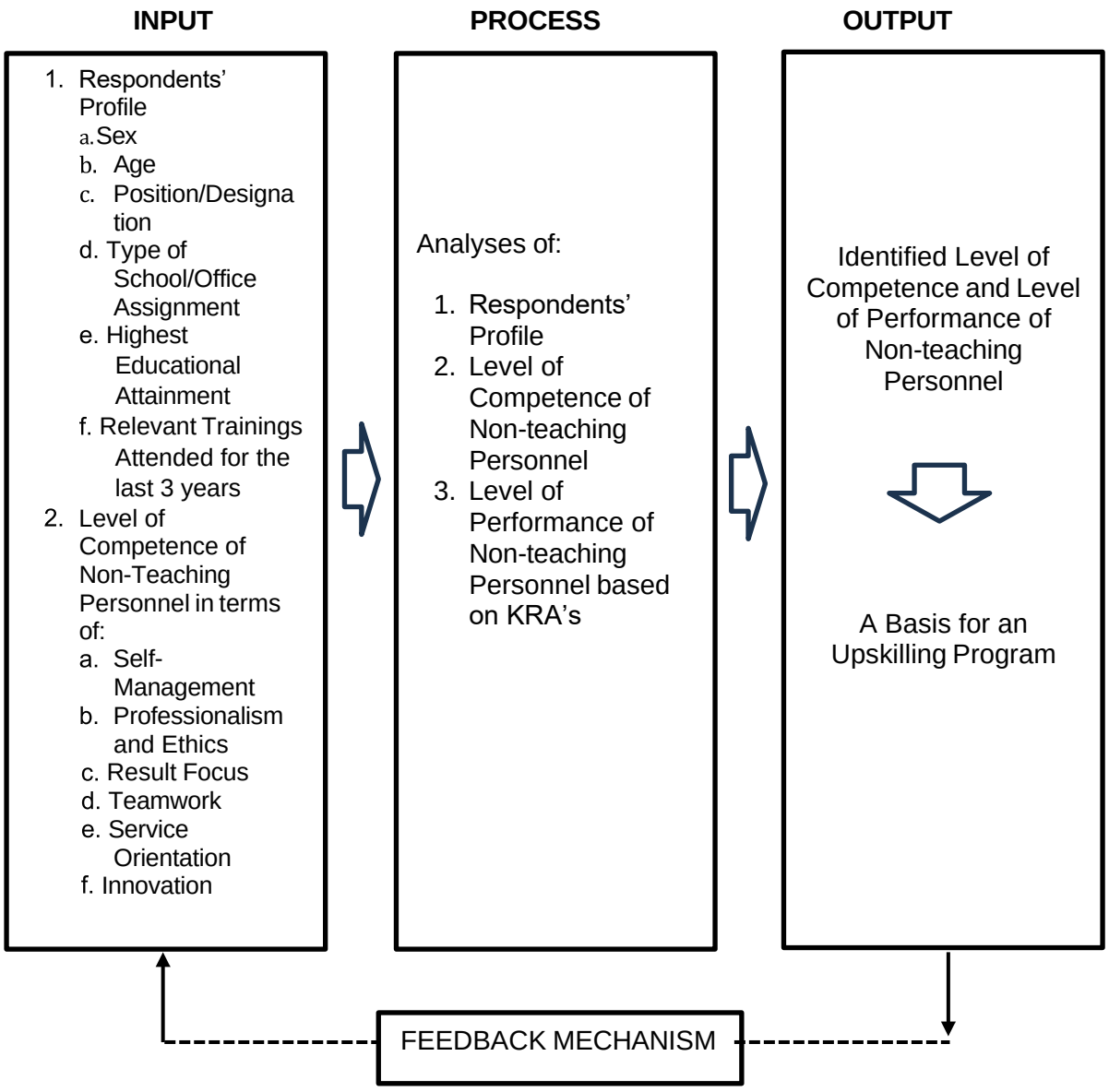


Figure 1. The Input-Process-Output Model of the Study

Research Questions

The study aimed to identify and determine the competencies of non-teaching personnel in the City Division of Ilagan as a basis for an upskilling program. Specifically, the study sought to answer the following questions:

1. What is the profile of the respondents in terms of the following:
    a. Sex;
    b. Age;
    c. Position/Designation;
    d. Type of School/Office Assignment;

e. Highest Educational Attainment; and
f. Relevant Trainings Attended (for last three years)

2. How competent are the Non-Teaching Personnel in the City Division of Ilagan in terms of the following:
   a. Self-Management;
   b. Professionalism and Ethics;
   c. Result Focus
   d. Teamwork;
   e. Service Orientation;
   f. Innovation.
3. Is there a significant difference in the level of competence of the respondents when grouped according to their profile?
4. What is the level of performance of Non-Teaching Personnel based on the Key Result Areas (KRAs)?
5. Is there a significant difference in the level of Performance of Non-Teaching Personnel in terms of Key Result Areas (KRAs) when grouped according to profile?
6. Is there a significant relationship between the level of competencies and the level of performance of the Non-Teaching Personnel?

METHODOLOGY

Research Design

The study utilized a descriptive inferential research design. This provides an accurate and valid presentation of the factors or variables that pertain to research questions. This study described the competencies of non-teaching personnel in the Schools Division of the City of Ilagan and its impact on the personal and professional skills development and efficacy of non-teaching personnel as a basis for an upskilling program, thus the descriptive method is appropriate for this research since this method is used for gathering current conditions.

The correlational approach was further utilized to gauge relationships between the described and identified research variables. In this study, the correlational approach was used to test the relationship between the level of competencies and the level of performance of the Non-Teaching Personnel. Moreover, a significant difference was tested between and among variables including the profile of the respondents, competencies, and performance of the respondents using their performance rating from the Key Result Areas in their Individual Performance Commitment Review Form.

Locale of the Study

This research work was conducted in the public elementary and secondary schools including the non-teaching personnel of the Schools Division of the City of Ilagan. The City of Ilagan is mainly composed of rural areas interconnected by rivers as the main body

of water in the city. The rural areas compose the most parts of the city including the elementary schools, integrated schools, and secondary schools where the non-teaching personnel are deployed. On the other hand, the urban areas are home to the biggest secondary and elementary schools in the Division, the Schools Division of the City of Ilagan is also located adjacent to the biggest secondary school in the City of Ilagan – the Isabela National High School. Some schools in the urban areas also compose most of the employees and non-teaching personnel in the Schools Division of the City of Ilagan. The maps presented below are the geographical classifications of the rural and urban areas of the City of Ilagan.

Selection and Description of the Respondents

The study included the entire population of non-teaching personnel in the Schools Division of the City of Ilagan as respondents in the study.

The respondents were composed of Administrative Officers, Administrative Assistants, Administrative Aides, Accountants, and Budget Officers employed in the Schools Division of the City of Ilagan and deployed in different schools and the offices of the Schools Division of the City of Ilagan. Table 1 presents the distribution of the respondents by school and administrative offices in the Schools Division of the City of Ilagan.

Table 1. Description of Respondents in the Study

TYPE OF SCHOOL/ OFFICE	DESCRIPTION OF RESPONDENTS IN THE STUDY												
	AA IV	AA VI	ADAS I	ADAS II	ADAS III	AO I	AO II	AO IV	AO V	ACCT. I	ACCT. III	B.O. I	TOTAL
Elementary				7	9		26						42
Secondary	7	1		11		1	1			1			22
Senior High School				1	5		1						7
Division Office	1	2	3	3	6		11	4	1		1	1	33
TOTAL	8	3	3	22	20	1	39	4	1	1	1	1	104

Data Gathering Instruments

Survey-Questionnaire. This research employed a survey questionnaire as the main type of research instrument. The questionnaire elicited the competence of non-teaching personnel in the Schools Division of the City of Ilagan as a basis for an upskilling program. The survey questionnaire was adapted from the Core Behavioral Competencies of the Individual/Office Performance Commitment Review Form of the respondents. In

addition, the performance level part of the questionnaire was derived from their Individual/Office Performance Commitment Review Form.

The first part of the survey questionnaire composes the profile of the respondents including sex, age, position/designation, type of school/ office assignment, highest educational attainment, and relevant trainings attended in the last three years.

The second part of the questionnaire includes the following areas of competence of non-teaching personnel: Self-Management, Professionalism and Ethics, Result Focus, Teamwork, Service Orientation & Innovation. The items of competencies were derived from the Core Behavioral Competencies of the Individual/Office Performance Commitment Review Form – Result-Based Performance Management System of Non-Teaching Personnel of the Department of Education. This part is scored through a four-point Likert Scale.

Finally, the third part of the survey questionnaire elicits the respondents' performance based on KRAs (Key Result Areas). This data was gathered through the face-to-face method of data gathering. Further, the respondents' performance was based on documentary analysis and interviews.

Interview Guide. The interview procedure was conducted along with the floating of the questionnaire to the respondents. Aside from the survey questionnaire, respondents were interviewed using a non-structured interview guide.

Documentary Analysis. Documentary analysis was also conducted in the determination of common and specific responses of the respondents in their performance ratings. This was done by looking at and assessing their personal and individual files (IPCRF/OPCRF) to match the data needed for the whole conduct of the study.

Data Gathering Procedure

To conduct the research study, a letter of permission was sought from the office of the City Schools Division Superintendent. The researcher did the floating of the questionnaire through personal delivery to the respective schools or workplace assignments of the respondents. To ensure 100 percent retrieval of the questionnaire, the researcher carefully supervised the data collection.

In compliance with the Data Privacy Act, the researcher first sought the approval of the respondents and was constantly informed that the data and information to be gathered from the respondents were treated with utmost confidentiality. The gathered data were recorded, organized, analyzed, and interpreted accordingly.

Finally, the researcher also sought and requested the copies of respondents' Individual or Office Performance Commitment Review Form from the Human Resources Development Office for validation and verification purposes.

Statistical Treatment of Data

The statistical tools utilized in treating data to be gathered included the following:

1. For the first profile of the respondents, descriptive statistics such as frequency count and percentage were used to treat the variables;
2. In identifying the levels of competence and performance of the respondents based on their KRAs, the weighted mean was utilized;
3. Inferential statistics including the One-Way ANOVA were used to test the significant difference between and among the identified variables in the study; and
4. Pearson- r was further used to identify the relationship between and among the variables.

Data Analysis Procedure

To determine the level of competence of non-teaching personnel from the subparts of the survey questionnaire, the following was used:
Interpretation of the Level of Competence

Point	Scale	Qualitative Description
4	3.25 – 4.00	Highly Competent
3	2.50 – 3.24	Competent
2	1.75 – 2.49	Fairly Competent
1	1.00 – 1.74	Not Competent

To determine the level of performance of non-teaching personnel, the following interpretation of the 5-point scale was utilized:
Interpretation of the Level of Performance

Point	Scale	Qualitative Description
5	4.50 – 5.00	Outstanding
4	3.50 – 4.49	Very Satisfactory
3	2.50 – 3.49	Satisfactory
2	1.50 – 2.49	Unsatisfactory
1	below – 1.49	Poor

RESULTS AND DISCUSSION

Profile of the Respondents

Table 2. Frequency and Percentage Distribution of the Respondents According to Sex

Sex	Frequency	Percentage
Male	33	31.73
Female	71	68.27

Total	104	100.0

Table 2 presents the frequency and percentage distribution of the respondents according to their sex. From the data presented, it could be gleaned that most of the respondents are female with 71 or 68.27 percent while only 33 or 31.73 percent male respondents.

This means that there are more female administrative and non-teaching employees in the Schools Division Office of the City of Ilagan than male employees. This is evident in the distribution of respondents in schools and offices and departments of the Schools Division Office. As affirmed in the study of Jeremiah, et. al (2014), there are more women in the administrative field than men who dominate other fields such as engineering and sciences. Here, as concluded by Franks (2017) administrative duties and responsibilities are often disposed of and deployed to women employees who correspond to the requirements, qualifications, and other educational requisites of the specific administrative jobs. Hence, institutions with huge and established administrative offices hire more women applicants who satisfy the required competencies.

Table 3. Frequency and Percentage Distribution of the Respondents According to Age

Age	Frequency	Percentage
20 – 25 Years Old	3	2.88
26 – 30 Years Old	31	29.81
31 – 35 Years Old	30	28.85
36 – 40 Years Old	14	13.46
41 – onwards	26	25.00
Total	104	100.0

Table 3 shows the distribution of frequency and percentage of the respondents in terms of their age range. From the data presented, it reveals that most of the respondents with 31 or 29.81 percent responses belong to the age group between 26 to 30 years old. Moreover, there are 30 or 28.85 percent of respondents belong to the age group between 31 – 35 years old, 14 or 13.46 percent of respondents who belong to the 36 – 40 years old age group, and 26 or 25 percent of respondents who are categorized under 41 years old and above.

Meanwhile, there are only three 2.88 percent of respondents who belong to the age group from 20 to 25 years old. This means that there are only a few fresh graduates who belong to the latter age group who are employed in administrative positions and designations in schools and offices of the Schools Division Office of the City of Ilagan. As emphasized by Mercado (2023), this age group characterizes a large volume of younger employees who seek to establish themselves in the administrative workplace.

Table 4. Frequency and Percentage Distribution of the Respondents According to Position/Designation

Position/Designation	Frequency	Percentage
Administrative Aide IV	8	7.69
Administrative Aide VI	3	2.88
Administrative Assistant I	3	2.88
Administrative Assistant II	22	21.15
Administrative Assistant III	20	19.23
Administrative Officer I	1	0.96
Administrative Officer II	39	37.5
Administrative Officer III	0	0.00
Administrative Officer IV	4	3.85
Administrative Officer V	1	0.96
Accountant I	1	0.96
Accountant II	0	0.00
Accountant III	1	0.96
Budget Officer III	1	0.96
Total	104	100.0

The table above enshrines the distribution of frequency and percentage of the respondent's position or designation as non-teaching personnel in the Schools Division of the City of Ilagan.

Of all the respondents, most of them hold the position of Administrative Officer II with 39 or 37.5 percent. There are 22 or 21.15 percent of the respondents hold the position of Administrative Assistant II. Twenty or 19.23 percent of the respondents are employed as Administrative Assistant III. There are eight or 7.69 percent of the respondents hold the position of Administrative Aide IV, and 4 or 3.85 respondents are employed as Administrative Officer IV Three or 2.88 percent of the respondents hold the position of Administrative Aide VI.

In the position of Administrative Assistants, there are only 3 or 2.88 percent of respondents who are employed as Administrative Assistant I. For the Administrative Officer position, Administrative Officer I is reserved for only one or 0.96 percent of respondents the same as Administrative Officer V, Accountant I, Accountant III, Budget Officer III.

Finally, there are only three employees who are employed in the accounting department of the Schools Division of the City of Ilagan who hold the positions of Accountant I, Accountant III, and Budget Officer III. As per DepEd Memorandum Order No. 35 s. 2017, these positions are tasked to manage and supervise the finances, accounting, and other related management schemes of the Schools Division Office relative to their job descriptions.

Table 5. Frequency and Percentage Distribution of the Respondents According to the Type of School/Office Assignment

Type of School/Office Assignment	Frequency	Percentage
Small School	30	28.85
Medium School	21	20.19
Large School	29	27.88
Division Office	24	23.08
Total	104	100.0

The table above shows the frequency and percentage distribution of the respondents according to the type of school or assignment. It is revealed that 30 or 28.85 percent of respondents are deployed in small schools. These schools are mainly elementary schools which are distributed in almost every barangay of the City of Ilagan. Twenty-nine or 27.88 percent of non-teaching personnel who are deployed in the large school category. These schools are composed of national high schools, central schools, and large integrated schools that cater to the complete basic education system. In medium schools which are some of the elementary schools and integrated schools in the City Division of Ilagan, there are 21 or 20.19 percent non-teaching personnel deployed in these schools.

On the other hand, there are 24 or 23.08 percent non-teaching personnel deployed in the Schools Division Office. As per DepEd Memorandum Order No. 35 s. 2017, these non-teaching personnel are delegated to the offices and departments of the Schools Division Office which include the Human Resources Office, Accounting Office, and other administrative departments.

Table 6. Frequency and Percentage Distribution of the Respondents According to Highest Educational Attainment

Highest Educational Attainment	Frequency	Percentage
College Graduate	67	64.42
Master's Degree	35	33.65
Doctor's Degree	2	1.92
Total	104	100.0

Table 6 represents the frequency and percentage distribution of the respondents in terms of their highest educational attainment. The data reveals that 67 or 64.42 percent of respondents are college graduates, while 35 or 33.65 percent of respondents have master's degrees. However, only 2 or 1.92 percent of respondents are doctorate holders.

The data implies that most respondents only attended bachelor's education as their highest educational attainment which signifies that no other further continuing professional education or degree was finished. This further signifies that there is a need for further educational development programs for non-teaching personnel to cope with the demands of educational requirements for further or higher administrative positions with accompanied tasks, duties, and responsibilities.

As discussed under the Civil Service Commission – Competency-Based Recruitment and Qualifications Standards, employees of the government with the main duties of governmental and public service in nature are required to uphold the requirements set forth by the commission which includes the combination and cumulative possession of eligibility, education, training, experience, and competencies. In the education requirement, employees must possess the minimum educational qualifications relative to the position or office to be taken. Further, the higher the public office sought, the higher the educational qualification required.

Table 7. Frequency and Rank Distribution of the Respondents According to Relevant Trainings Attended in the Last 3 Years

Relevant Trainings Attended in the Last 3 Years	Frequency	Rank
Finance Management and Budget Related	75	1
Administrative and Technical Support	54	2
Accounting and Auditing Services	41	3
Human Resources and Personnel Management	40	4
Property and Resources Custodianship	28	5
Records and Files Management	32	6
Coordination, Communication, and	18	7
Organizational Support	15	8

The table above reflects the frequency and ranking of the relevant training courses for the last three years attended by the non-teaching personnel of the Schools Division of the City of Ilagan.

From the data presented, it can be gleaned that the field of Finance Management and Budget Related is the most attended training course attended by the respondents with 75 respondents who are engaged in the said training course. This field is not limited to training in financial management, budget allocation and appropriation, school financial status, and other rules and promulgations relevant to financial management.

The second most attended training course is Administrative and Technical Support with 54 respondents who are engaged in the said course. This training course offers several aspects including the provision of aid and information, civil service procedures, requirements, qualifications for hiring and promotion, and other administrative and technical support for papers and procedures. The third most attended training course is Accounting and Auditing Services with 41 respondents. This is mostly common to accountants and administrative officers and assistants with similar duties and responsibilities in school and office accounting and auditing.

Meanwhile, 40 respondents attended course trainings in the field of Human Resources and Personnel Management. This is usually attended by administrative officers and administrative assistants. 32 respondents are engaged in attending training courses relating to Records and Files Management which are fundamentally one of the

main duties and responsibilities of administrative officers, administrative aides, and administrative assistants.

Moreover, the last three training courses that the respondents attended for the last years are training courses in Property and Resources Custodianship with 28 respondents, Coordination and Communication with 18 respondents, and Organizational Support with 15 respondents.

The training of non-teaching staff in experiential higher education institutions makes it possible to act with a certain meaning in certain situations. This allows for greater direct contact, strengthens the relationship between the individual and the object, and supports reflection and recall of experiences as provided by the Civil Service Commission. Further, as emphasized by Bilhim (2019), it is in this context that the exchange of experiences and comparisons of methods and results becomes relevant, creating space for collective work. It is a return to experience that enables transformation into formal knowledge, where the presence of partners translates into social interventions, essential for experiential knowledge to grow. The development of Human Resource Management, seen as a strategic factor, is the phase where we see changes in human resource management developed through administrative techniques, where there is a department of people to maintain only a predetermined order, for management based on the competitive advantage that is achieved by the factors people in the company.

Further, these descriptions for further training are enhanced and sought to be established by the PRIME-HRM of the Civil Service Commission. The Program to Institutionalize Meritocracy and Excellence in Human Resource Management (PRIME-HRM) integrates and enhances the Personnel Management Assessment and Assistance Program (PMAAP) and the CSC Agency Accreditation Program (CSCAAP). It is a mechanism that empowers government agencies by developing their human resource management competencies, systems, and practices toward HR excellence. PRIME-HRM entails greater engagement not just of the human resource management officer (HRMO) but also of the officials and the rank-and-file employees of the agency.

Level of Competence of the Non-Teaching Personnel in the Schools Division of the City of Ilagan

Table 8. Level of Competence of the Non-Teaching Personnel in the Schools Division of the City of Ilagan in Terms of Self-Management

Indicators	Weighted Mean	Qualitative Description
1. Set personal goals and direction, needs and development.	3.58	Highly Competent
2. Undertake personal actions and behaviors that are clear and purposive and take into account personal goals and values congruent to those of the organization.	3.53	Highly Competent
3. Display emotional maturity and enthusiasm for and is challenged by higher goals.	3.52	Highly Competent

4. Prioritize work tasks and schedules (through Gantt charts, checklists, etc.) to achieve goals.	3.57	Highly Competent
5. Set high-quality, challenging, realistic goals for self and others.	3.54	Highly Competent
Average Weighted Mean	3.55	Highly Competent

Table 8 shows the level of competence of the non-teaching personnel in the Schools Division of the City of Ilagan in terms of Self-Management.

As presented above, respondents under this indicator of competence obtained an average weighted mean of 3.55 which means that the non-teaching personnel of the Schools Division of the City of Ilagan are highly competent. Further, this implies that employees possess features and administrative prowess that qualify them to exhibit a sense of self-organization and self-management. Self-management allows employees to control and handle emotions and other personal circumstances that enable them to produce quality and standard results in their workstations.

In this indicator, Item 1 had the highest weighted mean of 3.58 which categorically implies that respondents set personal goals and direction, needs and development. This aspect manifests respondents' ability to zeal personal and professional goals and direction for further growth and development as members of an organizational institution. Item 3, on the other hand, obtained a weighted mean of 3.52 which means that the respondents are still highly competent in displaying emotional maturity and enthusiasm for and are challenged by higher goals.

As affirmed by Bakker (2017), competence goes higher when employees share their values and personal goals in an organization. When shared values become embedded within an organization, they form the foundation of the organizational culture. When engaged, employees feel compelled to strive towards a challenging goal. Engaged employees become absorbed in their work, experiencing a flaw in which they lose track of time and diminish their response to distractions.

Table 9. Level of Competence of Non-Teaching Personnel in the Schools Division of the City of Ilagan in Terms of Professionalism and Ethics

Indicators	Weighted Mean	Qualitative Description
1. Demonstrate the values and behavior enshrined in the Norms of Conduct and Ethical Standards for public officials and employees (RA 6713).	3.62	Highly Competent
2. Practice ethical and professional behavior and conduct taking into account the impact of his/her actions and decisions.	3.64	Highly Competent
3. Maintain a professional image: being trustworthy, regularity of attendance and	3.63	Highly Competent

punctuality, good grooming and communication.		
4. Make personal sacrifices to meet the organization's needs.	3.58	Highly Competent
5. Act with a sense of urgency and responsibility to meet the organization's needs, improve systems, and help others improve their effectiveness.	3.60	Highly Competent
Average Weighted Mean	3.61	Highly Competent

Table 9 indicates the level of competence of the non-teaching personnel in the Schools Division of the City of Ilagan in terms of Professionalism and Ethics.

It can be gleaned from the table shown above that the non-teaching personnel of the Schools Division of the City of Ilagan are highly competent in terms of professionalism and ethics with an average weighted mean of 3.61. This signifies that these employees demonstrate attributes and features expected from a government employee in accordance with rules, regulations, and policies set forth by the State including the Civil Service Rules for government employees, and other relevant laws regulating the conduct of public employees in the public service.

Furthermore, Item 2 obtained the highest weighted mean in this indicator which means that the non-teaching personnel of the Schools Division of the City of Ilagan are highly competent in the practice of ethical and professional behavior and conduct considering the impact of their actions and decisions. On the other hand, Item 4 obtained a weighted mean of 3.58 which implies that respondents are highly competent in making personal sacrifices to meet the organization's needs.

This finding affirms the study of Davies and Anderson (2010) who illustrated work ethics as a component of work engagement as one of the most critical issues in business, specifically in managing human resources. An organization's good ethical culture will provide direction and guidance for building united, harmonious, and ethical employees in various areas. There is no guidance or standard of ethics, however, that is absolute, appropriate, and applicable to any company. The ethics code is a good indicator of organizational commitment to accepting and implementing the need for ethical behaviors. Further, Work ethics can be called a cultural norm that advocates holding people accountable and fully responsible for the work they do, based on the premise that work has an intrinsic value to the individual.

Finally, the Program to Institutionalize Meritocracy and Excellence in Human Resource Management (PRIME-HRM) integrates and enhances the Personnel Management Assessment and Assistance Program (PMAAP) and the CSC Agency Accreditation Program (CSCAAP). This program mandated the necessity to further enhance the ethical and professional standards among employees of the government.

Table 10. Level of Competence of Non-Teaching Personnel in the Schools Division of the City of Ilagan in Terms of Result Focus

Indicators	Weighted Mean	Qualitative Description
1. Achieve results with optimal use of time and resources most of the time.	3.52	Highly Competent
2. Avoid rework, mistakes, and wastage through effective work methods by placing organizational needs before personal needs.	3.44	Highly Competent
3. Deliver error-free outputs most of the time by conforming to standard operating procedures correctly and consistently. Able to produce very satisfactory quality of work in terms of usefulness/acceptability and completeness with no supervision required.	3.29	Highly Competent
4. Express a desire to do better and may express frustration at waste or inefficiency. May focus on new or more precise ways of meeting goals set.	3.44	Highly Competent
5. Make specific changes in the system or in own work methods to improve performance. Examples may include doing something better, faster, at a lower cost, more efficiently; or improving quality, customer satisfaction, morale, without setting any specific goal.	3.44	Highly Competent
Average Weighted Mean	3.43	Highly Competent

Table 10 reflects the level of competence of the non-teaching personnel of the Schools Division of the City of Ilagan in terms of Result Focus.

It is reflected that respondents are highly competent in delivering services because of their result-oriented features and characteristics, with a weighted mean of 3.43. In this indicator, Item 2 had the highest weighted mean of 3.52. This signifies that respondents are highly competent in achieving results with optimal use of time and resources most of the time. Meanwhile, a weighted mean of 3.29 qualifies the respondents as highly competent in delivering error-free outputs most of the time by conforming to standard operating procedures correctly and consistently. In addition, they are also able to produce a very satisfactory quality of work in terms of usefulness/acceptability and completeness with no supervision required.

Result Focus, as provided in the Individual/Office Performance Commitment Review Form and the Strategic Performance Management System, result focus implies a target and the means to accomplish the goals and target of the employee or office. In the study of Alaswad (2021), this finding is affirmed when he found out that employees are highly competent and productive when an organization sets goals and directions that are outcomes-based and result-oriented. He further stated that employees' productivity and result-oriented are critical to raising employees' performance which contributes to the

success of organizations, and it is influenced by many factors. This research aims at examining the influence of work environment, leadership styles, and organizational culture on employees' productivity. Finally, he recommended that an employee's performance depends on various factors, but the most important factor is training, which enhances the capabilities of employees.

Table 11. Level of Competence of Non-Teaching Personnel in the Schools Division of the City of Ilagan in Terms of Teamwork

Indicators	Weighted Mean	Qualitative Description
1. Willingly does his/her share of responsibility.	3.83	Highly Competent
2. Promote collaboration and removes barriers to teamwork and goal accomplishment across the organization.	3.66	Highly Competent
3. Apply negotiation principles in arriving at win-win agreements.	3.60	Highly Competent
4. Drive consensus and team ownership of decisions.	3.58	Highly Competent
5. Work constructively and collaboratively with others and across organizations to accomplish organizational goals and objectives.	3.66	Highly Competent
Average Weighted Mean	3.67	Highly Competent

Table 11 represents the level of competence of the respondents in terms of Teamwork.

It is reflected from the table that the personnel are highly competent in working and collaborating as a team on their workstations. An average weighted mean of 3.67 implies that working in a group is one of the top features of the non-teaching personnel of the Schools Division of the City of Ilagan.

Moreover, Item 1 gained the highest weighted mean of 3.83 which indicates that respondents are highly competent and are willing to do their share of responsibility. A weighted mean of 3.60 also manifests that respondents are highly competent in applying negotiation principles in arriving at win-win agreements.

Teamwork is a highly anticipated and managed organizational feature that every organizational institution hones to cultivate and gauge to effectuate and deliver public service. As pointed out by Hanaysha (2016), he examined the effects of employee empowerment, teamwork, and employee training on organizational commitment. It was found that the three variables mentioned have a significant positive impact on organizational commitment. On the other hand, Hulpia, Devos, & Keer (2011) also examined the relationship between school leadership and non-teachers organizational commitment because of the organizational culture of teamwork and collaboration. The work productivity of an individual is an organizational asset that can be equated to

progress and success. It provides satisfaction to the employees, the organization, and other stakeholders. Work productivity is also important in terms of providing sound and quality service to different stakeholders. This boiled down to the organizational virtue of working in a team.

Table 12. Level of Competence of the Non-Teaching Personnel in the Schools Division of the City of Ilagan in Terms of Service Orientation

Indicators	Weighted Mean	Qualitative Description
1. Can explain and articulate organizational directions, issues, and problems.	3.38	Highly Competent
2. Take personal responsibility for dealing with and/or correcting customer service issues and concerns.	3.44	Highly Competent
3. Initiate activities that promote advocacy for men's and women's empowerment.	3.36	Highly Competent
4. Participate in updating office vision, mission, mandates, and strategies based on DepEd strategies and directions.	3.35	Highly Competent
5. Develop and adopt service improvement programs through simplified procedures that will further enhance service delivery.	3.44	Highly Competent
Average Weighted Mean	3.39	Highly Competent

Table 12 reflects the level of competence of the non-teaching personnel of the Schools Division of the City of Ilagan in terms of Service Orientation.

The data reveals that the respondents are highly competent in delivering public and general services with an average weighted mean of 3.39. Service-oriented employees exhibit high quality and standard work productivity that match their efforts, dedication, and commitment to fulfill and dispose of organizational goals and directions. As affirmed by Al-Mzary (2015), while employee performance is one of the crucial measures emphasized by top management, employees are more concerned about their service delivery and own productivity and are increasingly aware of the accelerated obsolescence of knowledge and skills in their turbulent environment. As the literature suggests, by effectively training and developing employees, they will become more aligned for career growth—career potential enhances personal motivation.

In this indicator, Item 5 had the highest weighted mean of 3.44 which indicates that respondents are highly competent in developing and adopting service improvement programs through simplified procedures that will further enhance service delivery. Moreover, Item 4 also states that respondents participate in updating of office vision, mission, mandates, and strategies based on DepEd strategies and directions.

Amisano (2010) claims that employees' service delivery is one of the most essential resources and an important asset in any organization. Various human resource functions give an organization a competitive edge, but most scholars argue that human

resource functions become only operational when training has run through them all. This makes training and development an essential feature in the survival of any organization. These are further developed by training courses. According to Barreto (2020), staff training and development have been identified by various scholars to be very crucial to an organization and its effectiveness. In light of the above, organizations are therefore encouraged to train and develop their staff to the maximum of their ability to enhance their effectiveness. Employee training and development are typically associated with the improvement of the performance, knowledge, and skills of employees in their present job position.

Table 13. Level of Competence of the Non-Teaching Employees in the Schools Division of the City of Ilagan in Terms of Innovation

Indicators	Weighted Mean	Qualitative Description
1. Examine the root cause of problems and suggest effective solutions. Fosters new ideas, processes, and suggests better ways to do things (cost and/or operational efficiency).	3.32	Highly Competent
2. Demonstrate an ability to think “beyond the box”. Continuously focuses on improving personal productivity to create higher value and results.	3.38	Highly Competent
3. Promote a creative climate and inspires co – workers to develop original ideas or solutions.	3.38	Highly Competent
4. Translate creative thinking into tangible changes and solutions that improve the work unit and organization.	3.34	Highly Competent
5. Use ingenious methods to accomplish responsibilities. Demonstrates resourcefulness and the ability to succeed with minimal resources.	3.34	Highly Competent
Average Weighted Mean	3.35	Highly Competent

The table reveals the level of competence of the non-teaching personnel of the Schools Division of the City of Ilagan in terms of Innovation.

It is revealed from the table that the respondents are highly competent with an average weighted mean of 3.34 in the field of Innovation as an aspect of their competence. In this indicator, it is also revealed that respondents are highly competent in demonstrating an ability to think “beyond the box” and continuously focus on improving personal productivity to create higher value and results. In addition, they are also active in promoting a creative climate and inspiring co-workers to develop original ideas or solutions. Lastly, with a weighted mean of 3.32, respondents are beyond competent in examining the root cause of problems and suggesting effective solutions. They also foster

new ideas, and processes, and suggest better ways to do things (cost and/or operational efficiency).

As affirmed by Rebore (2019), the competencies of non-teaching employees are composed of a wide array of fields that transpire from their personal and professional growth and development. These skills are anchored from the necessary competencies prescribed by their institutional organizations, job descriptions, and other organizational factors that significantly affect their upskilling processes. In this field, innovation is a factor in upgrading the level of competence of non-teaching employees in an educational institution. In the study of Wanjiku (2021), effective staff development through innovation is essential to support new approaches to gauge organizational directions, to meet changing needs of institutions. Innovation serves institutional needs and enhances the ability of the organization to meet its goals. It is an effort to help employees learn how to do their jobs better. It is important to establish working conditions to attract good-quality personnel committed to achieving organizational objectives in both the public and private sectors.

According to Khawaja & Nadeem (2013), innovation is viewed as a systematic approach to learning and development that improves individual, group, and organization. Thus, it is the series of activities organizations embark on that leads to knowledge or skills acquisition for growing purposes. Thereby, contributing to the well-being and performance of human capital, organizations, as well as society at large. Innovation serves as an act of intervention to improve an organization's goods and services quality in stiff competition through improvements in the technical skills of employees.

Table 14. Overall Level of Competence of the Non-Teaching Personnel in the Schools Division of the City of Ilagan

Indicators	Weighted Mean	Qualitative Description
a. Self-Management	3.55	Highly Competent
b. Professionalism and Ethics	3.61	Highly Competent
c. Result Focus	3.43	Highly Competent
d. Teamwork	3.67	Highly Competent
e. Service Orientation	3.39	Highly Competent
f. Innovation	3.35	Highly Competent
Average Weighted Mean	3.50	Highly Competent

Table 14 summarizes the level of competence of non-teaching personnel of the Schools Division of the City of Ilagan from all the indicators of competence of non-teaching personnel. Overall, 104 non-teaching employees of the Schools Division Office are highly competent with an average weighted mean of 3.50. This means that they demonstrate a favorable level of competence and productivity which could result in the desired organizational outcomes. In summary, all indicators obtained a "Highly Competent" mark from the scale of level of competence Self-management has a weighted mean of 3.55; 3.61 for Professionalism and Ethics; Result Focus – has 3.43; 3.67 for Teamwork, Service Orientation has 3.39; and Innovation with 3.35.

Generally, the level of competence and the competencies present among non-teaching employees of an educational institution affect organizational productivity as a requisite in the disposition of public needs and delivery of services. These skills are anchored from the necessary competencies prescribed by their institutional organizations, job descriptions, and other organizational factors that significantly affect their upskilling processes. Emphasizing the importance of staff development in increasing effectiveness in the Schools Division, it is proven that staff development facilitates professional development for individuals and groups, enabling them to achieve their potential and contribute to the provision of excellence in the delivery of public services.

Hence, as pointed out by Dessler (2011), there is a need for an effective and trailblazing upskilling or training development program that would enhance and further develop the competence and competencies of non-teaching personnel to achieve the desired organizational goals and directions.

Comparison Between the Level of Competence of the Respondents According to the Profile Variables

Table 15. Results of the Test of Significant Difference in the Level of Competence of the Respondents in terms of Self-Management when grouped According to their Profile

Variables	Probability of F	Remarks
Self-Management and Sex	0.0321	Significant
Self-Management and Age	0.0230	Significant
Self-Management and Position/Designation	0.0221	Significant
Self-Management and Type of School/Office Assignment	0.0146	Significant
Self-Management and Highest Educational Attainment	0.0294	Significant
Self-Management and Relevant Trainings Attended for Last Three Years	0.0482	Significant

Table 15 presents the results of the test of significant differences in the level of competence of the respondents in terms of self-management when grouped according to their profile.

The results show that the F-probability values are less than 0.05. Hence, the null hypothesis is rejected at a 0.05 level of significance. Thus, there is a significant difference in the level of competence of the respondents in terms of self-management when grouped according to their profile. It implies that the non-teaching personnel in the City Division of Ilagan differ in their competency level in terms of self-management when clustered by their sex, age, position, type of school/office assignment, highest educational attainment, and relevant trainings attended for the last three years. Further, in comparing self-management and profile variables, the following obtained highest weighted mean for each profile variable: 3.56 for female respondents, 3.60 for respondents with age ranges from 26 to 30 years old, 4.00 for Administrative Officer I and Accountant I respondents, 3.63 for schools that are categorized as large schools, 3.80 for respondents with Doctor's

Degree, and 4.00 for relevant trainings in the fields of Human Resources and Personnel Management, Property and Resources Custodianship, and Technical Support.

This result affirmed the study of Franks (2017), it is established that self-management as an essential indicator of the level of competence of non-teaching personnel is zealous towards organizational and institutional development. In addition, when compared to the personal attributes of these non-teaching personnel, it is revealed that positive significance is present such as sex, age, position, and educational background of the respondents. Non-teaching personnel are integral to student success and educational development. Some non-teaching personnel help the schools' direction through administration and capability building towards an effective public institution and organization towards dispensing of public duties.

Further, as affirmed by Goot (2017), there is the importance of how non-teaching personnel influence an agency's overall development. In addition to serving as development navigators and helping the trajectory of most educational organizations, non-teaching personnel maintain campus operations so students can focus on learning, and teachers can focus on teaching. Thus, their engagement, professional development, and personal growth are instrumental to the functioning of higher education. Self-management is affected by employee's profile including sex and age. Franks (2017) further agreed that these variables are contributory aspects and factors in employees' manner of handling themselves in terms of relevant duties and responsibilities. Women employees, as further noted, can become strategic and organizational too as men also possess leadership and managerial abilities. Their age also manifests experiential activities that brought them to manage and handle positions or other administrative designations relative to their job description. Empirical research has instead highlighted the advantages for organizations of enhancing (for instance, by training activities) factors such as self-efficacy and the perception of control, rather than trying to remove obstacles to change according to de Jong et al. (2016). However, research that treats training for preparing an organizational change as a positive approach and emphasizes the strengths of individuals is still insufficient, and needs more empirical evidence, as advocated by recent literature.

During a radical organizational change, the perception of control and sense of self-efficacy are strategic assets for the involved people concurred by Avey et al.(2018) Successfully coping with change can be perceived by recipients as a challenging task, and can affect career choices (e.g., withdrawal behaviors or even the intention to resign). It has been found that an individual's self-efficacy plays a major role in how goals, tasks, and challenges are approached. Literature highlights that people with a strong sense of self-efficacy develop a deeper interest in the activities in which they participate, form a stronger sense of commitment to their interests and activities, recover quickly from setbacks and disappointments, and view challenging problems as tasks to be mastered. Change self-efficacy (often referred to as change confidence [CC]) is thus considered a pivotal factor in facing an organizational change successfully.

Training and educational backgrounds also affected employees' self-management mechanisms in dealing with administrative tasks. Initially, professional development aimed to improve employee performance deficiencies as emphasized by Rebore (2019). However, professional development has become a significant factor in connecting employees to their workplace and promoting group cohesiveness and a sense of community. Employees' high levels of employee engagement, training, and professional development are connected and correlate with organizational social capital.

Hence, there is a need to navigate through the competencies of non-teaching personnel by providing an upskilling program to explore and catapult the road for educational development as drivers of leadership, administration, and internal and external processes. In this study, the disparity of results between the younger and experienced employees is evidenced by the significant difference between self-management and profile variables of the age group. To resolve this, peer mentoring and coaching programs may be conducted to cater to and address the working experience gaps between the identified age groups.

Table 16. Results of the Test of Significant Difference in the Level of Competence of the Respondents in Terms of Professionalism and Ethics when Grouped According to their Profile

Variables	Probability of F	Remarks
Professionalism and Ethics and Sex	0.0178	Significant
Professionalism and Ethics and Age	0.0207	Significant
Professionalism and Ethics and Position/Designation	0.0398	Significant
Professionalism and Ethics and Type of School/Office Assignment	0.0222	Significant
Professionalism and Ethics and Highest Educational Attainment	0.0300	Significant
Professionalism and Ethics and Relevant Trainings Attended for the Last Three Years	0.0446	Significant

The table shows the results of the test of significant differences in the level of competence of the respondents in terms of professionalism and ethics when grouped according to their profile.

It is evident from the results that the probability of values of F is less than 0.05. This signifies the rejection of the null hypothesis at a 0.05 significance level. Therefore, there is a significant difference in the level of competence of the respondents in terms of professionalism and ethics when grouped according to their profile. It states that the non-teaching varies in their competence level on professionalism and ethics when they are grouped by their different profile variables. As appended, the non-teaching personnel are fully competent in professionalism and ethics but the highest mean among them are the male, age 20-25, administrative officer 1, accountants I and II, district school, and doctoral degree. While on the training attended, out of 41 classifications, six of these are competent while the rest are fully competent in this area of competence. Further, in comparing professionalism and ethics with their profile variables, the following variables

obtained the highest weighted mean, 3.64 for male respondents, 3.93 for respondents who are from the age range of 20 to 25 years old, 4.00 for Administrative Officer I, Accountant I, and Accountant III employees, 3.73 for respondents deployed in the Schools Division Office, 3.80 for respondents who have Doctors Degree, and 4.00 for relevant trainings in the fields of Human Resources and Personnel Management, Accounting and Auditing Services, and Property Resources and Custodianship.

As established by Cuizon (2018), professionalism and ethical or work values of non-teaching personnel of an educational institution are also affected by their profile variables including personal attributes and professional circumstances. According to Judge and Bretz, as cited by Cuizon (2018), work values were found to exhibit significant effects on job choice decisions. Further, individuals were more likely to choose jobs whose value content is like their own value orientation. Donald Super recognized that the self-concept changes and develops throughout people's lives because of experience. People successively refine their self-concept(s) over time and application to the world of work creates adaptation in their career choice. Professionalism and ethical standards are also exhibited from the respondents' educational backgrounds and positions and designations, it is concluded that when these employees hold higher designations which are administrative, there is more likely a higher expectation of transmission and practice of moral and legal ascendancy according to their job description. All of these are further developed by training and development.

Training and development, according to Oluwaseum (2018), is an important activity that increases the performance of employees in an organization and is a building block that enhances the growth and success of an organization. Training and development are the processes of investing in people so that they are equipped to perform well and are part of an overall human resource management approach that hopefully will result in people being motivated to perform. Finally, this is a platform for them to reintroduce the ethical standards and professional activities set forth by the appropriate authorities.

Table 17. Results of the Test of Significant Difference in the Level of Competence of the Respondents in Terms of Result Focus when Grouped According to their Profile

Variables	Probability of F	Remarks
Result Focus and Sex	0.0340	Significant
Result Focus and Age	0.0489	Significant
Result Focus and Position/Designation	0.0163	Significant
Result Focus and Type of School/Office Assignment	0.0478	Significant
Result Focus and Highest Educational Attainment	0.0385	Significant
Result Focus and Relevant Trainings Attended for the Last Three Years	0.0450	Significant

Table 17 displays the results of the test of significant difference in the level of competence of the respondents in terms of Result Focus when grouped according to their profile.

The results reveal that the probability values of F are less than 0.05 for this reason, the null hypothesis is rejected at a 0.05 level of significance. As a result, there is a significant difference in the level of competence of the respondents in terms of Result Focus when grouped according to their profile. It shows that the non-teaching personnel differ in their competence level on result focus when they are classified by sex, age, position, type of school, and highest educational attainment.

However, when grouped by relevant trainings attended from the last three years, out of 41 groupings of trainings, 11 groupings are competent in Result Focus, and 30 classifications are fully competent in Result Focus, but with different means. Result Focus When compared with their profile variables, the following obtained the highest weighted mean: 3.43 for female respondents, 3.55 for respondents who are aged 41 years old and above, 4.00 for respondents with positions of Administrative Officer I, and Accountant I, 3.49 for large schools, 3.50 for respondents with Doctor's Degree, and 4.00 for Accounting and Auditing Service
s as relevant training.

The study signifies that the profile variables of the respondents differ in terms of Result Focus as an indicator of the level of competence of non-teaching personnel of the Schools Division Office of the City of Ilagan. Results Focus is a concern for surpassing a standard of excellence. The standard may be one's past performance (striving for improvement); an objective measure (achievement orientation); challenging goals that one has set; or even improving or surpassing what has already been done (continuous improvement). Al-Mzary (2015) noted that human resources are the main asset at modern organizations, which makes the skills mastered by employees an important factor in determining the current situation as well as the future of an organization, which are impacted by the performance of the human resources. Hence, the need for rigorous and relevant training development aligned with their fields of specialization which are salient factors of a Result-Focus organization such as the Department of Education, specifically the Schools Division of the City of Ilagan.

As emphasized by Wanjiku (2021), effective staff development toward result achievement is essential to support new approaches to learning and teaching, to meet the changing needs of institutions. The result serves institutional needs and enhances the ability of the organization to meet its goals. It is an effort to help employees learn how to do their jobs better. Results may or may not include career development. It is important to establish working conditions that will attract good-quality personnel committed to the achievement of organizational objectives in both the public and private sectors. Also, there is a need to ensure the safety of employees and provide satisfactory welfare services. In the Schools Division of the City of Ilagan, all cited profile variables are significantly connected to the Result Focus indicator of the level of competence which signifies that these are contributory factors in the level of competence of the respondents as administrative employees in the Schools Division of the City of Ilagan.

As an implication of the results, according to Navaneetha and Bhaskar (2018), the organization and workplace need to adapt mechanisms in enhancing and providing

relative upskilling and training engagements to their employees relative to their educational developmental activities, positions or designations, and personal attributes. Thus, for organizations to achieve optimum returns from their investment, there is an imperative need to effectively manage training and development programs.

Table 18. Results of the Test of Significant Difference in the Level of Competence of the Respondents in terms of Teamwork when grouped According to their Profile

Variables	Probability of F	Remarks
Teamwork and Sex	0.0207	Significant
Teamwork and Age	0.0255	Significant
Teamwork and Position/Designation	0.0481	Significant
Teamwork and Type of School/Office Assignment	0.0229	Significant
Teamwork and Highest Educational Attainment	0.0094	Significant
Teamwork and Relevant Trainings Attended for Last Three Years	0.0500	Significant

The results of the test of significant difference in the level of competence of the respondents in terms of teamwork, when grouped according to their profile, are displayed in Table 18.

It is reflected from the results that the F-probability values are less than or equal to 0.05. Hence, the null hypothesis is rejected at a 0.05 significance level. Thus, there is a significant difference in the level of competence of the respondents in terms of teamwork when grouped according to their profile. It shows that the non-teaching personnel have varied competency in teamwork in terms of their mean when grouped by sex, age, position, type of school, and highest educational attainment. As appended, the non-teaching personnel are fully competent in teamwork but with different means. The ones that obtain the highest mean are the male, aged 20-25, Administrative Assistant I, Accountants I and III, all the Administrative Officers except Administrative Officer II, Medium School, and Doctoral Degree. On the other hand, when grouped by training attended for the last three years, out of 41 groupings four groupings are competent in teamwork, and the other 37 groupings are fully competent as indicated by their means.

It has been further revealed that teamwork and the highest educational attainment are highly significant. This implies that teamwork is highly significant when compared to their highest educational attainment which indicates the level of educational attainment of the non-teaching personnel of the Schools Division Office of the City. Teamwork and highest educational attainment are two comparative and relative variables that indicate that when educational attainment is high, then there is a probability that such an employee is manifesting the thrusts and features of a contributing member in an organization which is an aspect of teamwork.

The result affirms that individuals vary in terms of their level of competence in teamwork. As agreed by Nda & Fard (2013), teamwork is the backbone of effective

communication within a company. When employees work as individuals or independently on projects, they may not readily share knowledge or new information. This lack of communication increases the time it takes to complete projects, tasks, or the development of solutions. Teamwork promotes conversation between employees regarding the task at hand, possibly preventing employees from working in opposite directions. Therefore, training and development must be designed and delivered to meet the needs of all employees in such a way that the employees will not only be productive but also be satisfied. Training and development have a positive impact on the employees to carry out their work more effectively, increasing their interpersonal and technical abilities, teamwork, job confidence, and work motivation.

Consequently, when teams, groups, or individual employees possess varied levels of teamwork, there is a variety of mechanisms for dealing with clients, administrative tasks, and other aspects of public services. This is better achieved through upskilling programs. As emphasized by Hamid (2021), upskilling is a way of enhancing employee commitment and maximizing employee potential. Training is an instrument that fundamentally affects the successful accomplishment of organizations' goals and objectives. Further, it is well known that teamwork develops thanks to a social learning process. Indeed, the growth of self-efficacy continues to evolve throughout people's working lives as they acquire new skills, experience, and understanding. Training processes should therefore play a strategic role in addressing and developing teamwork in preparation for an organizational change.

Table 19. Results of the Test of Significant Difference in the Level of Competence of the Respondents in terms of Service Orientation when Grouped According to their Profile

Variables	Probability of F	Remarks
Service Orientation and Sex	0.0472	Significant
Service Orientation and Age	0.0229	Significant
Service Orientation and Position/Designation	0.0051	Significant
Service Orientation and Type of School/Office Assignment	0.0071	Significant
Service Orientation and Highest Educational Attainment	0.1233	Not Significant
Service Orientation and Relevant Trainings Attended for Last Three Years	0.0400	Significant

Table 19 discloses the results of the test of significant differences in the level of competence of the respondents in terms of service orientation when grouped according to their profile.

The results show that the F-probability values are less than 0.05 except for the highest educational attainment. This signifies the rejection of the null hypothesis at a 0.05 level of significance. Therefore, there is a significant difference in the level of competence of the respondents in terms of service orientation when grouped according to their sex, age, position, type of school/office assignment, and relevant trainings attended for the last three years. It states that the non-teaching personnel differ in their competency level

on service orientation in terms of their means when they are grouped by the aforesaid profiles. As evidenced by the mean, the non-teaching personnel are fully competent in service orientation when classified by sex, age, and type of school but with different means. The highest means are obtained by males, ages 20-25, and medium school.

Regarding position, out of 10 positions, one is competent, that is the Administrative Assistant, and the other nine designations are fully competent in this area but with varied means. On the other hand, with regards to training attended for the last three years, out of 41 groupings, 24 are fully competent and 17 are competent in service orientation but with varied means. Service Orientation, when compared to their profile variables, 3.47 for male respondents, 3.67 for respondents who are aged from 20 to 25 years old, 4.00 for respondents with positions Administrative Officer I, Accountant I, and Accountant III, 3.50 for medium schools, 3.43 for college graduates, and 4.00 for Human Resources and Personnel Management as relevant training.

However, there is no significant difference in the level of competence of the respondents in terms of service orientation when they are grouped according to highest educational attainment. Hence, the null hypothesis is accepted at a 0.05 significance level. It implies that the non-teaching personnel do not differ in their competence level on service orientation when they are classified by the said profile. It states further that the respondents have similarities in their competence level on service orientation regardless of their highest educational attainment. Nonetheless, it has been further revealed that service orientation and highest educational attainment of the non-teaching personnel of the Schools Division Office of the City of Ilagan are not significant when compared together.

Service Orientation is an equivalent of service efficiency directed and provided to clients and organizations whom the agency or institution they serve. The impact of service orientation on employees' performance and competence has been a leading factor in the development of organizational institutions, specifically those who are in public service. Hence, as discussed by Tahir et al. (2014), service orientation is affected by the position or designation and the work assignment or station of administrative employees. Some indicators of service orientation are measured in various parameters such as participation, transparency, environment, and provision of general administrative and technical services to ensure the general delivery of public services. These are manifested by the professional status of administrative employees as mentioned in terms of their status and standing in an organization.

Further, service orientation could also be manifested by the administrative employees' age and experience. In addition, employees' sex also differ in terms of service orientation as some studies including Hafeez & Akbar (2015), divulged that women generally provide clearer directions for organizations in terms of service orientation, while male employees are generally akin to administrative management and leadership. However, this was negated by stating that sexual differences have little to no effect in terms of the service orientation of administrative employees in an educational institution.

Finally, in terms of relevant training attended, these trainings anchored from the job descriptions, duties, and responsibilities of non-teaching personnel of an educational agency provide for clearer manifestations of their service orientation. Darcy mentions that training and development, taken together, help employees develop better skills, change their attitudes toward work, and improve their knowledge regarding their field. The main purpose of training and development is to improve employee competencies so that organizations can maximize the efficiency and effectiveness of their employees. As an effect on the non-teaching personnel of the Schools Division of the City of Ilagan, some benefits of this program are the increase in the productivity of workers, development of skills, and greater proficiency in work. If employees are to experience effectiveness on the job, they need to acquire and develop knowledge and skills.

Furthermore, the result also shows that when compared together, the variable of service orientation is highly significant to position/designation and type of school or office assignment. In the first comparison, this means that the position or designation of a non-teaching employee could influence his or her service orientation. As established, service orientation is tantamount to service efficiency. Hence, if an employee is in a higher position or designation with greater responsibilities, service efficiency is expected. Service Orientation is an equivalent of service efficiency directed and provided to clients and organizations whom the agency or institution they serve. Moreover, service orientation could also be influenced by the type of school or office assignment. This implies that when the workplace is favorable or convenient to the employee considering significant and relevant factors, it follows that service efficiency could be raked.

Table 20. Results of the Test of Significant Difference in the Level of Competence of the Respondents in terms of Innovation when Grouped According to their Profile

Variables	Probability of F	Remarks
Innovation and Sex	0.0474	Significant
Innovation and Age	0.0397	Significant
Innovation and Position/Designation	0.0146	Significant
Innovation and Type of School/Office Assignment	0.0103	Significant
Innovation and Highest Educational Attainment	0.0368	Significant
Innovation and Relevant Trainings Attended for Last Three Years	0.0500	Significant

The results of the test of significant difference in the level of competence of the respondents in terms of Innovation, when grouped according to their profile, are exhibited in Table 20.

It is evident from the results that the probability values of F are less than or equal to 0.05. Hence, the null hypothesis is rejected at a 0.05 level of significance. Thus, there is a significant difference in the competence level of the respondents in terms of innovation when grouped according to their profile. It shows that the non-teaching

personnel differ in their competence level on innovation when they are grouped by sex, age, position, type of school/office assignment, highest educational attainment, and relevant trainings attended for the last three years. As appended, the non-teaching personnel who got the highest mean are the male, aged 20-25, administrative officer I and Accountant I and III, medium school and college graduates. While, on training, out of 41 groupings, 27 are fully competent, 13 are competent, and one is competent in innovation as evidenced by the means. When compared to innovation, the following obtained the highest weighted means for every profile variable: 3.47 for male respondents, 3.73 for respondents aged from 20 to 25 years old, 4.00 for respondents who are designated as Administrative Officer I, Accountant I, and Accountant III, 3.41 for medium schools, 3.41 for college graduates, and 3.90 for Property and Resources Custodianship as relevant training.

The result affirms that the respondents differ in their level of competence in terms of Innovation when compared to their profile variables. According to Sarkodie (2011), in terms of innovation, it is the systematic and practical application of solutions, methods, and mechanisms adapted to resolve or further enhance an organization's policy, scheme, or programs. In the Department of Education, several innovations are made in instructional and curriculum development. On the other hand, innovations are also encouraged and further developed in the administrative section of the Department. Public agencies such as the Department of Education are considered the cornerstone for intelligent and responsible citizenship. To enhance its efficiency and effectiveness, it is necessary to conduct innovations for the personnel development of all its employees at all levels. These employees are assets or resources to be valued, developed, and utilized in the delivery of basic services to the interest of the public. They must have the necessary skills and knowledge to better serve the people's needs and concerns.

These factors of competence in innovation include the personal and professional dealings of the respondents as they gauge the innovative levels of these employees to better serve the stakeholders. Another factor is upskilling or training engagement which trail-blazed organizations to further enhance and improve. In the Schools Division of the City of Ilagan, these are engaged to boost the skills and competencies of administrative employees including the non-teaching personnel who are deployed within the schools of the Division Office.

Further, Edralin (2011) noted that training has been at the forefront factor of developing employees from among organizations, associations, agencies, and human resources. In terms of innovation, respondents are optimistic and enthusiastic if nominated for a training and development program. Results also revealed possible enablers of employee's ability to learn. Work-related and personal commitments, as well as training programs, including delivery methods, materials, and instructors, turned favorable for respondents considering their situation signifying those employees genuinely value training.

Performance of Non-Teaching Personnel based on the Key Result Areas (KRAs)

Table 21. Performance of Administrative Officer V Employee/s Based on the Key Result Areas

KRA for Administrative Officer V (Admin)	RATING	Qualitative Description
1. Administrative Policies and Guidelines	5	Outstanding
2. Personnel Administration	5	Outstanding
3. Records Management	5	Outstanding
4. Cash Management	5	Outstanding
5. Supply and Procurement	5	Outstanding
6. Security and Custody of Properties	5	Outstanding
7. Maintenance of SDO Grounds and Facilities	4	Very Satisfactory
8. Administrative Services Performance	5	Outstanding
OVERALL RATING	4.88	Outstanding

The table above portrays the performance of an employee who is holding the position of Administrative Officer V based on the Key Result Areas of the Office Performance Commitment Review Form. The data shows that the employee gained an overall rating of 4.88 which means that the employee excelled with an Outstanding Performance to the prescribed duties and responsibilities as Administrative Officer V. In an interview, performance ratings were validated and upon checking their files or records.

Further, the employee achieved a perfect score of 5 from each Key Result Area including Administrative Policies and Guidelines, Personnel Administration, Records Management, Cash Management, Supply and Procurement, Security and Custody of Properties, and Administrative Services Performance. However, a score of 4 was also marked in the KRA of Maintenance of SDO Grounds and Facilities. The Schools Division Office (SDO) empowers schools and Learning Centers (LC) and engages partners and communities in the delivery of quality basic education that is accessible to all.

According to the 2022 DepEd-Civil Service Commission guidelines, this administrative position aims to provide management with economical, efficient, and effective budgeting services and reliable and timely financial information for decision-making towards the cost-effective utilization of financial resources of the division. Further, this also aims to supervise the team that will provide the Schools Division Office with timely, responsive, and economical administrative services in personnel and records management, cash disbursement, procurement, security and custody of the property, and the maintenance of facilities, to ensure efficient operation of the schools division office towards enabling schools and learning centers provide accessibly and quality and basic education.

Table 22. Performance of Administrative Officer IV (Personnel) Employees Based on the Key Result Areas

KRA for Administrative Officer IV (Personnel)	RATING	Qualitative Description
1. Recruitment, Selection and Placement	5.00	Outstanding
2. Personnel Actions	5.00	Outstanding
3. Salary Administration and Personnel Records	5.00	Outstanding
4. Benefits Administration	5.00	Outstanding
5. Personnel Information System	5.00	Outstanding
OVERALL RATING	5.00	Outstanding

The table above represents the performance of the employee holding the position of Administrative Officer IV in the field of Personnel Management based on the Key Result Areas of the Office Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their files or records.

It is revealed that the employee achieved an Outstanding Performance with a rating of 5 as the overall rating. These Key Result Areas include Recruitment, Selection and Placement, Personnel Actions, Salary Administration and Personnel Records, Benefits Administration, and Personnel Information System.

As provided by the DepEd-CSC in 2022, this administrative position aims to provide personnel administration services to the management and personnel of the Schools Division in the areas of recruitment and selection, personnel administration, compensation and benefits administration, personnel records, while ensuring adherence to the standards, rules, and regulations in personnel administration of government oversight agencies (CSC, DBM, COA, etc.).

Table 23. Performance of Administrative Officer IV (Records) Employees Based on the Key Result Areas

KRA for Administrative Officer IV (Record Officer II)	RATING	Qualitative Description
1. Records Management System	5.00	Outstanding
2. Receiving and Releasing	5.00	Outstanding
3. Documentation Authentication and Verification	5.00	Outstanding
4. Reporting	4.90	Outstanding
5. Technical Assistance	5.00	Outstanding
6. Unit Performance	4.88	Outstanding
OVERALL RATING	4.96	Outstanding

Table 23 reflects the overall performance of an employee holding the position of Administrative Officer IV in the field of Records Management based on the Key Result Areas of the Office Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their individual files or records.

The data highlights that the employees maintained an Outstanding Performance with an overall rating of 4.96. It is further divulged that the said employee garnered perfect

ratings in the Key Result Areas of the Records Management System, Receiving and Releasing, Documentation Authentication and Verification, and Technical Assistance. The Key Result Areas of Reporting and Unit Performance obtained a rating of 4.90 and 4.88, respectively.

Accordingly, this position, as per DepEd-CSC is characterized by the aim to establish and maintain a records management system, including the creation, classification, storage, maintenance, use, and disposition of operating records and documents of permanent, legal, and historical value and ensure the security, preservation, and efficient access and retrieval of such records when needed by the school's division office management and staff.

Table 24. Performance of Administrative Officer IV (Cash) Employees Based on the Key Result Areas

KRA for Administrative Officer IV (Cash)	RATING	Qualitative Description
1. Cash Collection	5.00	Outstanding
2. Cash Disbursement Payment & Remittance	5.00	Outstanding
3. Liquidation and Reporting	5.00	Outstanding
4. Secondary Duties	4.90	Outstanding
OVERALL RATING	4.98	Outstanding

Table 24 manifests the overall performance of the Administrative Officer IV employee for Cash Management based on the Key Result Areas of the Office Performance Commitment and Review Form. In an interview, performance ratings were validated and upon checking their files or records. In an interview, performance ratings were validated and upon checking their files or records.

An overall rating of 4.98 shows that the said employee is qualified to have an Outstanding Performance. For each Key Result Area, a score of 5 dominated the areas of Cash Collection, Cash Disbursement Payment and Remittance, and Liquidation and Reporting, while Secondary Duties had a score of 4.90.

As per DepEd-CSC is characterized by the aim to manage cash collections, disbursements, liquidations, and preparation of reports to the accounting office to ensure proper utilization and timely disbursement of funds and liquidation of cash advances to pay for government obligations in accordance with accounting and auditing rules and regulations.

Table 25. Performance of Administrative Officer IV (Supply Officer II/Property) Employees Based on the Key Result Areas

KRA for Administrative Officer IV (Supply Officer II/Property)	RATING	Qualitative Description
1. Policies, Standards, Guidelines, Systems	4.70	Outstanding
2. Property and Acquisition	4.13	Very Satisfactory

3. Delivery Inspection and Acceptance	4.50	Outstanding
4. Custodianship	4.83	Outstanding
5. Disposal	4.35	Very Satisfactory
OVERALL RATING	4.50	Outstanding

Table 25 shows the performance of an employee with the position of Administrative Officer IV as the Supply and Property Officer of the Schools Division Office of the City of Ilagan.

From the data presented, the said employee had an overall rating of 4.50 which means that an Outstanding Performance was manifested from the Office Performance Commitment Review Form. The Key Result Area of Policies, Standards, Guidelines, and Systems had an outstanding rating of 4.70, Property and Acquisition had a Very Satisfactory rating of 4.13, Delivery Inspection and Acceptance had an Outstanding Performance of 4.50, Custodianship obtained an Outstanding Rating of 4.83, and Disposal as the last Key Result Area had a Very Satisfactory rating of 4.35. These Very Satisfactory remarks are implications of the insufficient relevant trainings of the said employees in the fields of Disposal and Property Acquisition as essential Key Result Areas of their designation or position.

In place of this, the upskilling program in the fields of result focus and innovation signifies the necessity to include this position in the development and evaluation of training development for improved and better performance in the Individual Performance Review Commitment Form. During the interview, respondents under this position/designation narrated that they obtained a Very Satisfactory rating in the fields of Property and Acquisition, and Disposal due to the complexity and difficulty of the nature of these Key Result Areas as Supply/Property Officer. Due to the demands and necessities in purchases, procurement, and inventories, respondents had simple inconsistencies with data and supply management. Nonetheless, they still managed to obtain an above-average rating for the identified Key Result Areas of their IPCRF/OPCRF.

Table 26. Performance of Administrative Officer II Employees Based on the Key Result Areas

KRA for Administrative Officer II	RATING	Qualitative Description
1. Personnel Administration	4.76	Outstanding
2. Property Custodianship	4.71	Outstanding
3. General Administrative Support	4.78	Outstanding
4. Financial Management	4.76	Outstanding
OVERALL RATING	4.75	Outstanding

Table 26 presents the performance of non-teaching personnel who hold the position of Administrative Officer II based on their Key Result Areas of the Individual Performance Commitment Review Form. In an interview, performance ratings were validated upon checking their files or records.

Based on the presented data above, non-teaching personnel who are designated in the schools of the Schools Division of the City of Ilagan had an overall rating of 4.75 which signifies that they had an Outstanding Performance as prescribed from their administrative position. These employees possessed and performed well in the duties and responsibilities as Administrative Officers of elementary schools, integrated schools, and secondary schools in the Schools Division of the City of Ilagan. Moreover, for each Key Result Area, employees obtained an Outstanding Performance for each Key Result Area including Personnel Administration, Property Custodianship, General Administrative Support, and Financial Management.

According to DepEd-CSC, Administrative Officer IV (Supply/Property) is guided to provide technical services to the management and staff of the SDO in relation to procurement (using alternative mode), inspection, acceptance, issuance, storage, maintenance, and inventory of material resources, equipment, and properties to support the efficient operations of the schools' division office in managing the delivery of quality basic education and, facilitate the disposal of waste materials and unserviceable equipment to derive economic benefit and maintain orderliness and efficient use of office space.

Table 27. Performance of Administrative Officer II (Personnel) Employees Based on the Key Result Areas

KRA for Administrative Officer II (Personnel/HRMO I)	RATING	Qualitative Description
1. Salary Administration and Personnel Records	5.00	Outstanding
2. Benefits Administration	5.00	Outstanding
3. Personnel Information System	5.00	Outstanding
4. Other Duties	4.90	Outstanding
OVERALL RATING	4.98	Outstanding

The table above reveals the performance of Administrative Officer II employees designated for Personnel Management in the Schools Division Office of the City of Ilagan based on the Key Result Areas of their Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their individual files or records.

The data established those employees under this KRA for Administrative Officer II (Personnel/Human Resource Management Officer) achieved an overall rating of 4.98 which means that they showcased an Outstanding Performance from the last calendar year. These employees had a perfect score of 5 in the Key Result Areas of Salary Administration and Personnel Records, Benefits Administration, and Personnel Information System. Their Other Duties also had an Outstanding rating of 4.90.

As provided under DepEd-CSC, this is administrative work in coordinating and assisting a higher-level administrator with the management of an agency. An employee in this class is responsible for performing administrative staff assignments and office management work for a division or organizational unit. Work differs from that of

Administrative Officer I by the complexity of assignments and independent decision-making, but an employee is allowed to use his judgment where necessary. General supervision is received from a higher-level officer through conferences and review of work for compliance with departmental rules and regulations. Supervision is exercised over a small clerical staff.

Table 28. Performance of Administrative Officer I (IUs) Employees Based on the Key Result Areas

KRA for Administrative Officer I (IUs)	RATING	Qualitative Description
1. Personnel Administration	5.00	Outstanding
2. Property Custodianship	5.00	Outstanding
3. General Administrative Support	4.90	Outstanding
4. Financial Management	4.90	Outstanding
OVERALL RATING	4.95	Outstanding

This table provides the result of the performance survey of Administrative Officer I employees in the Implementing Units Office based on their Key Result Areas of the Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their individual files or records.

In this administrative position, non-teaching personnel of the Schools Division Office of the City of Ilagan had an Outstanding Performance of 4.95 as their overall rating. On the other hand, they had a respective final score of 5 for the Key Result Areas of Personnel Administration and Property Custodianship. A rating 0f 4.90 was respectively achieved in the Key Result Areas of General Administrative Support and Financial Management. According to DepEd-CSC, this position supervises and assists in the direction of a major department; assists a senior official in the development of operating procedures; confers with him on matters affecting personnel, policy and other administrative problems; makes complex operational decisions; supervises a number of subordinate staff.

Table 29. Performance of Administrative Assistant III Employees Based on the Key Result Areas

KRA for Administrative Assistant III	RATING	Qualitative Description
1. Office Schedules	4.63	Outstanding
2. Communications/Documents	4.68	Outstanding
3. Guests Reception	4.70	Outstanding
4. Records/Files	4.83	Outstanding
5. Personnel Matters	4.75	Outstanding
6. Technical/Administrative	4.65	Outstanding
OVERALL RATING	4.70	Outstanding

Table 29 shows the performance of Administrative Assistant III employees of the Schools Division of the City of Ilagan based on their Key Result Areas of the Individual Performance Commitment Form. Based on the data presented, these employees had an

overall rating of 4.70 which implies that they had an Overall Outstanding Performance as Administrative Assistant III employees as prescribed by their duties and responsibilities. Outstanding ratings were also manifested in all Key Result Areas including Office Schedules, Communications/Documents, Guests Reception, Records/Files, Personnel Matters, and Technical or Administrative Support. In an interview, performance ratings were validated upon checking their files or records.

As emphasized by DepEd-CSC, this position seeks to provide prompt and quality support service to the SDS by implementing administrative systems, and procedures, and monitoring administrative projects for the SDS to perform his/her duties efficiently.

Table 30. Performance of Administrative Assistant III Employees Based on the Key Result Areas

KRA for Administrative Assistant III (IUs)	RATING	Qualitative Description
1. Accounting Services	4.63	Outstanding
2. Salary Administration and Payroll Processing	4.63	Outstanding
3. Payroll-related Services	4.72	Outstanding
4. Budgeting Services	4.69	Outstanding
OVERALL RATING	4.67	Outstanding

The preceding table showcases the performance evaluation results of Administrative Assistant III employees of the Implementing Unit Offices of the Schools Division Office of the City of Ilagan based on the Key Result Areas of their Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their files or records.

It is revealed that employees were outstanding in all the Key Result Areas including Accounting Services, Salary Administration and Payroll Processing, Payroll-Related Services, and Budgeting Services. Overall, they had an outstanding performance with an overall rating of 4.67.

Further, DepEd-CSC detailed that this position shall provide assistance on the finance-related functions in schools and facilitate efficiency in SDO and school operations such as accounting, budgeting, cash management, and payroll services, to ensure efficient office operations.

Table 31. Performance of Administrative Assistant III (Non-IUs) Employees Based on the Key Result Areas

KRA for Administrative Assistant III (Non-IUs)	RATING	Qualitative Description
1. Financial Records and Reports	4.69	Outstanding
2. Account Tracking	4.70	Outstanding
3. Financial Transactions Recording Procedures	4.64	Outstanding
4. Human Resource Management	4.38	Very Satisfactory
OVERALL RATING	4.60	Outstanding

The preceding table illustrates the performance of the Administrative Assistant III employees as Non-Implementing Unit employees of the Schools Division Office of the City of Ilagan based on the Key Result Areas of their Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their files or records.

It is divulged that employees under this administrative position perform well with an overall rating of 4.60 which implies that they had an Outstanding Performance. In addition, these employees had an Outstanding performance in the Key Result Areas of Financial Records and Reports, Account Tracking, and Financial Transactions Recording Procedures. In the Key Result Area of Human Resource Management, they had a rating of 4.38 which means that they obtained a Very Satisfactory remark. This Very Satisfactory remark implies that there is a necessity to upgrade the field or area of the KRA to align objectives based on the necessary skills to be obtained and possessed by the employee.

In the development of an upskilling program, employees in this position are recommended to undergo further training and a series of upskilling programs to transform their overall individual performance specifically in the fields of self-management and result focus. During the interview, the respondents detailed the recurring causes and issues that arose during the year of service because of some issues and concerns that arose from their designation. In the position of Administrative Officer III (Non-Implementing Units), they had issues with Human Resource Management due to the scattered deployment of employees under their designation and assigned workplaces. It is also cited that the far-flung distances of schools led to difficulty in the daily assistance of technical aid and administrative services. However, this did not hinder them to still obtain a rating of Very Satisfactory.

Moreover, employees in this position, according to DepEd-CSC, aim to maintain and safeguard the books, records, and supporting schedules of the Division Office by keeping track of accounts and verifying the accuracy of procedures used for recording financial data that are necessary for the preparation of timely and reliable reports which will aid the management in making informed decisions.

Table 32. Performance of Administrative Assistant III Employees Based on the Key Result Areas

KRA for Administrative Assistant III (Senior Bookkeeper)	RATING	Qualitative Description
1. Financial Records and Reports	4.82	Outstanding
2. Account Tracking	4.85	Outstanding
3. Financial Transactions Recording Procedure	4.84	Outstanding
OVERALL RATING	4.84	Outstanding

The table presented above shows the performance of Administrative Assistant III Employees as Senior Bookkeepers of the Schools Division Office of the City of Ilagan based on the Key Result Areas of their Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their files or records.

As presented, employees holding this administrative position received an overall rating of 4.84 which means that they had an Outstanding Performance as non-teaching personnel. Specifically, they also had outstanding remarks in the Key Result Areas of Financial Records and Reports, Account Tracking, and Financial Transactions Recording Procedure.

As noted under DepEd-CSC, this position seeks to maintain and safeguard the books, records, and supporting schedules of the Division Office by keeping track of accounts and verifying the accuracy of procedures used for recording financial data that are necessary for the preparation of timely and reliable reports which will aid the management in making informed decisions.

Table 33. Performance of Administrative Assistant II Employees Based on the Key Result Areas

KRA for Administrative Assistant II (IUs)	RATING	Qualitative Description
1. Accounting Services	4.73	Outstanding
2. Budgeting Services	4.78	Outstanding
OVERALL RATING	4.75	Outstanding

This table presents the performance of Administrative Assistant II employees of the Implementing Unit Offices of the Schools Division of the City of Ilagan based on the Key Result Areas of their Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their files or records.

Here, respondents had an overall rating of 4.75 which signifies their outstanding performance as indicated by their description of duties and responsibilities in the fields of Accounting Services and Budgeting Services. This position, according to DepEd-CSC, shall assist in finance and administrative-related services such as accounting, budgeting, and payroll processing and ensuring efficient office operations.

Table 34. Performance of Administrative Assistant II Employees Based on the Key Result Areas

KRA for Administrative Assistant II	RATING	Qualitative Description
1. Accounting Records	4.66	Outstanding
2. Accounting Reports	4.74	Outstanding
3. Loan Verification	4.77	Outstanding
4. Salary Administration and Personnel Records	4.50	Outstanding
5. Finance-Related Reports and Records Management	4.53	Outstanding
OVERALL RATING	4.64	Outstanding

The table above exhibits the performance of Administrative Assistant II employees deployed in schools within the Schools Division of the City of Ilagan based on the Key Result Areas of their Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their files or records.

From the data presented, it can be gleaned that Administrative Assistant II employees of the Schools Division of the City of Ilagan performed Outstanding with an overall rating of 4.64 with the same qualitative description for the ratings in the Key Result Areas including Accounting Records, Accounting Reports, Loan Verification, Salary Administration and Personnel Records, and Finance-Related Reports and Records Management.

According to DepEd-CSC, this position shall assist the Senior Bookkeeper and/or School Head in the performance of their functions, such as but not limited to undertaking the necessary accounting, budgeting, cash management, payroll services, and other finance-related, to ensure efficient office operations.

Table 35. Performance of Administrative Assistant II Employees Based on the Key Result Areas

KRA for Administrative Assistant II (Accounting Clerk)	RATING	Qualitative Description
1. Accounting Records	4.83	Outstanding
2. Accounting Reports	4.85	Outstanding
OVERALL RATING	4.84	Outstanding

Table 35 presents the performance of Administrative Assistant II employees deployed as Accounting Clerks in the Schools Division of the City of Ilagan based on their Key Result Areas of the Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their files or records.

It is shown that these employees had an Outstanding Performance from last year with an overall rating of 4.84. The same qualitative remarks were also obtained in the Key Result Areas of Accounting Records and Accounting Reports. As guided by DepEd-CSC, this position has its goal to support accounting operations by filing documents; reconciling statements; and running software programs.

Table 36. Performance of Administrative Assistant II (Non-IUs) Employees Based on the Key Result Areas

KRA for Administrative Assistant II (Non-IUs)	RATING	Qualitative Description
1. Financial Records and Reports	4.69	Outstanding
2. Budget Preparation Execution and Reports	4.61	Outstanding
3. Human Resource Management	4.68	Outstanding
4. Other Task	4.69	Outstanding
OVERALL RATING	4.67	Outstanding

The table preceding table divulges the overall performance of Administrative Assistant II employees deployed in the Non-Implementing Units of the Schools Division of the City of Ilagan based on the Key Result Areas of their Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their files or records.

An overall rating of 4.67 qualified the respondents to excel with an Outstanding Performance which is also evident from their ratings in every Key Result Area including Financial Records and Reports, Budget Preparation, Execution, and Reports, Human Resource Management, and Other Tasks.

According to DepEd-CSC, Administrative Assistant II positions are characterized by Accounting, Budgeting, and administrative duties. The Accounting Services maintain financial records and reports to provide management with information for decision-making and accounting reports to oversight agencies to ensure the proper utilization of funds in accordance with accounting and auditing rules and regulations. The Budgeting Services provides management with economical, efficient, and effective budgeting services and reliable and timely financial information for decision-making toward the cost-effective allocation and utilization of financial resources of the schools division.

Table 37. Performance of Administrative Assistant I Employees Based on the Key Result Areas

KRA for Administrative Assistant I (Budget Officer I)	RATING	Qualitative Description
1. Budget Preparation, Execution, and Accountability Data and Documents	4.93	Outstanding
OVERALL RATING	4.93	Outstanding

Table 36 manifests the performance of Administrative Assistant I employees deployed as Budget Officers of the Schools Division of the City of Ilagan based on the Key Result Area of the Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their files or records.

With a single Key Result Area, the overall outstanding performance in Budget Preparation, Execution, and Accountability of Data and Documents had an overall rating of 4.93. Further, according to DepEd-CSC, this position aims to provide general and routine clerical support to the budgeting officer in the preparation of budgetary requirements needed for submission to the DBM and reports in compliance with other attached agencies, and to provide administrative support to the Finance Services functions.

Table 38. Performance of Administrative Assistant I (IUs) Employees Based on the Key Result Areas

KRA for Administrative Officer I (IUs)	RATING	Qualitative Description
1. Personnel Administration	5.00	Outstanding
2. Property Custodianship	5.00	Outstanding
3. General Administrative Support	4.90	Outstanding
4. Financial Management	4.90	Outstanding
OVERALL RATING	4.95	Outstanding

The table above reflects the performance of Administrative Assistant I employees deployed in the Implementing Units in the Schools Division of the City of Ilagan based on the Key Result Areas of their Individual Performance Commitment Review Form. In an interview, performance ratings were validated and upon checking their individual files or records.

As shown above, the employees had an overall rating of 4.95 which directly translates to an Outstanding Performance. They also had an Outstanding Performance for every Key Result Area including Personnel Administration, Property Custodianship, General Administrative Support, and Financial Management. According to DepEd-CSC, this position aims to provide general and routine clerical support to the budgeting officer in the preparation of budgetary requirements needed for submission to the DBM and reports in compliance with other attached agencies, and to provide administrative support to the Finance Services functions.

Table 39. Performance of Administrative Aide VI (Data Entry Machine Operator) Employees Based on the Key Result Areas

KRA for Administrative Aide VI (Data Entry Machine Operator)	RATING	Qualitative Description
1. Receiving and Releasing	4.50	Outstanding
2. Documents Authentication, Verification and Certification	4.40	Very Satisfactory
3. Reporting	4.30	Very Satisfactory
4. Technical Assistance	4.20	Very Satisfactory
OVERALL RATING	4.35	Very Satisfactory

Table 39 represents the overall performance of Administrative Aide VI employees deployed as Data Entry Machine Operators based on the Key Result Areas of their Individual Performance Review Commitment Form. It is categorically presented that these respondents had an Overall Performance of Very Satisfactory with an overall rating of 4.35. The same qualitative remark was obtained in the following Key Result Areas: Receiving and Releasing, Documents Authentication, Verification, and Certification, Reporting, and Technical Assistance.

Three areas obtained a Very Satisfactory remark due to insufficiency of trainings relevant to the areas or fields of reporting, receiving, and releasing, and documents authentication, verification, and certification. During the interview, employees under the position of Administrative Aide VI detailed that due to their lack of educational experience and training attendance, they somehow obtained a Very Satisfactory rating from almost all their Key Result Areas of their Individual Performance Commitment Review Form. They added that apart from these cited reasons, the nature of their task is technical and purely administrative. Their inability to properly manage papers relative to their job descriptions had led to this result. On the other hand, the necessity for an upskilling program was highly recommended by their immediate heads and supervisors.

With this result, there is a necessity to augment the training and upskilling development of employees in this position. These fields to be included in their upskilling program are Result Focus, Self-Management, Innovation, and Service Orientation.

Further, DepEd-CSC expressly states that this position provides administrative support to the Records Officer in the maintenance of a records management system for the creation, classification, storage, maintenance, use, and disposition of operating records and documents of permanent, legal, and historical value and ensure the security, preservation, and efficient access and retrieval of such records when needed by the school's division office management and staff.

Table 40. Performance of Administrative Aide VI (Cash) Employees Based on the Key Result Areas

KRA for Administrative Aide VI (Cash)	RATING	Qualitative Description
1. Cash Collection	4.90	Outstanding
2. Cash Disbursement Payment & Remittance	4.80	Outstanding
3. Liquidation and Reporting	4.80	Outstanding
OVERALL RATING	4.83	Outstanding

Table 40 reveals the performance of Administrative Aide VI employees deployed as Cash Disbursement Officers based on the Key Result Areas of their Individual Performance Commitment Review Form. These employees have shown an outstanding performance as evidenced by their overall rating of 4.83, and outstanding performance in every Key Result Area of Cash Collection, Cash Disbursement Payment and Remittance, and Liquidation and Reporting. In an interview, performance ratings were validated upon checking their files or records. Moreover, this position as per DepEd-CSC, this position aims to assist the AO IV for Cash, in cash collection and disbursement, and the preparations and submission of cash-related reports.

Table 41. Performance of Administrative Aide IV Employees Based on the Key Result Areas

KRA for Administrative Aide IV	RATING	Qualitative Description
1. Messengerial and Photocopying	4.74	Outstanding
2. Recording	4.80	Outstanding
3. Communication	4.64	Outstanding
4. Plots/Schedules Activities	4.66	Outstanding
5. Record Management	4.68	Outstanding
6. Administrative Support	4.72	Outstanding
7. Secretariat/Frontline	4.65	Outstanding
OVERALL RATING	4.70	Outstanding

The table above represents the overall performance of Administrative Aide IV employees based on the Key Result Areas of their Individual Performance Commitment

Review Form. In an interview, performance ratings were validated upon checking their files or records.

These respondent employees had an overall rating of 4.70 which signifies that they had an exemplary performance. They also had an outstanding performance for all the Key Result Areas including Messengerial and Photocopying, Recording, Communication, Plots/Schedules Activities, Records management, Administrative Support, and Secretariat or Frontline. In lieu of these Key Result Areas, the Department of Education – Civil Service Commission also provided guidelines on the job description of this position. As noted by DepEd-CSC, this position assists in various aspects of general administrative processes such as purchasing, facilities operations, office automation, safety, human resources, customer service, public information, and other areas. Participates in meetings and presents data to assist managers in making operations and administrative decisions.

Table 42. Performance of Budget Officer III Employees Based on the Key Result Areas

KRA for Budget Officer III	RATING	Qualitative Description
1. Budget Preparation	5.00	Outstanding
2. Budget Execution	5.00	Outstanding
3. Budget Accountability and Reporting	5.00	Outstanding
4. Budget Systems Maintenance, Monitoring & Evaluation	5.00	Outstanding
5. Technical Assistance	5.00	Outstanding
OVERALL RATING	5.00	Outstanding

The preceding table is representation of the overall performance of Budget Officer III employees based on the Key Result Areas of their Office Performance Commitment Review Form. With an overall rating of 5.00, these non-teaching personnel had a perfect and outstanding performance from the last calendar year. They also had perfect scores for all the Key Result Areas including Budget Preparation, Budget Execution, Budget Accountability and reporting, Budget Systems Maintenance, Monitoring and Evaluation, and Technical Assistance. In an interview, performance ratings were validated upon checking their files or records.

DepEd-CSC provides that this position seeks to provide management with economical, efficient, and effective budgeting services and reliable and timely financial information for decision-making toward the cost-effective utilization of financial resources of the division.

Table 43. Performance of Accountant III Employee Based on the Key Result Areas

KRA for Accountant III	RATING	Qualitative Description
1. Financial Records and Reports	5.00	Outstanding
2. Financial Systems Maintenance	5.00	Outstanding
3. Monitoring and Evaluation	4.87	Outstanding
4. Technical Assistance	5.00	Outstanding

5. Accounting Services Performance	5.00	Outstanding
OVERALL RATING	4.97	Outstanding

Table 43 shows the performance of an Accountant III employee from the last calendar year based on the Key Result Areas of the Office Performance Commitment Review Form. An overall rating of 4.97 qualified the respondent to have an outstanding performance. In an interview, performance ratings were validated upon checking their files or records.

The employee also had a perfect score for the Key Result Areas including Financial Records and Reports, Financial Systems Maintenance, Technical Assistance, and Accounting Services Performance. Moreover, the employee had a rating of 4.87 in the Key Result Area of Monitoring and Evaluation.

DepEd-CSC provides that Accountant III develop and implement complex accounting system modifications and participate in the analysis and implementation of financial standards, policies, and procedures. Accountant III is distinguished from Accountant II in the amount and type of responsibility undertaken and direction received and exercised. DepEd Accountant III (Salary Grade 19) analyzes and attests to the accuracy of accounting records and reports and provides information and advice to the management of the schools division to ensure that the utilization of funds for basic education is maximized and compliant with government accounting rules and regulations, and ensures that financial reports will be fairly presented and that all recordable transactions must be taken up accurately in the books and that all disbursements are properly documented and following laws, rules, and regulations. Moreover, they are tasked to supervise, facilitate, and monitor the work of the accounting personnel and provide technical assistance to school heads and implementing units to ensure proper utilization of funds and preparation of reliable and timely financial reports.

Table 44. Performance of Accountant I Employees Based on the Key Result Areas

KRA for Accountant I	RATING	Qualitative Description
1. Financial Records and Reports	5.00	Outstanding
2. Financial Systems Maintenance	5.00	Outstanding
3. Monitoring and Evaluation	5.00	Outstanding
4. Technical Assistance	5.00	Outstanding
5. Accounting Services Performance	5.00	Outstanding
OVERALL RATING	5.00	Outstanding

The table above shows the overall performance of Accountant I employee based on the Key Result Areas of their Office Performance Commitment Review Form. The employee swept a perfect score for all the Key Result Areas including Financial Records and Reports, Financial Systems Maintenance, Monitoring and Evaluation, Technical Assistance, and Accounting Services Performance, and an Outstanding Performance. In

an interview, performance ratings were validated and upon checking their individual files or records.

Finally, as provided under DepEd-CSC, this position performs entry-level accounting work. Work involves maintaining, posting, and balancing accounting and financial statements, records, documents, or reports. May specialize in some phase of accounting work such as federal funds accounting, property and equipment control, cost, budgeting, or bond servicing. This position also prepares periodic Financial Statements and other related reports in accordance with accounting and auditing rules and regulations, and checks the accuracy, validity and appropriateness of income and expenditure transactions. accounting information.

Lastly, this position is also tasked to supervise, facilitate, and monitor the work of the accounting personnel and provide technical assistance to school heads and implementing units to ensure proper utilization of funds and preparation of reliable and timely financial reports.

Comparison Between the Performance of Non-Teaching Personnel based on the Key Result Areas (KRAs) and their Profile Variables

Table 45. Results of the Test of Significant Difference in the Performance of Non-Teaching Personnel in terms of Key Result Areas when grouped According to their Profile

Variables	Probability of F	Remarks
Performance and Sex	0.0440	Significant
Performance and Age	0.0200	Significant
Performance and Position/Designation	0.0009	Significant
Performance and Type of School/Office Assignment	0.0161	Significant
Performance and Highest Educational Attainment	0.0135	Significant
Performance and Relevant Trainings Attended for Last Three Years	0.0446	Significant

The results of the test of significant difference in the performance of the non-teaching personnel in terms of the Key Result Area when grouped according to their profile are disclosed in Table 45.

It is revealed from the results that the f-probability values are less than 0.05. Hence, the null hypothesis is rejected at a 0.05 level of significance. Thus, there is a significant difference in the performance of non-teaching personnel in terms of their KRA when grouped according to their profile. It states that the non-teaching personnel differ in their performance when they clustered by their profile variables. It shows that, as appended, all the respondents have outstanding performance but the highest mean are the females, age 41 and above, Accountant I, division school, and doctoral degree. However, those who attended trainings on Accounting and Auditing Services, Finance Management and Budget Related – Records and Files Management – Human Resources

and Personnel Management – Administrative and Technical Support – Organization Support, and Records and Files Management - Human Resources and Personnel Management - Administrative and Technical Support – Coordination, Communication and – Organizational Support have very satisfactory performance, while the others are of outstanding performance.

It has been revealed that performance and position or designation are highly significant in the comparison of the performance of the non-teaching personnel and their profile variables. This implies that performance is highly attributed on their position or designation. As significantly established and discussed earlier, position or designation affects the performance of employees. To put it up, when an employee seeks to upgrade in his or her professional dealings to upgrade a position or designation, then performance is also a byproduct not just for the employee for also for the organization as a whole.

In considering age as a factor in the performance level of administrative employees, Apolonio (2017) claimed that age gaps and differences affect the productivity levels and efficiency of employees in an organization as it could expand or lower the employees' amount of efficient production.

In addition, A related study by Osborne (2016) found that sex is a factor in employees' output efficiency and performance level, claiming that female employees are more output-efficient in a public institution or an office with public responsibilities. This point was also affirmed in the study of Manansala (2004), claiming that sex significantly influences employees' level of output efficiency and level of performance. In a parallel study by Cubukcu and Donmez (2011), it was found that female employees produce more work than male employees in an organization. In addition, they manifested a higher level of output efficiency as they are more involved in more senses development that help or aid their perception and attitude toward work and the working environment or workweek scheme.

This finding was supported by several studies that reveal the likelihood of performance of employees with higher and better working positions notwithstanding the type of work set up or working schedule. According to Bakker & Demerouti (2017), performance is a positive, fulfilling, and work-related state of mind that is characterized by vigor, dedication, and absorption. The vigor is characterized by high levels of energy and mental resilience, vitality, and flexibility during work, and being determined even in the face of difficulties during work. Dedication is the state in which an individual shows complete enthusiasm and involvement for work, and there is a practical effort, passion, respect, and challenging task. Absorption means that an individual is deeply focused and determined, engrossed in working, while time moves rapidly.

The result was confirmed in the study of Littky (2004) stating that education level directly affects employees' success and level of performance in any type or kind of workweek schedule. It is further revealed that when the employee, who is usually a degree holder, makes efforts to educate and further enhance oneself personally and professionally, there is more likely a positive reinforcement of educational goals due to

the employee's educational attainment. The level of education could also be determinative of employees' success in any organization, workstation, or organization.

According to Schaufeli (2011) at the beginning of the 21st century, employee performance emerged as a concept with the convergence of human capital economic theory and increasing scientific interest in positive psychology. From this convergence, interest in employee psychology materialized because organizations needed to consider how to efficiently manage their human capital expenditure while simultaneously increasing their organizational performance. However, according to Johnstone (2020), the human capital equation of producing more output with fewer employees translates into organizations having no choice but to try to engage not only the body but also the mind and the soul of every employee.

Finally, as concluded by Chievenato (2009) in the comparison between employees' performance and their attended relevant trainings and continuing professional development, these factors are contributory aspects of significant changes and development in the professional dealings of the employee. Training and development of people implies the transformation of individuals in their values, attitudes, behaviors, and skills to serve organizational change and not only provide them with information so that they learn new knowledge. So, training is concerned with the efforts made by every organization to enable its employees to develop their skills in the workplace including the knowledge, skills, and behaviors that are fundamental to successful performance.

For Cunha et al. (2009), the comparison between training of non-teaching staff and development and other measures of training and human resource assessment (such as salary, potential and performance evaluation, harmonization of individual praxis with organizational/institutional strategy) is closely related to planning practices that are aimed at individual collaborators and that positively affect outcomes in terms of performance and service delivery. As for other comments, the changes currently occurring require new skills, knowledge, and abilities from all people and training involves the possibility that each of them can contribute effectively to the organization to proactively adapt to these changes, ensuring that only the continuity of the process and its dynamics, but an increase in its capacity to meet social demands. The idea of training includes the transfer of knowledge, the standard is represented by actions on individual performance, which aim to improve team performance. So, training non-teaching staff in basic education institutions to increase work creativity, knowledge, and skills in the field of administration in supporting the teaching and learning process, performance, and the provision of public services.

Relationship between the Level of Competence and Performance of the Non-Teaching Personnel

Table 46. Results of the Test of Significant Relationship between the Level of Competence and Performance of the Non-Teaching Personnel

Variables	Probability of r	Remarks
Self-Management and Performance	0.5192	Not Significant

Professionalism and Ethics and Performance	0.3352	Not Significant
Result Focus and Performance	0.2332	Not Significant
Teamwork and Performance	0.0833	Not Significant
Service Orientation and Performance	0.1456	Not Significant
Innovation and Performance	0.4118	Not Significant

Table 46 discloses the results of the test of a significant relationship between the level of competence and performance of the non-teaching personnel.

The results reveal that the probability values of *r* are greater than 0.05. Hence, the null hypothesis is accepted at a 0.05 significance level. Thus, there is no significant relationship between the level of competence and performance of the non-teaching personnel. It implies that the competence level of the non-teaching personnel on self-management, professionalism and ethics, result focus, teamwork, service orientation, and innovation do not significantly affect their performance. It states further that the performance of the non-teaching personnel does not depend on their competence level in the said six areas.

In the study, Lingam (2002), cited that one of the critical factors that positively affects employees' performance and efficacy as productive employees is the level of training engagements, continuing education, and level of competencies such as enrollment to higher education, post-graduate studies, trainings relevant to job descriptions and other relatively significant trainings prescribed by their agencies, employers, or institutional management of the human resources division office. Also, Muwonge et al. (2002) found that strong social support from school administrators and supervisors from the school, and good resource management, are cited to be a few factors that contribute to the development of employees to strive and seek continuing education relevant to their job description.

This was supported by Khan et.al (2019) stating that employee effectiveness is essential in developing human resources because if the training is ineffective, it will not be helpful. Training is effective and it can enjoy the results for the trainees and the organization. In organizations that provide services at the forefront, educational organizations such as universities, schools, and others must use personnel who can meet specific standards. Various studies show that training is the best way to get the skills employees need.

Further, as emphasized by Khan (2019), the improved quality of work is a key outcome that can be expected from training initiatives. However, it is worth mentioning that such practices are increasingly focused and personalized. They seek to meet specific demands in a particular field or professional profile, accelerate their assimilation, and improve work outcomes. However, this quality is reflected not only in public services but also in the level of professional trust. Each work program must address all problems in public administration, and the absence of certain competencies, that is, contribute to developing new skills, knowledge, and attitudes in a professional or work team.

The foregoing results discussed are comparative analyses of the association between the level of competence and performance of employees in the Schools Division

Office of the City of Ilagan. Hannah as cited by Cody (2011) pointed out, that competencies are contributory factors in the success or failure of employees in the fields of work development and productivity as employees. Hence, it is indispensable for administrators and supervisors to ensure that training engagements, continuing education, and other relevant learning or educational opportunities are maximized to improve personal efficacy and skills development.

However, contrary to these claims and assertions, the cited indicators of the level of competence of non-teaching employees in the education sector which include Self-Management, Professionalism and Ethics, Result Focus, Teamwork, Service Orientation, and Innovation signify that these indicators of the level of competence of administrative employees do not affect their performance in an organization specifically to the Schools Division Office of the City of Ilagan. As established by Landale (2020), there are several sources of employees' productivity and performance attribution which could be both personal and professional. In the personal aspect, there is a huge relativity of positive connection between stability in the socio-economic status of employees. For instance, when employees are well-stationed in their personal lives, optimistic results could prosper in their workstations. Hence, performance and productivity of employees are not always cited in their professional attributions which are centered on organizational and institutional aspects including teamwork, result focus, service orientation, and work innovations. Aside from professional training, non-teaching employees and administrative employees could be further developed by considering aspects of their working conditions. However, training development in a holistic approach contributes meaningfully to the improvement of employees in the administrative, financial, and technical aspects of administrative work.

Conclusions

Considering the above results, the study concludes that the level of competence of the non-teaching personnel of the Schools Division of the City of Ilagan is overall high which indicates that they are highly competent in terms of Self-Management, Professionalism and Ethics, Result Focus, Teamwork, Service Orientation, and Innovation. This means that the personal attributes of the employees are factors towards their competence.

In their level of performance, most of the respondents performed outstanding. It is also concluded that the performance of non-teaching personnel varies according to their profile variables. This further implies that they perform differently according to their personal and professional dealings. However, some respondents were rated below outstanding performance.

Hence, in this study, there is a need to develop and devise a sustainable upskilling program to maintain the status quo and to relatively answer the problem of sustainability experienced by non-teaching personnel about their competence and performance as employees of the Department of Education.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are considered to formulate and devise proper and appropriate mechanisms to further improve the bounds of the study:

1. Since it was found that non-teaching personnel of the Schools Division of the City of Ilagan are highly competent, an appraisal system should be developed to reinforce good working practices and management capabilities to enforce the sustainability of results.
2. Since the number of relevant trainings attended significantly caused a difference in the non-teaching personnel's level of competence and performance, administrative employees must be sent and actively participate in more trainings related to the indicators of the competence of non-teaching personnel.
3. Development of sustainability and enhancement of an upskilling program should be formulated and developed based on the performance of the administrative employees.
4. Non-teaching employees may devise, craft, customize, and implement individual personal and professional developmental goals targeting the competencies and performance key indicators as non-teaching personnel that would foresee engagements for the next three to five years.
5. Non-teaching personnel who performed excellently in their Individual/Office Performance Commitment Review Form with an Outstanding Rating are recommended for merit increase or additional enumeration as indicated in the Result Based Performance Management System.
6. Administrative Aide employees must maintain and organize the grounds and facilities of the Schools Division Office of the City of Ilagan.
7. Finally, an Upskilling Program must be developed, crafted, implemented, and monitored as a response to the results and findings in the study that highlighted the levels of performance and competence of the employees.

Compliance with Ethical Standards

The author declares that this research was conducted with strict adherence to ethical guidelines. Informed consent was obtained from all participants before their involvement in the study, ensuring they were fully aware of the research objectives, procedures, and potential risks. Respondents were informed of their right to withdraw from the study at any time without penalty. The anonymity of all participants was maintained throughout the research process, and their well-being was safeguarded. No conflict of interest exists in the conduct of this study. The authors have strictly avoided plagiarism, ensuring that all sources are properly cited and acknowledged. Furthermore,

the interpretation of the findings was conducted without bias, and the results were used solely for research purposes.

Acknowledgments

The researcher would like to extend her heartfelt gratitude to her research adviser for the invaluable guidance, to the participants of this study for their essential contributions, and to the researcher's family and friends for their unwavering support. She is also deeply thankful to his colleagues for their encouragement, and most importantly to God for providing him with the strength and perseverance to complete this work.

REFERENCES

Alaswad, H. I. (2021). Factors influencing employees' productivity – Literature review. Academy of Entrepreneurship Journal, 27(3).

Al Mzary, M. M. M. (2015). Training and its impact on the performance of employees at Jordanian universities from the perspective of employees: The case of Yarmouk University. Journal of Education and Practice, 6(32).

Amisano, J. R. (2010). Human capital development and innovation: A sectoral analysis. In P. Howitt (Ed.), The implications of knowledge-based growth for micro-economic policies (pp. 210-210). University of Calgary Press.

Apolonio, E. (2017). Indigenous education and learning development. The Journal of Learning.

Avey, J. B., Wernsing, T. S., & Luthans, F. (2018). Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors. The Journal of Applied Behavioral Science, 44 (1), doi: 10.1177/0021886307311470.

Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. Journal of Occupational Health Psychology.

Barreto, A. (2020). The importance of non-teaching staff training and public administration in higher education institutions (literature review). International Journal of Research and Analytical Reviews, eISSN 2348–1269, Print ISSN 2349-5138.

Bilhim, J. A. (2009). Human resources management* (4th ed.). Higher Institute of Social and Political Sciences.

Chiavenato, I. (2009). Training and development of human resources: How to increase talent in the company.

Cody, T. B., Walker, L. J., & White, J. L. (2011). Working in urban schools. Institute for Educational Leadership.

Cubukcu, Z., & Donmez, A. (2011). The examination of the professional anxiety levels of teacher candidates. Eğitimde Kuram ve Uygulama. https://dergipark.org.tr/tr/pub/eku/issue/5463/74140

Cuizon, H. (2018). Work values of government employees: Implication to work relationships, productivity, job satisfaction, and creativity. Isabela State University San Mariano Campus, San Mariano, Isabela.
Cunha, M. P., Rego, A., Cunha, R. C., & Cardoso, C. C. (2009). Manual of organizational behavior and management. Editora RH.
Darcy, J. (2017). Employee training and induction. Larsen & Keller Education.
Davies, T. G., & Anderson, S. K. (2010). An ethical decision-making model: A necessary tool for community college presidents and boards of trustees. https://journals.sagepub.com/doi/abs/10.1177/0091552112448818
de Jong, T., Wiezer, N., de Weerd, M., Nielsen, K., Mattila-Holappa, P., & Mockałło, Z. (2016). The impact of restructuring on employee well-being: A systematic review of longitudinal studies. Work and Stress, 30(1), doi: 10.1080/02678373.2015.1136710.
Dessler, G. (2011). Fundamentals of human resource management. Pearson Higher Ed.
Edralin, D. (2011). Training and development practices in the Philippines. Asia Pacific Business Review. doi:10.1080/13602381.2011.533501
Franks, B. M. (2017). Upskilling programs for non-teaching personnel in a state university. Mindanao State University, Iligan City. http://msu.gov.ph/internationaljournalonresearchforeducation
Goot, J. E. (2017). The impact of training and development on the performance of administrative staff in the public sector organizations: The case of the Second Vice President's Office – Zanzibar. International Journal of Life Sciences Research, 6 (3). ISSN 2348-3148 (online).
Hafeez, U., & Akbar, W. (2015). Impact of training on employees performance: Evidence from pharmaceutical companies in Karachi, Pakistan. Business Management and Strategy, 6(1), 79. https://www.academia.edu/28839284/The_Impact_of_Training_and_Development_on_Employees_Performance_and_Productivity
Hamid, S. (2021). A study of effectiveness of training and development programmes of UPSTDC, India – An analysis. South Asian Journal of Tourism and Heritage, 4 (1). https://www.academia.edu/41134303/THE_IMPACT_OF_EMPLOYEE_TRAINING_AND_DEVELOPMENT_ON_EMPLOYEE_PRODUCTIVITY
Hanaysha, J. (2016). Examining the effects of employee empowerment, teamwork, and employee training on organizational commitment. *Procedia-Social and Behavioral Sciences.https://www.researchgate.net/publication/308003145_Examining_the_Effects_of_Employee_Empowerment_Teamwork_and_Employee_Training_on_Organizational_Commitment
Hulpia, H., Devos, G., & Van Keer, H. (2011). The relation between school leadership from a distributed perspective and teachers' organizational commitment: Examining the source of the leadership function. Educational Administration Quarterly. https://psycnet.apa.org/record/2011-25721-002
Jeremiah, S., Sele, A., & Okodoko, D. (2014). Factors that influence the supervision of student teachers in teaching practice. Asia Pacific Journal of Education, Arts and Sciences. http://apjeas.apjmr.com/wp-content/uploads/2014/12/APJEAS-2014-1-033.pdf

Johnstone, E. (2020). Increasing non-academic employee engagement: The organizational improvement plan at Western University. Western University.
Khan, S. I. (2019). The impact of staff training and development on teacher's productivity. Economics Management and Sustainability. doi: 10.14254/jems.2019.4-1.4.
Khawaja, J., & Nadeem, H. (2018). Training and development program and its benefits to employee and organization: A conceptual study. *European Journal of Business and Management, 5 (2). https://www.academia.edu/4919249/Training_and_Development_Program_and_Its_Benefits_to_Employee_and_Organization_An_Conceptual_Study
Landale, G. (2010). Gower handbook of training and development (3rd ed.). Gower Publishing Limited.
Lingam, G. I. (2002). Practicum component: Preparation of teachers for the real world of work. Journal of Educational Studies, 24 (1). http://www.directions.usp.ac.fj/collect/direct/index/assoc/D770234.dir/doc.pdf
Littky, D. (2004). The big picture: Education is everyone's business. Association for Supervision and Curriculum Development. https://eric.ed.gov/?id=ED489078
Manansala, E. O. (2004). Development and validation of a module (Unpublished thesis). Philippine Normal University, Manila.
Mercado, R. K. C. (2023). Work performance of selected DEPED sub-offices non-teaching employees: An initiative for institutional training scheme. EPRA International Journal of Multidisciplinary Research (IJMR). Laguna State Polytechnic University – Santa Cruz Main Campus, Philippines. https://eprajournals.com/IJMR/article/10693/abstract
Muwonge, C., Ssenyonga, J., & Mwesigwa, R. (2002). Factors affecting performance of teacher-trainees during school practice. https://www.must.ac.ug/sites/default/files/muwonge.pdf
Nda, M. M., & Fard, R. Y. (2013). The impact of employee training and development on employee productivity. Global Journal of Commerce and Management Perspective. Limkokwing University of Creative Technology, Cyberjaya, Malaysia.
Navaneetha, & Bhaskar. (2018). A study on employee motivation at workplace with reference to BSNL, Kadapa. International Journal of Engineering Technologies and Management Research, 5 (5), 18-25. https://doi.org/10.29121/ijetmr.v5.i5.2018.222.
Osborne, J. (2016). Educational management theory and practice. Nairobi University Press.
Oluwaseum, O. O. (2018). Employee training and development as a model for organizational success. International Journal of Engineering Technologies and Management Research. https://pdfs.semanticscholar.org/e142/f1b9eed9016a80793dab68595cacaf27fd2a.pdf
Rebore, K. E. (2019). The effect of training and development on employee attitude as it relates to training and work proficiency. *Sage Publications. doi: 10.1177/2158244011433338. http://sgo.sagepub.com

Sarkodie, G. W. (2011). Training and development and employee performance in district assemblies in Ghana (Bosomtwe District Assembly) [Master's thesis, Kwame Nkrumah University of Science and Technology].
Schaufeli, W., & Salanova, M. (2011). Work engagement: On how to better catch a slippery concept. European Journal of Work and Organizational Psychology. doi:10.1080/1359432X.2010.515981
Tahir, N., Yousafzai, I. K., Jan, S., & Hashim, M. (2014). The impact of training and development on employees performance and productivity: A case study of United Bank Limited Peshawar City, KPK, Pakistan. International Journal of Academic Research in Business and Social Sciences, 4(4), 86-98. https://ideas.repec.org/a/hur/ijarbs/v4y2014i4p86-98.html
Wanjiku, W. G. (2021). Factors affecting non-teaching staff development in Kenyan universities. School of Business, Department of Human Resource, Karatina University, Kenya. doi: 10.6007/IJARBSS/v6-i5/2120. http://dx.doi.org/10.6007/IJARBSS/v6-i5/2120

APA Citation:

Guerrero, R. B. (2024). LEVEL OF COMPETENCE AND PERFORMANCE OF NON-TEACHING PERSONNEL IN THE CITY DIVISION OF ILAGAN: A BASIS FOR AN UPSKILLING PROGRAM. Ignatian International Journal for Multidisciplinary Research, 2(8), 1387–1443. https://doi.org/10.5281/zenodo.13371291

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

MALE NURSES' INTENTION TO STAY IN A SPECIFIC HOSPITAL: A CASE STUDY

Czarina Julia C. Montañer, Edil Fe B. Sumile, Lalaine D. Undag, Ian C. Abordo, PhD, Donna Belle P. Sumugat, RN, MAN, and Amelyn Grace M. Maghanoy, RN, MAN

Nursing Department, Adventist Medical Center College, Iligan City, Philippines

https://doi.org/10.5281/zenodo.13330004

ABSTRACT

This research aimed to understand factors contributing to male nurses' retention and satisfaction in a government-owned hospital setting in the Philippines, particularly in Mindanao. Utilizing qualitative case study, the research employed purposive sampling to identify male nurses who committed to stay and work in a hospital. In-depth interviews were conducted with 11 registered male nurses, each having over five years of experience and currently working at said hospital. The researchers followed the Creswell and Creswell's (2018) five steps during data analysis process: 1. Organize and prepare the data for analysis, 2. Read or look at all the data, 3. Start coding all of the data, 4. Generate a description and themes, 5. Representing the description and themes. The findings revealed three key themes: reasons for selecting a specific hospital, factors influencing long-term commitment, and solutions to interpersonal conflicts. The study concludes that male nurses' decisions to remain at a particular hospital are influenced by their satisfaction with salary and other work benefits, prospects for growth and development, camaraderie among staff, and the ability to remain neutral and fair during interpersonal conflict situations.

Keywords: *Intention to stay, male nurses, retention, Filipino, commitment, case study*

INTRODUCTION

In recent decades, the nursing profession has witnessed a notable demographic shift, with an increasing number of men entering what was traditionally considered a female-

dominated field. This trend has been particularly evident since the 1970s, and currently male nurses comprise more than 13% of the overall nursing workforce (American Nurses Association, 2023). The decision-making process for men pursuing a nursing career remains influenced by various factors such as societal expectations, childhood experiences, perceptions on nurses' challenges, and other positive aspects within the profession (Dos Santos, 2020; Banakhar et al., 2021).

As men enter the nursing profession, they bring with them unique characteristics and qualities, including caring, calmness, attentiveness, bravery, and skill (Kaur et al., 2022). Additionally, male nurses exhibit autonomy in decision-making, emotional resilience, a sense of humor, and they demonstrate respect, consideration, and supportiveness towards patients (Saleh et al., 2020; Martínez-Morato et al., 2021; Sundus & Younas, 2020; Mao et al., 2021). Despite these positive attributes, male nurses also encounter challenges within their working environments, ranging from limitations in job performance to gender-based discrimination (Shin & Lim, 2021; Chang & Jeong, 2021; Papantoniou, 2021).

Moreover, job satisfaction among male nurses is influenced by various factors, including personality, resilience, emotional intelligence, mental well-being, stress, and organizational factors such as leadership styles and organizational culture (Nam & Kim, 2018; Kim et al., 2019; Chang & Kim, 2022). Notably, the intention of male nurses to remain in a specific hospital is shaped by factors such as work commitment, job satisfaction, and organizational factors like hospital type and salaries (Labrague et al., 2018; Sapar & Oducado, 2021).

While the existing literature provides valuable insights into various aspects of male nurses' experiences, challenges, and motivations, there remains a research gap concerning their intention to stay in a specific hospital, particularly within the confines of government-run hospitals in the Philippines. Existing studies either offer generalized perspectives or focus on broader organizational commitment, failing to delve into the intricate dynamics of male nurses' retention within a specific hospital.

Hence, this study addressed three gaps. First, it addressed the knowledge gap by specifically examining the possible reasons for male nurses' intention to remain within a specific hospital in the Philippines. Second, it addressed a methodological gap by utilizing a qualitative research design. A broader understanding of factors influencing their intention to stay within their respective hospital in this specific geographical setting is necessary. Third, it addressed a population gap in existing research on the intention of male nurses to stay in a specific hospital. By focusing on the insufficiently researched population of male nurses in government-run hospitals in Region X, Mindanao, Philippines, the study sought to enhance our knowledge and offer insights into the factors influencing the retention patterns of male nurses in a particular hospital. This study aimed to explore deeper insights into reasons for male nurses' intention to remain working in a hospital in the Philippines. Hospital managers and nurse administrators can draw insights useful in crafting retention and job satisfaction policies and strategies for male nurses in similar hospital settings in the Philippines, particularly in Mindanao.

Research Questions

The main research questions were:

1. What are the male nurses' reasons for selecting a specific hospital?
2. What motivates male nurses in maintaining their dedication to a specific hospital over an extended period of time?
3. How do male nurses manage and address interpersonal conflicts within their departments?

METHODOLOGY

The researchers of this study used the qualitative case study design as the suitable approach for this research. Case studies are empirical inquiries that investigated a phenomenon in its real-life context (Yin, 2009). A case study can be descriptive, explanatory, or exploratory (Yin, 2014). Case studies are useful for answering "how" and "why" questions about a set of events over which the researchers have little or no control (Yin, 2009). These studies are bounded by the unique characteristics and complexities of the particular case being studied, and it is important to understand the individual case within its specific context rather than attempt to generalize findings to other cases or contexts (Stake, 1995). In this study, the phenomenon under investigation covered the multiple complexities forming the reasons or factors that influenced male nurses' stays in a specific hospital.

Bounded System and Participants

The *case* of this study included registered male nurses currently working at a government-run and tertiary hospital in Region X, Mindanao, Philippines. The study involved 11 male registered nurses from Gregorio T. Lluch Memorial Hospital (GTLMH) in Iligan City, Lanao del Norte, each with a minimum of 5 years of work experience. A purposive sampling strategy, particularly criterion sampling, was employed to select participants based on the inclusion criteria: male gender, at least 5 years of work experience at GTLMH, and registered nurse status.

Semi-Structured Interview Protocol

This study utilized semi-structured interviews that allowed the researchers to delve into the factors that affect male nurses in staying in a specific hospital. The interviews were tailored to capture nuances and contextual details, fostering open conversations that reveal participants' thoughts, feelings, and personal reflections on their work experience in the chosen hospital in Iligan City. Participant observation was used, which offered an immersive lens into how male interact with their fellow nurses and patients.

Ethical Considerations

Several ethical considerations were taken into account. Primarily, permission from the hospital's administrator and head nurse was obtained through a letter of authorization in order to gain access to the institution's employees, which ensured the researchers credibility. The research used "informed consent" approach so that the participants would be aware of the purpose and research design. Participants' confidentiality and anonymity were guaranteed, and permission to audio record the interviews were granted by the participants through the consent form.

Data Gathering Procedure

Before data collection, the researchers sought clearance from the Ethics Review Committee of Adventist Medical Center College. Participants were carefully selected, informed of the study's purpose, and assured of confidentiality before providing consent. Interviews were scheduled at convenient times and locations within the hospital, and conducted using a semi-structured format to cover key topics while allowing open-ended response. The interviewer built rapport, paid attention to nonverbal cues, and asked clarifying questions. With participants' consent, interviews were audio-recorded and supplemental field notes. During and after the interviews, the researchers wrote memos and updated entries in the audit trail. Transcripts were verified by participants, ensuring accuracy. Data were securely stored, anonymized, and analyzed thematically, with findings triangulated for credibility. Table 1 shows a data triangulation matrix.

Table 1

Data Triangulation Matrix

Research Questions	*Source 1*	*Source 2*
RQ1: What are the male nurses' reasons for selecting a specific hospital?	Participant Interview	Observation
RQ2: What motivates male nurses in maintaining their dedication to a specific hospital over an extended period of time?	Participant Interview	Observation
RQ3: How do male nurses manage and address interpersonal conflicts within their departments?	Participant Interview	Observation

Data Analysis

In qualitative research, data analysis progresses alongside the other components of the study, such as data collection and reporting findings (Creswell & Creswell 2018). This type of research emphasizes using everyday methods of interpretation (Stake, 1995). After the interviews and the consequent transcriptions, member checking was achieved, and data analysis followed Creswell and Creswell's (2018) five steps to achieve codes and categorical themes.

Trustworthiness and Authenticity

Authenticity and trustworthiness were paramount considerations to ensure the credibility and reliability of the researcher's findings. Drawing on insights from Flory and Emanuel (2004) and Wilkinson and Kitzinger (2020), the researchers recognized the importance of transparency to enhance authenticity. To enhance the authenticity of the researcher's study findings, the researchers prioritized transparency and ethical conduct through adhering to the ethical considerations through informed consent.

Trustworthiness was also prioritized by employing strategies recommended by renowned qualitative researchers. To enhance credibility (Lincoln & Guba, 1985), the researchers *triangulated* data (Stake, 1995; Merriam, 2002; Yin, 2009) from multiple sources and performed *member checks* to validate the accuracy of the researchers interpretations. The researchers also sought *peer review* to ensure the congruency of the findings with the data and interpretations and provided an *audit trail*, documenting the methods, procedures, and decision points throughout the research process to enhance dependability.

Furthermore, the researchers engaged in *reflexivity* (Merriam, 2002), critically reflecting on the researchers assumptions, biases, and relationship to the study. This self-awareness enabled them to navigate potential biases effectively and produce a nuanced and insightful exploration of male nurses' intentions. In addition, the researchers ensured a *rich description* by providing detailed contextual information to enable readers to understand the study's context thoroughly. For example, the researchers described the participants' demographic characteristics, such as their assigned department, starting and current working position, years of experience, and marital status, as well as the setting in which the study took place, including the hospital's size, location, and organizational structure.

Additionally, the researchers incorporated *maximum variation* by recruiting participants from various departments in the hospital "to allow for a greater range of application of the findings by consumers of the research" (Merriam, 2002 p. 31). This deliberate sampling approach enhanced the richness and depth of the researcher's data, contributing to the credibility and transferability of the findings. By adhering to these principles of authenticity and trustworthiness, the researchers aimed to ensure the ethical conduct and reliability of the qualitative study. Through transparent documentation, critical reflection, and methodological rigor, the researchers sought to contribute to the body of knowledge on male nurses' intentions in the hospital setting with confidence and integrity.

Reflexivity Statement

It is clear that the primary instrument for data collection and analysis in qualitative research is the researcher herself. Qualitative research assumes that the researcher's biases and values impact the outcome of any study (Merriam, 1998). To enable any audience of qualitative studies to evaluate the validity of conclusions drawn from data,

researchers should, as part of the study, neutralize or bracket their biases by stating them explicitly to the full extent possible (Altheide & Johnson, 1994).

In this study, reflexivity was acknowledged to address potential biases stemming from our backgrounds and experiences. Firstly, the researchers status as nursing students may have provided them with insider knowledge of the nursing profession, including its challenges, dynamics, and gender disparities. Furthermore, the researchers observation of the scarcity of male nurses in various hospital departments and the researchers interactions with male classmates in the nursing program may have shaped their understanding of gender dynamics within the nursing profession.

RESULTS

Table 2 provides a demographic profile of participants, including their department, years of service, starting position, current position, and marital status. Participants represent a diverse range of departments and possess varying levels of experience, from 8 to 31 years.

Table 2
Participants' Demographic Profile

Participants	*Department*	*Years of Service*	*Starting Position*	*Current Position*	*Marital Status*
P001	Emergency Room	12	Job Order	Nurse I	Single
P002	Health Emergency Management Bureau Unit (HEMB)	31	Request of Employment	Nurse IV	Single
P003	Health Emergency Management Bureau Unit (HEMB)	24	Residency Training	Nurse II	Married

Table 2 *(continued)*

P004	Hemodialysis Unit	12	Job Order	Nurse II	Single
P005	Intensive Care Unit	18	Job Order	Regular Nurse	Married

P006	Out-patient Department	20	Request of Employment	Nurse II	Married
P007	Out-patient Department	30	Kitchen Staff	Nurse II	Married
P008	Operating Room	20	Residency Training	Contractual	Married
P009	Operating Room	8	Contractual	Contractual	Married
P010	Respiratory Unit	11	Staff Nurse	Nurse I	Single
P011	Surgery Ward	10	Staff Nurse	Staff Nurse	Single

During the interviews, participants were stationed within their respective departments and were informed in advance by their head nurses regarding the scheduled interviews. Despite this, they exhibited a welcoming demeanor and demonstrated cooperation throughout the process. Participants varied in their contributions to the three themes constituting the narrative. While some individuals extensively discussed one or two themes, others evenly distributed their input across all three. Consequently, the study ensured the representation of all participants' voices and perspectives.

The research findings are organized into three themes: (a) reasons for selecting a specific hospital, (b) factors influencing long-term commitment, and (c) interpersonal conflict's solutions. Each theme explores the experiences and perspectives of male nurses, offering insights into the complexities of their professional lives within the hospital setting.

Theme 1: Reasons in Selecting a Specific Hospital

Participants shared their motivations and considerations guiding them towards decisions when selecting a particular hospital for employment. It is focused on the primary factors that attract male nurses emphasizing beneficial offers such as experience, salary, and team-building activities.

Table 3

Beneficial Offers of the Hospital

Theme	*Participant Interview*	*Observation*
Gaining experience	*"The reason why I applied here is because of my future work. I believe that this hospital offers a unique environment and opportunities that align closely with my professional goals and personal values. By working here, I aim to gain invaluable experience, refine my skills, and contribute meaningfully to the healthcare community.*" (P009)	Enthusiasm and passion observed during the interview. Consistency in responses, emphasizing professional growth and contribution. Positive body language and confident tone.
Salary	*"The pay rate in government hospitals is generally higher compared to private ones."* (P002)	Participant mentioned specific figures or comparisons indicating awareness of salary differences.
Team-building	*"I enjoyed the company of my batchmates when I joined. We spent a longer period of time together, which strengthened our bond. Moreover, the hospital before used to organize team-building activities for all employees. There were days when the entire hospital would go for team-building outside the premises, like going to the beach."* (P002)	Described past team-building activities with enthusiasm and fondness. Provided specific examples of team-building events and their impact on morale. Positive demeanor when discussing team-building and social interactions.

Theme 2: Factors Influencing Long-Term Commitment

This theme explores the factors driving long-term commitment and dedication among male nurses, focusing on two key aspects: the prospect for career advancement and strong interpersonal connections. These elements resonate strongly with the majority of male nurses and significantly shape their commitment to their profession and workplace.

Prospect for Career Advancement

This theme encompasses factors influencing male nurses' perceptions of opportunities for professional growth and development within their careers. It includes components such as becoming resourceful and creative, experiencing learning opportunities, the prospect of growth and development, striving further to learn, and participating in trainings and seminars.

Table 4

Prospect for Career Advancement

Theme	*Participant Interview*	*Observation*
Becoming resourceful and creative	*"Yes, despite the limitations in budget and resources, it pushes us to be more resourceful and creative in delivering care to our patients. This mindset cultivates resilience and adaptability, which are essential qualities for nurses in any healthcare setting."* (P004)	Described creative solutions they have implemented. Showed enthusiasm for challenges and problem-solving. Demonstrated resilience and adaptability in responses.
Experience learning opportunities	*"Despite the inherent difficulties, these experiences serve as invaluable learning opportunities, honing my interpersonal skills and enhancing my ability to provide compassionate care even in the most challenging circumstances."* (P001)	Exhibited a reflective attitude on personal growth. Showed a compassionate approach to patient care.
Prospect of growth and development	*"The prospect of growth and development within the hospital does play a role in my decision to stay for an extended duration. The knowledge that there are pathways for advancement and the possibility of taking on new challenges in the future adds a sense of purpose and direction to my tenure here."* (P001)	Participant discussed future career plans and advancement opportunities. Showed awareness of career pathways and developmental programs within the hospital. Expressed a clear sense of purpose and direction.
Striving further to learn	*"For me, despite the years I've spent, I still thrive on learning and there's so much more I want to learn."* (P010)	Shared excitement about new areas they want to explore. Demonstrated a lifelong learning attitude and continuous curiosity.
Trainings and seminars	*"Before, training here was fast-paced, which is why I was encouraged to stay."* (P007)	Answered the questions confidently and was able to share his experiences in his stay in the hospital.

Strong Interpersonal Connections

This theme explores the significance of social relationships and collaboration among male nurses in the workplace, focusing on camaraderie and bonding with colleagues and the value of teamwork.

Table 5

Strong Interpersonal Connections

Theme	*Participant Interview*	*Observation*
Camaraderie and bonding with colleagues	*"It's the people around me. Even if the salary is low, and it took a long time to receive payment when I started as a casual employee. I even started without pay, right? But despite that, it's really the people who are there. Yes, the bond. Even if we don't have much money, we can still eat together, have fun in our area, even if there are challenging patients or watchers, we continue. We can still manage to laugh and joke around because of the camaraderie and the people you work with."* (P004)	The casual joking and laughter exchanged among participants indicate a comfortable and positive atmosphere where colleagues feel at ease interacting with one another, fostering social cohesion and emotional well-being.
Value of teamwork	*"I value teamwork over personal convenience. In this hospital where staff is often insufficient, if you possess the necessary skills and knowledge, it's compassionate to assist your less skilled colleagues rather than leaving them behind."* (P010)	The researchers noted an instance where participant P010 provided guidance and assistance to a trainee under his supervision in communicating with a client, exemplifying his commitment to fostering a supportive work environment.

Theme 3: Interpersonal Conflict's Solutions

This theme explores the various methods male nurses utilize to navigate and resolve interpersonal conflicts encountered within healthcare environments. The predominant strategy observed across responses is the emphasis on maintaining neutrality and fairness in addressing such situations.

Neutrality and Fairness in Situations

This theme centers around the principles of impartiality, objectivity, and equitable treatment in addressing conflicts and reaching resolution. This focuses on giving time before resolving, helping each other out, leaving it to higher ups, not being one-sided, not harboring grudges, open-minded approach, and verifying situation.

Table 6

Neutrality and Fairness in Situations

Theme	*Participant Interview*	*Observation*
Giving time before resolving	*"Sometimes it's best to postpone it to let things cool down because everyone's still heated and emotions are running high, so it's better to calm down first as nothing gets resolved when everyone's just angry."* (P004)	Participant demonstrated a calm and measured demeanor during the interview. Showed awareness of emotional states and their impact on conflict resolution.
Helping each other out	*"In the OR, cleanliness is paramount. So if your teammate is lazy and doesn't work, it affects everyone, and it also affects the cleanliness of the OR. As a team, you should really help each other out."* (P008)	Talked about the importance of cleanliness and collaboration. Showed appreciation for team efforts and describes situations where helping each other improved outcomes.
Leaving it to higher ups	*"In disagreements, at the end of the day, it's usually the head who steps in to help resolve the issue."* (P006)	Showed reliance on hierarchical structure for resolving disputes.
Not being one-sided	*"Just provide solutions... It's important to remain neutral and accept all sides. Don't be one-sided."* (P005)	The researchers observed that positive relationships among coworkers demonstrated a commitment to fairness and neutrality in handling conflicts. Emphasized the value of considering all perspectives and avoiding bias.

Table 6 *(continued)*

Not harboring grudges	*"It just passes by... I'm not one to harbor grudges. So I haven't experienced conflicts."* (P007)	Participant exhibited a positive and forgiving attitude. Showed a lack of resentment and emphasizes moving on from disagreements.
Open-minded approach	*"If a conflict or disagreement arises, it's important to communicate. We need to talk about the differences, identify any mistakes, and understand the reasons behind them. Instead of letting things escalate without taking action, addressing the conflict head-on allows us to resolve issues and prevent them from worsening."* (P007)	Demonstrated a proactive attitude towards conflict resolution. Emphasized the importance of understanding the underlying reasons behind conflicts. Showed a belief in the effectiveness of open communication in resolving issues.
Verifying situation	*"I verify what really happened before saying anything. We shouldn't jump into conclusions without gathering all the data."* (P002)	Demonstrated a careful and analytical mindset when dealing with conflicts.

DISCUSSION

The findings reveal that male nurses intended to stay because of beneficial offers, opportunities for gaining experience, competitive salaries, and team-building activities. The desire for professional growth, stable income, and a supportive work environment significantly contributed to job satisfaction and retention intentions. The prospect of career advancement, continuous professional development through training and seminars, and strong interpersonal connections, described as akin to family, are crucial for long-term commitment. Participants also emphasized the importance of resourcefulness and creativity in patient care, viewing challenging interactions as valuable learning opportunities. Effective conflict resolution strategies include maintaining neutrality and fairness, giving time before addressing conflicts, involving higher-ups, and verifying situations to ensure fair outcomes. Overall, career progression opportunities, supportive work culture, and teamwork are critical in attracting, retaining, and ensuring long-term commitment among male nurses.

The researchers of this study found that job satisfaction and organizational commitment are crucial in nurses' retention. This finding joins the research of Dutta, Sutnga, and Kaur (2021) on job satisfaction among nurses that emphasized the role of

professional growth opportunities, echoing the participants' focus on gaining experience. Similarly, the study of Labrague et al. (2018) underscores the influence of salary and organizational factors on nurses' retention intentions, supporting the researchers participants' emphasis on competitive salaries. Participants preferred staying in the public or governmental hospital, which offers a higher pay rate than private sector. Furthermore,the researchers findings are consistent with earlier research in some aspects, but the researchers data revealed the value of team-building activities. Through team-building, camaraderie and social interaction occur, contributing to job satisfaction and creating supportive work environment for male nurses.

The prospect for career advancement and strong interpersonal connections influenced the long-term commitments among nurses in this hospital. Participants highlighted the practice of being resourceful and creative in patient care, viewing challenging interactions as valuable learning opportunities. The continuous professional growth through training and seminars facilitated their renewed sense of purpose and direction. A supportive work culture and camaraderie among colleagues was described as akin to family relationships. Teamwork and mutual assistance were highly valued, fostering a positive and cohesive work environment.

The researchers findings also uncovered various strategies for conflict resolution within healthcare settings. While previous studies have explored aspects of conflict resolution, emotional intelligence, and leadership's impact on organizational culture, the researchers study contributes nuanced insights into these areas. Chang and Kim (2022) discussed organizational culture and leadership broadly but did not delve into specific conflict resolution strategies. In contrast, this study offers practical methods for maintaining neutrality and fairness—giving time before resolving, helping each other out, leaving it to higher-ups, not being one-sided, not harboring grudges, an open-minded approach, and verifying situations—enriching the understanding of how these concepts manifest in real-world conflict scenarios. Additionally, while Liu et al. (2022) highlighted emotional intelligence's role in managing interpersonal challenges, our study goes further by providing concrete examples of its application, demonstrating its effectiveness in navigating conflicts among healthcare professionals.

Moreover, this study diverges from previous research by emphasizing the importance of teamwork as a conflict resolution strategy rather than solely focusing on interpersonal relationships as noted by Baker (2019). While Marañón, Rodríguez-Martín, and Galbany-Estragués (2019) explored professional-family relationships and gender dynamics, our findings underscore the significance of avoiding grudges and fostering professional relationships as crucial elements in resolving conflicts within healthcare teams. Furthermore, while Mao et al. (2020) prioritized maintaining respect and dignity in interactions, this study emphasizes the importance of fact-checking and due diligence in conflict resolution processes. Lastly, unlike Chang and Kim (2022), who primarily discussed leadership's influence on organizational commitment, this study highlights the practical involvement of higher-ups in resolving conflicts, offering tangible strategies for addressing conflicts within healthcare organizations.

The findings from this study carry significant implications for healthcare management and policy, particularly in crafting effective strategies for recruiting and retaining male nurses. By identifying specific factors that appeal to male nurses, such as competitive salaries, structured training programs, and team-building activities, healthcare administrators can tailor their recruitment efforts to better attract and retain this demographic. Moreover, the study highlights the pivotal role of professional growth opportunities and a supportive work environment in securing long-term commitment from male nurses. To address these needs, healthcare institutions may consider investing in continuous education programs and establishing clear pathways for career advancement.

Additionally, the study's emphasis on effective conflict resolution underscores the necessity for hospitals to offer training in interpersonal skills and conflict management for male nurses. By equipping male nurses with the tools to navigate and resolve conflicts efficiently, hospitals can foster a more harmonious and productive workplace. This is extremely important in public hospitals where the application of a neutral attitude towards work conflicts can enable one to navigate through the bureaucratic systems, and promote team harmony. Such an approach fosters strong interpersonal relationships, which is one of the key determinants as to why male nurses tend to stay long-term in any public hospital setting. Improved patient care outcomes can therefore be achieved through this since it always ensures a coherent and supportive working environment.

Conclusions

In conclusion, this research reveals a comprehensive understanding of the factors influencing the intention of male nurses to remain in a particular hospital. Key factors include the beneficial offerings provided by the hospital, such as work experience, salary, and team-building activities. Furthermore, factors influencing long-term commitment is influenced by prospects for career advancement, including opportunities for creativity, learning, growth, and development. Strong interpersonal connections, characterized by camaraderie and teamwork, are also highlighted as crucial for creating a supportive and collaborative work environment, essential for the well-being and success of male nurses.

Interpersonal conflict’s solutions, particularly neutrality and fairness in situations are highlighted by giving time before resolving, helping each other out, leaving it to higher-ups, not being one-sided, not harboring grudges, open-minded approach and verifying the situation. The findings of our study highlight that male nurses' decision to remain in a particular hospital is driven by the strong interpersonal relationships and teamwork. In governmental hospitals, where politics influence work, male nurses adopt a neutral approach to conflicts, preventing bias and fostering harmonious relationships. This neutrality is key to resolving conflicts and maintaining strong relationships, which significantly influences their decision to stay long-term.

Recommendations

The researchers of this study recommends future research endeavors to implement several key strategies. Firstly, future researchers should consider broadening the scope

of investigation by including male nurses from various hospitals and healthcare settings. The inclusion of participants from diverse backgrounds allows researchers to have a global meaning on the lives of male nurses. With this wider view, one can look into the factors that drive retention and work place dynamics in various healthcare environments better. It also makes knowledge gained useful to more health institutions when it combines outputs from many different settings.

Additionally, efforts should be made to diversify the sample by recruiting larger and more diverse participant groups. This entails including participants with varied demographic characteristics, such as age, years of professional experience, and specialty areas. Furthermore, recruiting participants with diverse professional backgrounds can provide a more holistic perspective on the challenges and opportunities faced by male nurses in different roles within the healthcare system. A larger and more diverse sample ensures that the findings are representative of the male nursing population and captures a wider range of perspectives, contributing to the richness and depth of the research.

Lastly, future researchers should pay close attention to contextual factors such as organizational culture and healthcare policies when interpreting findings. These contextual factors play a significant role in shaping male nurses' experiences and intentions within their workplace. Developing effective strategies for retaining men in nursing requires understanding the influence of organization culture, healthcare policies and leadership styles. By considering these contextual factors, researchers can provide more nuanced insights into the challenges and opportunities faced by male nurses and inform the development of targeted interventions to improve retention and workplace satisfaction.

Compliance with Ethical Standards

Regarding the conditions of this study, several ethical considerations were carefully addressed. Permission was secured from the hospital’s administrator and head nurse through a letter of authorization, granting access to the institution's employees and establishing the researchers' credibility. An informed consent approach was employed to ensure that participants were fully aware of the study's purpose and design, with clear communication that participation was voluntary and they could withdraw at any time without consequence. The confidentiality and anonymity of the participants were rigorously maintained, and permission was obtained for audio recording the interviews. No conflicts of interest were present, and the study was conducted with strict avoidance of plagiarism. The researchers addressed potential biases through reflexivity, acknowledging how their backgrounds and experiences might influence the study. They ensured that the interpretation of the findings was unbiased and that the results were used solely for research purposes, demonstrating their commitment to ethical research practices.

Acknowledgments

The success of this study has been significantly influenced by the guidance and support of many individuals, alongside our own efforts. We would like to take this opportunity to convey our heartfelt thanks to everyone whose contributions have made this study a reality. We extend our deepest gratitude and appreciation to the following people whose assistance has brought this study to fruition:

Ian C. Abordo, PhD, Research Professor, for his invaluable guidance throughout the course of this study. From the initial stages of conceptualization to the final phases of implementation, he provided us with insightful feedback, constructive criticism, and unwavering encouragement. His patience and commitment to excellence have significantly contributed to the success of this research .

Armelyn Grace M. Maghanoy, RN, MAN, Thesis Adviser, for her assistance and support. We thank her for giving us her time in correcting our papers and providing her knowledge despite the busy schedules. This study would not have been possible without her outstanding mentorship.

Donna Belle P. Sumugat, RN, MAN, Panelist, for her consideration despite the sudden invitation to be our panelist. Her encouragement pushed us to explore new perspectives and refine our methodology. Her participation has been pivotal in our research journey, and we are honored to have benefited from her expertise.

The Respondents, who provided us their time and assistance by providing the necessary information, thereby assisting in the achievement of the study's goal.

To our Family, who supported us emotionally and financially. We are grateful for their constant encouragement which gave us the strength and motivation to overcome all challenges that we faced during the making of this study.

To our Peers, we are grateful for their invaluable support, collaboration, encouragement throughout this journey. Together, we have navigated challenges, celebrated milestones and continuously inspired each other to strive for excellence.

We humbly acknowledge and give thanks to God for His grace, guidance, and blessings throughout the course of this research journey. In moments of uncertainty, His wisdom has provided clarity, and in times of challenge, His strength has sustained us. This study stands as a statement to His providence and the faithfulness that has accompanied us on this journey. May His blessings continue to enrich our lives and endeavors.

REFERENCES

Altheide, D. L., & Johnson, J. M. (1994). Criteria for assessing interpretive validity in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 485-499). Thousand Oaks, CA: Sage.

American Nurses Association. (2023). Male nurses: Why men should consider a career in nursing. ANA Enterprise. https://www.nursingworld.org/practice-policy/workforce/male-nursing-careers

Baker, M. (2019). Finding a safe way: A grounded theory of male nurse practice in inpatient rehabilitation. Journal of the Australasian Rehabilitation Nurses Association, 22(1), 28. https://doi.org/10.33235/jarna.22.1.28

Banakhar, M., Bamohrez, M., Alhaddad, R., Youldash, R., Alyafee, R., Sabr, S., Sharif, L., Mahsoon, A., & Alasmee, N. (2021). The journey of Saudi male nurses studying within the nursing profession: A qualitative study. Nursing Reports, 11(4), 832–846. https://doi.org/10.3390/nursrep11040078

Chang, H. E., & Jeong, S. (2021). Male nurses' experiences of workplace gender discrimination and sexual harassment in South Korea: A qualitative study. Asian Nursing Research, 15(5), 303–309. https://doi.org/10.1016/j.anr.2021.09.002

Chang, M., & Kim, Y. (2022). The influence of role conflict, head nurses' super leadership, and nursing organizational culture on organizational commitment of male nurses. Journal of Korean Academy of Nursing Administration, 28(5), 558. https://doi.org/10.11111/jkana.2022.28.5.558

Creswell, J. W., & Creswell, J. D. (2018). Research design (5th ed.). Thousand Oaks, CA: Sage Publications.

Dos Santos, L. M. (2020). Male nursing practitioners and nursing educators: The relationship between childhood experience, social stigma, and social bias. International Journal of Environmental Research and Public Health, 17(14), 4959. https://doi.org/10.3390/ijerph17144959

Dutta, M., Sutnga, G. M., & Kaur, S. (2021). Job satisfaction among male nurses working in a tertiary care hospital. Nursing Journal of India, CXII(02), 62–68. https://doi.org/10.48029/nji.2021.cxii202

Flory, J., & Emanuel, E. (2004). Interventions to improve research participants' understanding in informed consent for research. JAMA, 292(13), 1593. https://doi.org/10.1001/jama.292.13.1593

Kaur, N., Ricciardelli, R., & Clow, K. (2022). Men in nursing: A qualitative examination of students' stereotypes of male nurses through the framework of social role theory and stereotype content model. Journal of Men's Studies, 31(1), 157–178. https://doi.org/10.1177/10608265221108209

Kim, E. J., Kang, S. J., Shin, H. J., & Kim, J. O. (2019). Factors affecting satisfaction in major of male nursing students. Medico-Legal Update, 19(1), 458. https://doi.org/10.5958/0974-1283.2019.00086.0

Labrague, L. J., Petitte, D. M. M., Tsaras, K., Cruz, J. P., Colet, P. C., & Gloe, D. S. (2018). Organizational commitment and turnover intention among rural nurses in the Philippines: Implications for nursing management. International Journal of Nursing Sciences, 5(4), 403–408. https://doi.org/10.1016/j.ijnss.2018.09.001

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.

Liu, H. Y., Han, H. M., Chao, C. Y., Chen, H. F., & Wu, S. M. (2022). Performative masculinity: A meta-ethnography of experiences of men in academic and clinical nursing. International Journal of Environmental Research and Public Health, 19(22), 14813. https://doi.org/10.3390/ijerph192214813

Marañón, A. A., Rodríguez-Martín, D., & Galbany-Estragués, P. (2019). Male nurses' views of gender in the nurse–family relationship in paediatric care. International Nursing Review, 66(4), 563–570. https://doi.org/10.1111/inr.12541

Martínez-Morato, S., Feijoo-Cid, M., Galbany-Estragués, P., Fernández-Cano, M. I., & Marañón, A. A. (2021). Emotion management and stereotypes about emotions among male nurses: A qualitative study. BMC Nursing, 20(1). https://doi.org/10.1186/s12912-021-00641-z

Mao, A., Cheong, P. L., Van, I. K., & Tam, H. L. (2021). "I am called girl, but that doesn't matter" - perspectives of male nurses regarding gender-related advantages and disadvantages in professional development. BMC Nursing, 20(1). https://doi.org/10.1186/s12912-021-00539-w

Mao, A., Wang, J., Zhang, Y., Cheong, P. L., Van, I. K., & Tam, H. L. (2020). Male nurses' dealing with tensions and conflicts with patients and physicians: A theoretically framed

analysis. Journal of Multidisciplinary Healthcare, 13, 1035–1045. https://doi.org/10.2147/jmdh.s270113
Merriam, S. B. (1998). Qualitative research and case study applications in education. http://ci.nii.ac.jp/ncid/BA34212783
Merriam, S. B. (2002). Qualitative research in practice: Examples for discussion and analysis. San Francisco, CA: Jossey-Bass.
Nam, M. H., & Kim, H. O. (2018). Effect of personality and resilience on satisfaction with major in nursing students. Journal of Korean Academy of Nursing Administration, 24(4), 298. https://doi.org/10.11111/jkana.2018.24.4.298
Papantoniou, P. (2021). Are male nurses sexually harassed? A cross-sectional study in the Greek health system. BMC Nursing, 20(1). https://doi.org/10.1186/s12912-021-00656-6
Saleh, M. Y., Al-Amer, R., Ashram, S. R. A., Dawani, H., & Randall, S. (2020). Exploring the lived experience of Jordanian male nurses: A phenomenological study. Nursing Outlook, 68(3), 313–323. https://doi.org/10.1016/j.outlook.2019.10.007
Sapar, L. C., & Oducado, R. M. F. (2021). Revisiting job satisfaction and intention to stay: A cross-sectional study among hospital nurses in the Philippines. Nurse Media Journal of Nursing, 11(2), 133–143. https://doi.org/10.14710/nmjn.v11i2.36557
Shin, S. Y., & Lim, E. J. (2021). Clinical work and life of mid-career male nurses: A qualitative study. International Journal of Environmental Research and Public Health, 18(12), 6224. https://doi.org/10.3390/ijerph18126224
Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage.
Sundus, A., & Younas, A. (2020). Caring behaviors of male nurses: A descriptive qualitative study of patients' perspectives. Nursing Forum, 55(4), 575–581. https://doi.org/10.1111/nuf.12464
Wilkinson, S., & Kitzinger, C. (2020). Informed consent: A guide to the literature. Journal of Legal Medicine, 27(2), 303–324.
Yin, R. K. (2009). Case study research: Design and methods (4th ed.). Thousand Oaks, CA: Sage Publications.
Yin, R. K. (2014). Case study research: Design and methods (5th ed.). Thousand Oaks, CA: Sage Publications.

APA Citation:

Montañer, C. J. C., Sumile, E. F. B., Undag, L. D., Abordo, I. C., Sumugat, D. B. P., & Maghanoy, A. G. M. (2024). MALE NURSES' INTENTION TO STAY IN A SPECIFIC HOSPITAL: A CASE STUDY. Ignatian International Journal for Multidisciplinary Research, 2(8), 945–962. https://doi.org/10.5281/zenodo.13330004

Corresponding author: *montaner.czarinajulia@amcc.edu.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

MARKET STATUS OF UKAY-UKAY AND READY-TO- WEAR BUSINESS IN TAGBILARAN CITY

Michelle C. Cahucom

Bohol Island State University- Main Campus, Tagbilaran City, Bohol, Philippines

https://doi.org/10.5281/zenodo.13359227

ABSTRACT

This study investigates the market status of ukay-ukay and ready-to-wear (RTW) businesses in Tagbilaran City, Bohol, and examines whether significant differences exist between these two sectors. The research aims to profile these businesses in terms of capital, rental, product offerings, revenue, permits, supply sources, bulk releases, and product disposal, as well as assess their market status regarding price, product quality, promotion, location, and sanitation. Utilizing a questionnaire based on Garrovillas (2013), data were collected from ukay-ukay and RTW business owners. Analysis revealed that RTW businesses generally require higher capital and rental expenses compared to ukay-ukay. Despite both sectors generating similar revenue, RTW businesses incur higher permit fees and have fewer bulk releases. The findings indicate that ukay-ukay is more affordable and perceived as having better product quality, while RTW excels in promotion, location, and sanitation. A z-test confirms a significant difference between the market statuses of ukay-ukay and RTW. Based on these results, recommendations include rehabilitating stalls, implementing price tariffs, enhancing promotions, establishing sanitation oversight, and enforcing quality control for ukay-ukay vendors. Further research is suggested to validate and expand upon these findings.

Keywords: *Consumer Behavior, Market Status, Ready-to-Wear (RTW), Sanitation, Ukay-ukay*

INTRODUCTION

The clothing industry remains one of the most dynamic and competitive sectors worldwide, driven by the fundamental human need for clothing. Among the prominent segments within this industry today are ukay-ukay (second-hand garments) and ready-to-wear (RTW) apparel. These sectors are particularly relevant within the context of sustainable fashion, which emphasizes the need for the fashion industry to balance economic, environmental, cultural, and social goals. Ukay-ukay, by promoting the reuse of clothing and reducing environmental impact, presents a more sustainable alternative compared to fast fashion and luxury fashion (Biana, 2020).

The appeal of ukay-ukay lies in its affordability, offering fashionable and durable clothing at prices accessible to people with lower incomes (Isla, 2013). This accessibility has made ukay-ukay a popular alternative to brand-new garments found in boutiques and shopping malls, especially in regions like Bohol, where the industry has flourished in recent years. Despite concerns about sanitation, limited sizes, and potential defects, ukay-ukay continues to thrive, particularly in urban centers such as Tagbilaran City, where numerous ukay-ukay and RTW stalls can be found.

The sustained growth of the ukay-ukay and RTW industries in Bohol has piqued the interest of the researcher, prompting an investigation into consumer surplus and market dynamics within this sector. By examining these aspects, the study aims to provide a comprehensive overview of the market status of ukay-ukay and RTW, offering insights into how these businesses contribute to the local economy and what improvements can be made. Recognizing their significance as a source of income for local entrepreneurs and revenue for the city government, the study also considers the potential benefits of a proposed plan to enhance the operations of ukay-ukay and RTW stalls.

Grounded in several theories of consumer behavior, this research builds on Thorndike's Law of Effect, which suggests that consumers are likely to repeat purchasing behaviors that have previously been satisfying (Athalye et al., 2018). This principle aligns with observations that satisfied customers tend to return to products or services that have met their expectations (Nacif, 2012). Additionally, Ajzen and Fishbein's Theory of Reasoned Action (TRA) (1980), as cited by Al-Suqri and Al-Kharusi (2015), highlights the role of pre-existing attitudes and intentions in consumer decision-making, while Stern's concept of impulse behavior underscores the influence of external stimuli on purchasing decisions. Consumers often determine the attractiveness of a business through the quality of service extended to them, with excellent services or products encouraging repeat patronage (Danesh, Nasab, & Ling, 2012). These theoretical perspectives, combined with observations of consumer preferences and behaviors, form the foundation of this study, which seeks to shed light on the factors driving the success of ukay-ukay and RTW businesses in Bohol.

Moreover, this study draws on previous research that has explored various facets of the ukay-ukay industry, including its economic impact, consumer attitudes, and the ongoing debate over its legalization. The insights gained from this research will be

instrumental in formulating strategies to support and sustain the growth of the ukay-ukay and ready-to-wear (RTW) sectors, ensuring that they continue to serve as vital components of the local clothing industry. According to Te et al. (2021), the ukay-ukay industry significantly contributes to local economies by providing affordable fashion and fostering sustainability, reinforcing its critical role in the clothing market.

Research Questions

The main thrust of this study was to assess the significant difference between the market status of ukay-ukay and RTW business in Tagbilaran City, Bohol.

More specifically, it sought to answer the following specific questions:

1. What is the profile of ukay-ukay and RTW business in Tagbilaran City in terms of:
    - 1.1 Capital ;
    - 1.2 Rental ;
    - 1.3 Product ;
    - 1.4 Revenue ;
    - 1.5 Permit ;
    - 1.6 Supply ;
    - 1.7 Bulk of release and
    - 1.8 Upshot of the product?
2. What is the market status of ukay-ukay and RTW in Tagbilaran City in terms of :
    - 2.1 Price;
    - 2.2 Product quality;
    - 2.3 Promotion/ marketing presentation ;
    - 2.4 Placement/location and
    - 2.5 Sanitation?
3. Is there a significant difference between the market status of ukay-ukay and RTW?
4. What action plan can be proposed to upgrade the ukay-ukay and RTW business in Tagbilaran City?

METHODOLOGY

This section focused on the methodology that was utilized in the conduct of the study. It also outlined the research design, the procedure that was followed, the process of collecting the data, and the analysis. During the collection process, the ethical considerations were also discussed.

Research Design

This inquiry utilized descriptive-survey methods. In the descriptive survey, the researcher used a questionnaire as the primary tool. After collecting the data, a z-test

was employed to determine the level of difference between the market status of ukay-ukay and RTW.

The results of this survey provided a reference point for analysis, interpretation, and evaluation, serving as the basis for improving the ukay-ukay/RTW business through a proposed measure or plan.

Research Environment and Research Participants

This study was conducted in Tagbilaran City, Bohol, which is considered the heart of the province, where trade and commerce are concentrated. Tagbilaran City comprises fifteen (15) barangays: Bool, Booy, Cabawan, Cogon, Dampas, Dao, Manga, Mansasa, Poblacion I, Poblacion II, Poblacion III, San Isidro, Taloto, Tiptip, and Ubujan. However, only Barangay Dao, Poblacion 2, Poblacion 3, Cogon, and Manga had ukay-ukay and RTW businesses. The researcher chose this environment considering that Tagbilaran City is the province's main business capital and center of governance, with numerous ukay-ukay and RTW stalls found in the area.

The study involved 379 respondents, including 155 ukay-ukay customers, 137 RTW customers, 62 ukay-ukay entrepreneurs, and 35 RTW entrepreneurs.

An initial survey was conducted to determine the tentative number of ukay-ukay and RTW customers in Tagbilaran City on a typical day. Slovin’s formula was then used to calculate the sample size. Customers were randomly given questionnaires to complete, and as needed, the researcher translated the questions into the vernacular to ensure the respondents' understanding. This approach was employed to elicit the market status of ukay-ukay and RTW businesses.

Research Instrument

The instrument used in conducting the study was a questionnaire. Two questionnaires were employed to gather data. The first one was designed for ukay-ukay and RTW entrepreneurs, aiming to ascertain the profile of these businesses in Tagbilaran City. This questionnaire was self-made, crafted with the assistance of the researcher’s adviser and an English critic. A thorough modification process was undertaken before finalizing the instrument. Pilot testing was conducted to test the validity of the questionnaire.

The second questionnaire, intended for ukay-ukay and RTW buyers, was designed to assess the market status and identify any significant differences between ukay-ukay and RTW apparel in Tagbilaran City. This questionnaire was based on a marketing book by Garrovillas (2013), with modifications made by the researcher to align it with the current study. Pilot testing was also conducted to ensure the validity of this questionnaire.

Data Gathering Procedure

The researcher sent a letter to the Campus Director and the Dean of Graduate Studies requesting permission to conduct the study. Permission was also sought from the Mayor of Tagbilaran City, where the respondents resided. Afterward, the researcher requested permission from the owners of ukay-ukay and RTW businesses in Tagbilaran City to administer the questionnaire. A guided interview approach was adopted, where the researcher directed the interviewees through the questions, saving time and effort for the ukay-ukay and RTW business owners.

Additionally, random ukay-ukay and RTW customers were selected to answer the second type of questionnaire. The researcher sought permission from these customers, and upon their approval, they were given ample time to read and complete the questionnaire. The questionnaire was also translated into Visayan to ensure that the respondents could easily understand the items. The questionnaires were retrieved after the respondents thoroughly answered them. The tabulation, analysis, and interpretation of the gathered data followed. Finally, based on the conclusions of the study, recommendations and a proposed action plan were made.

Data Analysis

To determine the profile of “ukay-ukay” and RTW entrepreneurs in terms of capital, rental, product, revenue, permit, supply, bulk of release per month and upshot of the product, the percentage will be computed.

To determine the weighted mean of the market status of “ukay-ukay” and RTW in terms of price, product quality, promotion, placement and sanitation, weighted mean was computed and interpreted using the following scale:

Where:

Weighted Mean Intervals	**Qualitative Description**
3.25 - 4.0	Superior
2.50 - 3.24	Good
1.75 - 2.49	Fair
1.0 - 1.74	Poor

To test the significant difference between the market status of ukay-ukay and RTW, Z test was computed. The formula is:

$$z = \frac{(\bar{\bar{x}}_1 - \bar{\bar{x}}_2)}{\sqrt{\frac{SD_1^2}{N_1} + \frac{SD_2^2}{N_2}}}$$

Where:

z = Z test

X_1 = weighted mean of the market status of ukay-ukay
X_1 = weighted mean of the market status of RTW
N_1 = population of “ukay-ukay” costumers
N_2 = population of RTW costumers
SD_1^2 = Variance of the market status of “ukay-ukay”
SD_2^2 = Variance of the market status of RTW

RESULTS

This section presents, analyzes, and interprets the data gathered from the survey questionnaires, focusing on the marketability of ukay-ukay and ready-to-wear (RTW) businesses in terms of price, product quality, promotion or marketing presentation, placement or location, and sanitation. Additionally, it examines whether there is a significant difference between the market status of ukay-ukay and RTW.

Table 1 outlines the profile of ukay-ukay and RTW business owners in Tagbilaran City. Among the 62 ukay-ukay stalls, most have an initial capital of PHP 40,000.00 to PHP 40,999.00, while the 35 RTW stalls generally have a higher initial capital, ranging from PHP 50,000.00 to PHP 50,999.00. This indicates that the RTW business typically requires more capital than the ukay-ukay business.

In terms of rental costs, most ukay-ukay businesses pay a monthly lease of PHP 5,000.00 to PHP 9,999.00, whereas RTW stalls incur higher rental costs, typically between PHP 15,000.00 and PHP 15,999.00 per month. Ukay-ukay stalls generally have lower rental expenses because they are often located in informal areas, such as along roadsides, while RTW businesses are situated in more formal, presentable locations.

Regarding the types of products sold, ukay-ukay stalls primarily offer t-shirts, blouses, and pants, with children's wear being the least common due to concerns about sanitation. Similarly, RTW stalls also mainly sell t-shirts, blouses, and pants, with cosmetics being the least offered, likely because they are considered luxury items rather than necessities.

In terms of monthly revenue, both types of businesses typically earn between PHP 20,000.00 and PHP 24,999.00. Most ukay-ukay businesses pay an annual permit fee of PHP 1,000.00 to PHP 4,999.00, while RTW businesses pay a higher permit fee, ranging from PHP 5,000.00 to PHP 9,999.00. This difference in permit fees is consistent with the higher capital requirements for RTW businesses.

The products sold by both ukay-ukay and RTW businesses are primarily sourced from Korea, recognized as a fashion capital. These products are popular and in demand due to current fashion trends. Ukay-ukay businesses typically release 11-20 bulk orders per month, whereas RTW businesses release only 5-10 bulk orders. This disparity is largely due to the lower pricing of ukay-ukay products, which makes them more affordable than RTW products.

Finally, if products remain unsold, both ukay-ukay and RTW businesses often resort to sales promotions, such as buy-one-get-one-free offers or 50% discounts, to recover their capital. A small number of owners also choose to donate unsold items to charity or repurpose them as rags.

Table 1
Profile of Ukay-ukay and RTW owners in Tagbilaran City

Profile of Ukay-ukay and RTW in Tagbilaran City in terms of:	Ukay-ukay N=62		RTW N= 35	
	No. of responses	Percentage	No. of responses	Percentage
CAPITAL				
• P 30,000.00-P 30,999.00	10	16 %	2	6 %
• P 40,000.00-P 40,999.00	35	56 %	3	9 %
• P 50,000.00-P 50,999.00	2	3 %	12	34 %
• P 60,000.00-P 60,999.00	2	3 %	2	6 %
• P 70,000.00-P 70,999.00	4	6 %	6	17 %
• P 80,000.00-P 80,999.00	3	5 %	1	3 %
• P 90,000.00-P 90,999.00	1	3 %	1	3 %
• P 100,000.00 up	5	8 %	8	23 %
Total	**62**	**100%**	**35**	**100%**
RENTAL				
• P 1,000.00-4,999.00	13	21%	1	3%
• P 5,000.00- 9,999.00	35	56%	9	26%
• P 10,000.00-14,999.00	2	3%	5	14%
• P 15,000.00- 19,999.00	2	3 %	11	31%
• P 20, 0000.00 -up	10	16%	9	26%
Total	**62**	**100%**	**35**	**100%**
PRODUCT				
• Blouses/T-shirts	58	94 %	30	86%
• T-shirts for men	58	94 %	30	86%
• Pants for women	45	73 %	30	86%
• Pants for men	45	73 %	30	86%
• Shorts for men	32	52 %	22	63%
• Shorts for women	40	65%	22	63%
• Underwear	5	8%	16	46%
• Children's wear	30	48 %	25	71%
• Gowns	6	10%	7	20%
• Tailored suits	6	10 %	7	20%
• Curtains	16	26 %	23	66%
• Bedding	34	55%	23	66%
• Bags	40	65%	30	86%
• Footwear for men	23	37%	29	83%
• Footwear for women	23	37%	29	83%
• Stuffed toys	19	31%	17	49%
• Accessories	27	44 %	30	86 %
• Others, please specify (cosmetics)			5	14%
Total	**62**	**100%**	**35**	**100%**
REVENUE OR INCOME PER MONTH				
• P 5,000.00-P 9,999.00	3	5%	4	11%
• P 10,000.00-P 14,999.00	17	27%	5	14%
• P 15,000.00-P 19,999.00	5	8%	8	23%
• P 20,000.00-P 24,999.00	28	45%	11	32%
• P 25,000.00 up	9	15%	7	20%
Total	**62**	**100%**	**35**	**100%**
PERMIT				

• P 1,000.00-P 4,999.00	22	35%	10	29%
• P 5,000.00-P 9,999.00	21	34%	13	37%
• P 10,000.00-P 14,999.00	5	8%	2	6%
• P 15,000.00-P 19,999.00	5	8%	3	9%
• P 20,000.00 up	9	15%	7	20%
Total	**62**	**100%**	**35**	**100%**
SOURCE OF SUPPLY				
• Philippines	7	11%	12	34%
• Taiwan	9	15%	10	29%
• Korea	20	32%	25	71%
• USA	14	23%	21	60%
• Canada	2	3%	2	6%
• Australia	6	10%	2	6%
• Online shops	5	8%	13	37%
• China	9	15%	15	43%
• Others, please specify(Thailand)	2	3%	3	9%
BULK OF RELEASE PER MONTH				
• 5-10 bulk	20	32%	16	46%
• 11-20 bulk	29	47%	9	26%
• 21-30 bulk	13	21%	10	29%
• Others, specify _____	**62**	**100%**	**35**	**100%**
Total				
UPSHOT OF THE PRODUCT				
• Sale it. (E.g. buy 1. Take 1, 50% off, etc.)	45	73%	27	77%
• Donate the garments apparel.				
• Recycle it like make it into rag.	6	10%	2	6%
• Donate to a certain charity.				
• Resort to ukay-ukay garments	9	15%		
• Others, specify (Put it inside the punching bag, make as a rag.)				
Total			6	17%
	2	3%		
	62	**100%**	**35**	**100%**

Table 2
Market Status of Ukay-ukay and RTW in Tagbilaran City in terms of Price, Product Quality, Promotion or Marketing Presentation, Placement or Location, Sanitation

Ukay-ukay N=155	Description		RTW N= 137	Description
		I. Price		
2.96	Good	1.The price is affordable.	2.37	Fair
3.27	Superior	2.The price goes with the quality.	2.78	Good
3.05	Good	3.The quality exceeds its price or value.	2	Fair
3.46	Superior	4.The price is negotiable.	1.59	Fair
1.52	Poor	5.There is a standard directive of prices among other "ukay-ukay" or RTW stalls.	2.62	Good

2.85	**Good**	**TOTAL**	**Fair**	**2.27**
		II. Product Quality		
3.59	Superior	6.The product is branded.	2.6	Good
3.63	Superior	7.The design and style of clothes are exclusive.	2.66	Good
3.16	Good	8.There is a good combination of colors.	2.6	Good
3.06	Good	9.Colors are attractive and not faded.	2.84	Good
3.66	Superior	10.The clothing material is durable.	1.67	Fair
3.06	Good	11.There are no defects in the product.	3.28	Superior
3.42	Superior	12.The product is fashionable.	3.13	Good
3.37	**Superior**	**TOTAL**	**2.68**	**Good**
		III. Promotion or marketing presentation		
3.08	Good	13.The staffs are accommodating.	2.46	Fair
3.34	Superior	14.Sales promos are offered regularly.	2.59	Good
2.42	Fair	15.The products are properly displayed.	2.87	Good
1.74	Poor	16.The products are attractive to look at for it is arrange/hang well.	3.14	Good
1.61	Poor	17.The product is advertised through media like newspaper, radio, etc.	2.7	Good
1.74	**Poor**	**TOTAL**	**1.97**	**Fair**
		IV. Placement or Location		
2.37	Good	18.The location is accessible.	3.2	Good
2.04	Fair	19.The area is air-conditioned/ well-ventilated.	3.13	Good
1.94	Fair	20.The location is not overcrowded.	2.97	Good
2.02	Fair	21.The location is safe and sound.	3.01	Good
1.99	Fair	22.It is has proper lighting.	3.33	Superior
1.92	Fair	23.Emergency exit can be observed.	3.62	Superior
1.79	Fair	24.The flooring is friendly to the customer. It is plane or flat.	3.88	Superior
1.89	Fair	25.The clothing apparels are being hang.	3.93	Superior
2.16	Fair	26.Mannequins are found in the area.	3.82	Superior
1.17	Poor	27.Fitting rooms are present.	2.88	Good
1.97	Fair	28.Mirrors are readily available.	3.8	Superior

2.13	**Fair**	**TOTAL**	**3.86**	**Superior**
		V. Sanitation		
3.25	Superior	29.The garment apparel undergone treatment indicated by the chemical treatment smell.	3.41	Superior
1.94	Fair	30.Dirt is not found in the garment.	3.73	Superior
1.42	Poor	31.Allergy was not experienced after wearing the garments.	2.92	Good
2.43	Fair	32.Foul smell is absent.	3.5	Superior
2.26	**Fair**	**TOTAL**	**3.39**	**Superi**or

Table 2 presents the market status of ukay-ukay and ready-to-wear (RTW) businesses in terms of price, product quality, promotion or marketing presentation, placement or location, and sanitation.

The data indicates that ukay-ukay has a higher weighted mean in terms of price compared to RTW apparel, signifying that ukay-ukay items are much more affordable. This is supported by Garrovillas (2013), who noted that ukay-ukay thrives widely, largely because its low prices make it accessible even to the poorest individuals, including those at the base of the economic pyramid.

When it comes to product quality, ukay-ukay also scores higher than RTW. This suggests that ukay-ukay garments are perceived as more durable than their RTW counterparts. This finding aligns with the study by Abueg (2005), which highlighted that some consumers prefer ukay-ukay items because they are comparable in quality to brand-new garments and accessories sold in high-end stores, but at a much lower price.

In terms of promotion, RTW has an advantage over ukay-ukay. This discrepancy is linked to the ongoing challenges surrounding the legalization of the ukay-ukay business. In 2002, President Gloria Macapagal-Arroyo banned the entry and sale of ukay-ukay items in the Philippine market, causing dissatisfaction among consumers who viewed ukay-ukay as the most affordable option. As a result, ukay-ukay businesses have struggled to establish effective marketing strategies due to the lack of government support.

Regarding placement, ukay-ukay businesses are rated as having a fair status, while RTW businesses receive a superior rating. Fernandez (2011) explains this by noting that ukay-ukay stalls are typically found in congested areas with poor ventilation, reflecting the lower-quality environment in which these products are often sold. The term "ukay-ukay" itself comes from the Filipino word "hukay," meaning to dig up, which metaphorically describes the process of sifting through items in these crowded locations.

Finally, in terms of sanitation, ukay-ukay businesses are described as fair, whereas RTW businesses are rated superior. This distinction is supported by a blogger's

observation that individuals with higher standards of living prefer to purchase new, ready-to-wear garments from malls, primarily due to concerns about sanitation. Since ukay-ukay clothes are not thoroughly clean, there is a significant risk that bacteria and viruses may be present on these items.

Table 3
Difference between the Market Status of Ukay-ukay and RTW

	Mean	Description	Computed z	Critical z	Interpretation	Decision
Ukay-ukay	2.37	Fair	-10.92	± 1.96	Significant	Reject the null Hypothesis
RTW	2.97	Good				

With the use of z-test, the two variables implied significant difference since the computed tabular value of -10.92 was lower than the critical value ± 1.96 at 0.05 significance at 103 freedom. Thus, the null hypothesis is rejected. There is a significant difference in the market status of ukay-ukay and RTW.

DISCUSSION

Findings

After the data were analyzed and interpreted, the researcher derived the following findings.

A. Profile Ukay-ukay and RTW

The profile analysis reveals that among the 62 ukay-ukay stalls surveyed, the majority have a capital investment ranging from PHP 40,000.00 to PHP 40,999.00. In contrast, the 35 RTW stalls typically have a higher capital investment, ranging from PHP 50,000.00 to PHP 50,999.00.

Regarding rental costs, most ukay-ukay businesses pay a monthly lease of PHP 5,000.00 to PHP 9,999.00, while RTW stalls have higher rental expenses, typically between PHP 15,000.00 and PHP 15,999.00 per month. Both ukay-ukay and RTW businesses primarily sell t-shirts for both men and women.

In terms of revenue, both business types generate an income ranging from PHP 20,000.00 to PHP 24,999.00 per month. When it comes to business permits, ukay-ukay stalls pay an annual fee ranging from PHP 1,000.00 to PHP 4,999.00, whereas RTW businesses pay between PHP 5,000.00 and PHP 9,000.00.

The source of products for both ukay-ukay and RTW businesses is primarily from Korea, known as the "Fashion Capital." Ukay-ukay businesses typically release 11-20 bulk orders per month, while RTW businesses release fewer, around 5-10 bulk orders monthly.

Finally, if products remain unsold, both ukay-ukay and RTW businesses often resort to promotional sales, such as "buy one, take one" or offering items at a 50% discount, to recover their capital. A small number of business owners choose to donate unsold items to charity or repurpose them as rags.

B. Market Status of Ukay-ukay and RTW in Tagbilaran City

The analysis reveals that ukay-ukay is more affordable, with a higher weighted mean of 2.85 for price compared to RTW's 2.27. In terms of product quality, ukay-ukay again leads with a weighted mean of 3.37, surpassing RTW's 2.68. However, RTW excels in promotion and marketing presentation, scoring 1.97 against ukay-ukay's 1.24. For placement or location, RTW has a superior rating of 3.86, while ukay-ukay is rated fair at 2.13. When it comes to sanitation, RTW maintains a superior rating with a weighted mean of 3.39, compared to ukay-ukay's 2.26. Overall, RTW is rated as "good" with an average weighted mean of 2.97, making it more marketable than ukay-ukay, which is rated as "fair" with an average weighted mean of 2.37.

C. Difference Between the Market Status of Ukay-ukay and RTW

The analysis using a z-test revealed a significant difference between the market statuses of ukay-ukay and RTW. The computed z-value was -10.92, which is lower than the critical value of +1.96 at a 0.05 significance level with 103 degrees of freedom. Therefore, the null hypothesis is rejected, indicating a significant difference in the market status between ukay-ukay and RTW.

Conclusions

Based on the data analyzed in this study, it was concluded that the market status of ukay-ukay is rated as fair, with an average weighted mean of 2.37, whereas the market status of RTW is rated as good, with an average weighted mean of 2.97. This disparity highlights that RTW apparel outperforms ukay-ukay in terms of price, product quality, promotion, placement, and sanitation. The significant difference between the market statuses of ukay-ukay and RTW, as indicated by the z-test results, confirms that RTW has a more favorable market status compared to ukay-ukay.

Recommendations

Based on the conclusions drawn from this study, the following recommendations are proposed to improve the ukay-ukay and RTW businesses in Tagbilaran City:

Rehabilitation of Stalls: The city government should consider the rehabilitation of ukay-ukay and RTW stalls, as these businesses contribute significantly to the city's income.

Tariff Approval: Ukay-ukay and RTW vendors should establish a tariff for their prices, subject to approval by the relevant Board, to ensure fair pricing practices.

Enhanced Promotion: Entrepreneurs should develop effective promotional strategies for ukay-ukay and RTW to enhance their market presence and appeal.

Sanitation Oversight: The city government should create a committee to regularly assess the status of ukay-ukay and RTW businesses, with a particular focus on sanitation standards.

Quality Control: Ukay-ukay vendors should implement quality control measures to prevent the sale of defective products and ensure customer satisfaction.

Further Research: It is recommended that follow-up research be conducted to verify and expand upon the findings of this study.

Compliance with Ethical Standards

This study adhered to ethical standards by obtaining informed consent from all participants, ensuring confidentiality, and maintaining voluntary participation without coercion. No harm came to participants, and the study received ethics committee approval. Researchers declared no conflicts of interest and reported findings transparently and honestly. Cultural sensitivity was respected throughout the research process.

REFERENCES

Abueg, L. C. (2005). The economics of second-hand retail trade: An analysis of the market of the ukay-ukay. Manila: Manila Standard Today.

Al-Suqri, M. N., & Al-Kharusi, R. M. (2015). Ajzen and Fishbein's theory of reasoned action (TRA)(1980). In Information seeking behavior and technology adoption: Theories and trends (pp. 188-204). IGI Global.

Athalye, V. R., Santos, F. J., Carmena, J. M., & Costa, R. M. (2018). Evidence for a neural law of effect. Science, 359(6379), 1024-1029.

Biana, H. T. (2020). The Philippine Ukay-Ukay Culture as Sustainable Fashion. DLSU Business & Economics Review, 30(1), 154-164.

Danesh, S. N., Nasab, S. A., & Ling, K. C. (2012). The study of customer satisfaction, customer trust and switching barriers on customer retention in Malaysia hypermarkets. International Journal of Business and Management, 7(7), 141-150.

Fernandez, M. (2011). Does the ukay-ukay industry keep the budget-challenged fashionista? Manila: Manila Standard Today.

Garrovillas, E. P. (2013). Marketing principles. Pasig City, Philippines: Anvil Publishing.

Isla, V. L. (2013). Investigating second-hand fashion trade and consumption in the Philippines: Expanding existing discourses. Journal of Consumer Culture, 13(3), 221-240.

Nacif, R. C. (2012). Online customer loyalty: Forecasting the repatronage behavior of online retail customers. Springer Science & Business Media.

Te, A. B., Ignacio, S. G., Ibraheem, Z. D., & Sam, E. M. C. (2021). Customer preferences in buying second-hand clothing in Digos City. Journal of BIMP-EAGA Regional Development, 7(1), 25-41.

APA Citation:

Cahucom, M. C. (2024). MARKET STATUS OF UKAY-UKAY AND READY-TO-WEAR BUSINESS IN TAGBILARAN CITY. In Ignatian International Journal for Multidisciplinary Research (Vol. 2, Number 8, pp. 1324–1337). ICCE. https://doi.org/10.5281/zenodo.13359227

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

MASTER TEACHERS' INSTRUCTIONAL SUPERVISORY SKILLS AND TEACHERS PERFORMANCE: BASIS FOR SCHOOL SUPERVISORY PLAN

Rosanna Damacino Concepcion, Gina F. Labitad

Graduate School and Professional Studies, PHINMA Cagayan De Oro College, Philippines

https://doi.org/10.5281/zenodo.13346407

ABSTRACT

The Theory of Supervisory Impact on Teaching Excellence is established in this study as it posits that consistent and effective instructional supervision by Master Teachers (MTs) is fundamental in enhancing teaching performance. This study delved into the MTs instructional supervisory skills and teacher performance as basis for a school supervisory plan. Particularly, it investigated the teachers' demographic characteristics, the MT's level of supervisory skills, the teachers' teaching performance, and the significant relationship and significant difference of the variables. The study utilized a quantitative research design, particularly descriptive correlational method. Through the use of Slovin's formula, the study included the 529 Master Teachers and Teachers from both elementary and secondary schools as the research respondents. The questionnaire was adopted, while other parts were adapted and modified. In analyzing the data gathered, the study used both descriptive and inferential statistics such as frequency, percentage, mean, standard deviation, and Pearson (r) correlation as statistical tools. The findings of the study revealed that teachers are mostly female, have earned units in Masters, have been in the service for 6-10 years, do not belong to any of the seven tribes of Bukidnon, and have a positive attitude towards instructional supervision. The Master Teachers' instructional supervisory skills are excellent, while the teachers' teaching performance is outstanding. Meanwhile, the correlation analysis showed a positive significant correlation between Master Teachers' instructional supervisory skills and the teachers' teaching performance. The regression results showed no significant difference in the teachers' teaching performance when they were grouped according to sex and ethnicity but showed significant difference when grouped according to highest educational attainment,

teaching experience, and attitude towards instructional supervision Finally, the study proposed a school supervisory plan that was designed based on the teachers' lowest indicators in their teaching performance. As a conclusion, this study found that Master Teachers' instructional supervisory skills impacts teachers' performance, hence, recommends the adoption and implementation of the school instructional supervisory plan.

Keywords: *instructional supervisory skills, teaching performance*

INTRODUCTION

The role of Master Teachers (MTs) in the dynamic context of education extends beyond the classroom, encompassing a vital aspect of educational leadership - that is their instructional supervisory skills. It is a dynamic process that involves observation, feedback, and collaboration. The efficacy of master teachers in guiding and enhancing the performance of their fellow educators plays a critical role in creating an environment where continuous learning and improvement thrive.

The efficacy of master teachers in enhancing the performance of their fellow teachers is rooted in their capacity to provide constructive feedback (Dingal, 2023; Sangalang, 2018), tailored support (Gestupa, 2023; Cortez, 2023), and personalized professional development (Magcanas, 2019; Makavec, 2018). Through keen observation, master teachers identify strengths and areas for improvement, offering targeted guidance to help teachers refine their instructional techniques, classroom management strategies, and overall pedagogical approaches. This collaborative and reflective process fosters a culture of continuous improvement, where teachers feel supported and empowered to embrace innovation and refine their practice.

The trajectory of teachers' practice and performance is commonly conducted through a performance appraisal, essentially a method to gauge an individual's contributions in the field of teaching, particular to students' performance. A component of this appraisal process involves a systematic planning cycle and meticulous observation to evaluate teacher performance, which is usually done by an MT or a school principal. The expectation is that through instructional supervision, teachers receive feedback aimed at enhancing the quality of their performance. Thus, the effectiveness of a teacher's teaching performance is crucially impacted by the effectiveness of the MTs instructional supervision.

According to Kanya et al. (2021), teachers' performance is not solely determined by their instructional abilities but also by their capacity to engage with students, adapt to diverse learning styles, and foster a conducive learning environment. Makavec (2018) explained that effective teaching encompasses not only the dissemination of knowledge but also the cultivation of critical thinking, problem-solving skills, and a passion for lifelong learning. Therefore, the appraisal of teachers should encompass a comprehensive assessment of their pedagogical strategies, classroom management skills, and their

ability to establish rapport with students. Moreover, it should consider factors beyond academic achievement, such as the promotion of socio-emotional development and the integration of technology to enhance learning outcomes.

In the Philippines, the creation of master teacher positions, initially comprising four levels aligned with the pay grades of principals and assistant principals, represents their skills and experience in the field. This initiative introduced a dual-track system for career advancement among teachers, accommodating both school management and classroom teaching roles.

Previous researchers highlighted the significant role that master teachers play in terms of aiding and instructional supervision to fellow teachers. Carraway and Young (2018) posited that MTs must have enough instructional leadership which serves as a mechanism to bolster instructors' teaching practices, foster professional growth, and oversee resource management. Through coaching and mentoring, instructional leaders provide the necessary support to teachers, assisting them in the ongoing enhancement of their teaching methods. Meanwhile, Bush et al. (2018) considered MTs as the “crème del a crème” among educators as they exhibit distinct teaching methods that set them apart from regular, non-master teachers.

Despite the established roles, responsibilities, and skills of Master Teachers and their effect on teaching performance, there exists a noticeable research gap, particularly within the context of the division under study, regarding the perception of school teachers on the supervisory skills of MTs and its correlation with their teaching performance. Hence, the present study aimed to address the research gap by investigating the perspectives of public-school teachers on the master teachers’ supervisory skills and how it affects their teaching performance. The study also aimed to propose a supervisory development plan that can help both teachers and master teachers.

Research Questions

The study aimed to determine the level of Master Teachers’ instructional supervisory skills and teacher’s performance in the division of Valencia City for the School Year 2023-2024. The result of the study would serve as the basis for the school supervisory plan.
Specifically, it aimed to answer the following questions:

1. How are the respondents’ distributed in terms of sex, highest educational attainment, teaching experience, ethnicity, and attitude towards instructional supervision?
2. What is the level of master teacher’s instructional supervisory skills based on coaching, mentoring, clinical observation, pedagogical, technological, and evaluation?
3. What is the level of teachers’ performance with regard to teaching and learning process, students’ outcome, community involvement, professional growth and development?
4. Is there a significant relationship between Master Teacher’s instructional supervisory skills and the teachers’ performance?

5. Is there a significant difference in the teachers' performance when grouped according to their characteristics?
6. Based on the findings of the study, what school instructional supervisory plan can be designed?

Hypothesis

Problems 1, 2, 3, and 6 were hypotheses – free. On the basis of Problems 4 and 5, the null hypotheses were tested at 0.05 level of significance:

H01: There is no significant relationship between master teacher's instructional supervisory skills and the teachers' performance.

H02: There is no significant difference in the teachers' performance when grouped according to their characteristics.

METHODOLOGY

Research Design

The present study utilized a quantitative research design, particularly descriptive correlational method. Descriptive correlation is a research method that aims to understand the relationship between variables without necessarily implying causation. In this approach, researchers collect data on multiple variables of interest and analyse how they relate to each other. In the present study, utilizing a quantitative research design with a descriptive correlational method allowed for the examination of the relationship between the secondary school teachers' characteristics, perceived teaching performance, and the perceived level of their Master Teachers' instructional supervisory skills.

By collecting and analysing data on these variables, the study provided valuable insights into their associations, contributing to a deeper understanding and the creation of the proposed Master Teacher's Supervisory Plan that would help improved the teachers' performance in attaining quality education.

Study Setting

The present study was conducted among the four hundred seventeen (417) teachers and one hundred twelve (112) Master Teachers of the Division of Valencia City in the Province of Bukidnon. The division is composed of ten (10) school districts located in thirty-one (31) different barangays headed by Public School District Supervisor and the Education Program Supervisors (EPS) with their assigned focus to insure the quality of education and the implementation of the programs and projects so that no Valencianos are left behind. DepEd Valencia City, through its various divisions and offices, oversees the administration of public schools within its jurisdiction. This includes curriculum development, teacher hiring and training, school infrastructure development, student enrollment, and educational assessment.

The division of Valencia became the third independent School Division in the Province of Bukidnon in 1993 to cater to the growing number of schools in the City of Valencia. At present, the Division Office is home to seven secondary schools, twelve (12) elementary schools and twenty-five (25) integrated schools in the locality. It has conducted a series of training to capacitate both Master Teachers and Teachers I-III in their respective fields. The Division of Valencia City thrive for excellent, thus offers teachers' training in academic quality and teaching performance. The outcomes of this research can positively impact the educational landscape of the locale of the study that can contribute to the improvement of the broader educational system, and highlight the contributions of effective teachers and school heads, leading to professional recognition and career advancement opportunities. Figure 2 presents the map of the City of Valencia, highlighting the locations of the study.

Research Respondents

The respondents of the study included five hundred twenty-five (529) teachers of elementary and secondary schools in the Division of Valencia. This diverse group of educators collectively contributed to the study's breadth and depth. By encompassing such a broad spectrum of participants, the study gained valuable insights into the multifaceted dynamics of master teachers' instructional supervisory skills and teachers' performance across different grade levels and subject areas within the educational landscape of Valencia City.

Sampling Technique

For this research, the researcher utilized the Slovin's formula to choose a sample size of 33% from the total population of teachers in the Division of Valencia City. The objective was to represent all teachers within the division with the existing master teachers assigned, ensuring each one had a recognized, non-zero probability of being selected for the sample.

The study initially gathered data regarding the total number of secondary and elementary school teachers with master teachers in the Division of Valencia City, represented as N. Moreover, the standard deviation (σ) of specific pertinent characteristics was considered, offering insights into the diversity within the teacher cohort. Additionally, the research defined the desired precision level (E), which represented the maximum acceptable margin of error for the study.

Once the sample size was established, the researcher proceeded to persuade the five hundred twenty-nine (529) teachers and master teachers from the entire population. This approach guaranteed that every teacher in the Division of Valencia had an equal opportunity to be part of the study, thereby ensuring the comprehensiveness of the sample selection. Following this, the researcher gathered and scrutinized data from these chosen teachers, enabling her to derive significant insights aligned with the research objectives. It is crucial to acknowledge that while universal non-probability sampling

promotes inclusivity, the precision of the findings hinges on the accuracy of population data and the assumption of uniformity among the teacher population in the district.

Research Instruments

To gather the necessary data, this study used two sets of questionnaires that underwent reliability testing. The first survey questionnaire was distributed to the elementary and secondary school teachers and master teachers.

Part I of this survey questionnaire included the respondent's characteristics such as their sex, highest educational attainment, teaching experience and ethnicity and a questionnaire that contained indicators of teachers' attitude towards instructional supervision. The teachers' attitude towards instructional supervision was assessed using a Likert scale questionnaire adopted from Ramin (2014). It contained ten statements which the respondents had to check regarding their belief on supervision. It used a 4-point Likert scale, where 4 has the description of "Strongly Agree of what I believe," 3 for "Agree of what I believe," 2 for "Disagree of what I believe," and 1 for "Strongly Disagree of what I believe."

Part II of the questionnaire for the MTs contained statements that revolved around the components of instructional supervisory skills. It included components such as coaching, mentoring, clinical observation, pedagogical and technological evaluation. The indicators for the instructional supervisory skills were adapted and modified from the study of Laude et al. (2014). The statements in this questionnaire were modified to fit the context of the present study. To further enhance the relevance of the study, a pool of experts was consulted to review the modified statements. Their insights helped refine the adjustments and confirm that the changes were well-suited to the locale context.

Part III contained indicators of teaching performance that was also adapted and modified from Virginia Public Schools Performance Evaluation for Teachers (2016). It included areas such teaching and learning process, student's outcome, community involvement, and professional growth and development. The statements in each component were adjusted to align with the context of the study. This involved removing statements that were not relevant to the Philippine setting and replacing them with those that are appropriate and applicable. Additionally, efforts were made to ensure that the new statements maintained the original intent and meaning while being culturally and contextually suitable.

The first set of questionnaires was to assess teacher's performance. It contained Part I which is the respondent's characteristics such as their sex, highest educational attainment, teaching experience, ethnicity, and attitude towards instructional supervision and Part III the teacher's level of teaching performance. The other set of questionnaires was to assess their instructional supervisory competence of Master Teachers. It also contained part I was for the respondent's characteristics such as their sex, highest educational attainment, teaching experience, ethnicity, and attitude towards instructional supervision and Part II was about master teachers' supervisory skills.

Validity and Reliability of the Instrument

The indicators on the teacher's performance were adopted from the Virginia Public Schools Performance Evaluation for Teachers (2016) while the indicators for the master teachers' supervisory skills were adopted from the study of Laude et al. (2014). Both were modified to fit the context of the present study.

To evaluate the validity and reliability of the questionnaire, the researcher asked three (3) experts in the field of education for face testing. After this, they recommend that the integrity and effectiveness of the questionnaire were relevant in capturing accurate data. It adheres to the questionnaire design principles which is likely to guarantee the appropriateness of data collection in educational research. Before it was administered, the research instrument was pilot-tested on thirty (30) teachers from the division of Bukidnon and Valencia City with the same characteristics but were not part of the respondents of the present study. The results of the pilot testing were used for validity and reliability tests.

It can be seen from the results that in the domains related to attitudes towards instructional supervision, teachers' performance, teaching and learning processes, students' outcomes, community involvement, and professional growth and development, the coefficients ranged from .779 to .897. These results suggest that the items within each of these constructs reliably measure their respective concepts, with coefficients well above the commonly accepted threshold of .70 for satisfactory reliability.
Moreover, when examining the instructional supervisory skills, which encompass coaching, mentoring, clinical supervision, pedagogical knowledge, technological competence, and evaluation proficiency, the reliability coefficients were notably high, ranging from .923 to .954. The overall Cronbach's Alpha coefficient of .984 demonstrated exceptional internal consistency with an impressive overall.

Categorization of Variables

Part I. Respondents Characteristics
Sex Male
Female
Highest Educational Qualification
Doctorate Degree
Master's Degree with PhD units
Master's Degree
Bachelor's degree with Master's units
Teaching Experience
16 years and above
11-15 years
6-10 years
3-5 years
3 years and below
Ethnicity

Bukidnon
Higaonon
Manobo
Matigsalog
Talaandig
Tigwahanon
Umayamnon
None of the above

System of Scoring

Attitude Towards Instructional Supervision

Scale	Range	Description	Interpretation
4	3.14 – 4.20	Strongly Agree	Very Positive
3	2.61 – 3.40	Agree	Positive
2	1.81 – 2.60	Disagree	Negative
1	1.00 – 1.80	Strongly Disagree	Very Negative

Part II. Master Teacher's Supervisory Skills

Scale	Range	Description	Interpretation
4	3.14 – 4.00	Strongly Agree	Excellent
3	2.61 – 3.40	Agree	Average
2	1.81 – 2.60	Disagree	Below average
1	1.00 – 1.80	Strongly Disagree	Poor

Part III. Teacher's Level of Teaching Performance

Scale	Range	Description	Interpretation
4	3.14 – 4.00	Strongly Agree	Outstanding
3	2.61 – 3.40	Agree	Very Satisfactory
2	1.81 – 2.60	Disagree	Satisfactory
1	1.00 – 1.80	Strongly Disagree	Poor

Data Gathering Procedure

The researcher first secured a permit to conduct the study from the Office of Graduate Studies and submitted it to the Division Office for approval to conduct the study among secondary school teachers. Once the letter request was approved, another letter request was sent to the principals of the identified schools for the same purpose of asking permission to conduct the study. Then, the researcher recruited teachers to participate in the study. The researcher personally visited the identified secondary schools and informed the teachers of the purpose and the general overview of the study. It was also reiterated to the respondents that their participation was voluntary. Hence, they could opt not to participate for whatever reason. Their decision to participate would not in any way affect their positions in the school. When the number of respondents was identified, the researcher then distributed the survey questionnaire among the respondents. It was collected after a week, and the results were tallied, and the necessary statistical treatment was performed.

Statistical Treatment of Data

Descriptive statistics were employed to outline the fundamental attributes of the data in the study, offering concise descriptions of both the sample and the measurements.
First, in identifying the respondent's characteristics in terms of sex, highest educational attainment, teaching experience, ethnicity, and attitude towards instructional supervision, this study employed frequency and percentage as statistical tools.

Secondly, in identifying Master Teacher's instructional supervisory skills in terms of coaching, mentoring, clinical observation, pedagogical, and technological evaluation, mean and standard deviations were also used.

In the same way, when determining the teacher's level of teaching performance in terms of teaching and learning process, student's outcome, community involvement, professional growth and development, mean and standard deviations were used as statistical tools.

In ascertaining the significant relationship between the Master Teacher's instructional supervisory skills and teaching performance, Pearson r moment correlation was used as statistical tool. The same statistical tool was also used to determine the significant relationship between the teacher's teaching performance in terms of teaching and learning process, student's outcome, community involvement, professional growth and development in relation to their characteristics such as sex, highest educational attainment, teaching experience, ethnicity and attitude towards instructional supervision

Scope and Limitations

The scope of the study included teachers in the division of Valencia City. It investigated the teacher's characteristics, their attitude towards instructional supervision, their teaching performance in terms of teaching and learning process, student's outcome, community involvement and professional growth and development. It also determined the level of Master Teacher's supervisory skills. Furthermore, the significant relationship between the teacher's teaching performance and master teacher's supervisory skills in terms of coaching, mentoring, clinical supervision, pedagogical, technological and evaluation skills was also investigated. Finally, the study recommended a master teacher supervisory plan that aimed to capacitate master teachers in assisting the secondary school teachers in improving their performance.

The present study was limited since the assessment of the teaching performance and the MTs supervisory skills was done one time. Time limitations could have limited the longitudinal aspect of the study, preventing the researcher from assessing the long-term impact of master teachers' supervisory plans on teacher performance. Additionally, the use of survey questionnaires alone as the instrument may have limited the depth of understanding. While surveys are efficient for collecting data from a large number of participants, it may not have totally captured the complex aspects of teaching performance and supervisory skills.

RESULTS AND DISCUSSION

Research Question 1. How are the respondents distributed in terms of sex, highest educational attainment, teaching experience, ethnicity, and attitude toward instructional supervision?

Table 1.1. Distribution of the Respondents in terms of Sex

Variables	Frequency	Percentage
Male	80	15.1
Female	449	84.94
Total	**529**	**100.0**

Table 1.1 depicts the statistical result of the respondents' profile in terms of sex. It shows that the majority of the study's respondents are female, which comprised 449 individuals (84.9%) of the study's population. Meanwhile, only 80 teachers are male, which constitutes the remaining 15.1% of the population. The results indicate that the teaching force of the study's locale is dominated by female teachers, reflecting a gender imbalance in the profession. This dominance could influence various aspects of the educational environment, including teaching styles, instructional supervision, and teaching performance.

The result coincides with the Organization for Economic Cooperation and Development (OECD, 2024) report that observed scarcity of male teachers in the teaching profession. The gender disparities and under-representation of men in the field of teaching are influenced by complex factors such as historical biases, societal norms, and structural barriers. According to Wong (2019), the decision to educate young children was historically entrenched as an activity associated with femininity. This perception often limited opportunities for men to enter the field and perpetuated gender stereotypes about caregiving roles.

However, Dahl (2021) explained that the teaching profession is evolving with an increasing number of men entering the field, which is traditionally female-dominated. This shift brings diverse perspectives and teaching styles, contributing to a more balanced and inclusive educational environment.

Table 1.2. Distribution of the Respondents' in terms of Highest Educational Attainment

Variables	Frequency	Percentage
Doctorate Degree	12	2.3
Master's Degree with PhD Units	62	11.7
Master's degree	144	27.2
Bachelor's Degree with master's Unit	311	58.8
Total	**529**	**100.0**

Table 1.2 shows the distribution of the respondents in terms of highest educational attainment. It reflects that the greatest number of respondents, 311 individuals (58.8%), have earned units in Masters. Meanwhile, the lowest number of respondents are those with doctorate degree holders, which include only three teachers or 2.3% of the study's population. The overall result shows a significant commitment to higher education among the teachers, with nearly all participants engaged in or having completed postgraduate education. This implies that high percentage suggests a strong inclination towards advanced education, not necessarily at the doctoral level. This trend highlights the value placed on advanced academic credentials, particularly at the master's level, which reflects the educational requirements or professional aspirations prevalent in the division under study.

The results support the Teaching and Learning International Survey (TALIS, 2018) report, which states that teachers' educational attainment encompasses both their pre-service training and any supplementary qualifications obtained during their tenure. The caliber and extent of their initial education significantly influence their performance upon entering the teaching profession and should inform subsequent educational pursuits and training needs (Pardillo, 2021; Ganal et al., 2019), as well as other facets of their professional growth. For instance, inadequate or substandard formal education may heighten the necessity for ongoing professional development among teachers. Conversely, a vigorous formal education background may instigate a stronger inclination towards seeking further educational and training opportunities to refine skills acquired during their extensive academic training.

On the other hand, the minimal number of respondents with units in Ph.D. or full-fledged PhDs support the claims of Rungduin and Miranda (2018) that factors such as workload and expenses are the primary reasons teachers shy away from pursuing graduate studies. Pursuing a Ph.D. while maintaining a career in education is demanding in terms of time and energy, given the rigorous academic requirements and research obligations typically associated with doctoral studies. Additionally, the financial costs involved, including tuition and research expenses, can pose significant barriers for educators, especially those with familial responsibilities or limited financial resources.

Table 1.3. Distribution of the Respondents in terms of Teaching Experience

Variables	Frequency	Percentage
16 years and above	191	36.1
11 - 15 years	113	21.4
6 – 10 years	152	28.7
3 – 5 years	46	8.7
3 years and below	27	5.1
Total	**529**	**100.0**

Table 1.3 provides the distribution of the respondents in terms of teaching experience. It explains that the highest frequency is seen in the category of teachers with 16 years and above of service, comprising 191 (36.1%) of the total respondents. This indicates a

significant portion of the teaching workforce is in their mid-career stage, suggesting a relatively stable group of experienced teachers who are likely to have developed a solid teaching practice and familiarity with the educational system. On the other hand, the lowest frequency is observed in the category of teachers with 3 years or below of service, making up only 27 individuals (5.1%) of the respondents. This low percentage implies a smaller influx of new teachers into the division, which could imply challenges in attracting new educators or a stable workforce with low turnover rates. Balancing the experience with fresh perspectives from new educators is essential for ongoing innovations and adaptability in teaching practices within the Division.

Previous research shows that experienced teachers are vital in shaping the education system and fostering the growth of students and society. For instance, Marshall (2021) claimed that teachers improve in raising student achievement as they gain experience, becoming nearly twice as effective as novices after 15 years. Furthermore, Graham et al. (2020) found that teachers with two decades or more of experience are significantly more effective than they were at the beginning of their careers.

Sharrock (2023) asserted that teachers who are in early career positions are pivotal groups for mentorship, leadership cultivation (Ma, 2022; Luftiyana & Sugito, 2020), and strategies aimed at retaining talent within educational institutions (Pardillo et al., 2021). Additionally, the results underscore the necessity for tailored support and initiatives for professional development. These endeavors are crucial for facilitating their transition into the teaching profession, fostering effective instructional techniques, and navigating the initial challenges of their careers.

Table 1.4. Distribution of the Respondents' in terms of Ethnicity

Variables	Frequency	Percentage
Bukidnon	139	26.3
Higaonon	8	1.5
Manobo	21	3.9
Matigsalog	2	0.4
Talaandig	13	2.5
Tigwahanon	9	1.7
Umayamnon	1	0.2
None of the above	336	63.5
Total	**529**	**100.0**

Table 1.4 reflects the distribution of respondents in terms of ethnicity. It reveals significant diversity among the teaching staff. The largest group, constituting 336 individuals (63.5%) of the respondents, falls under the category None of the above, indicating that the majority of teachers do not identify with any of the specified indigenous ethnic groups. This reflects the broader national or regional ethnic demographics or a predominantly non-indigenous teaching workforce. On the other hand, the smallest representation is found among the Umayamnon, with only 1 individual (0.2%) of the respondents identifying as part of this group. The results corroborate the article in Bukidnon website (Bukidnon.gov.ph, 2012)

that the mixture of cultures in Bukidnon stems from the different levels of interaction and integration with outside influences. The recent immigrants add to this cultural diversity, blending their own traditions with those of Bukidnon. These dynamics create a unique cultural combination, reflecting both the preservation of indigenous traditions and the integration of modern influences.

Table 1.5. Distribution of the Respondents' Attitude Towards Instructional Supervision

Legend:

0.50-4.00	Strongly Agree/Very Positive	1.50-2.49	Disagree/Negative
2.50-3.49	Agree/Positive	0.00-1.49	Strongly Disagree/Very Negative

Indicators	Mean	SD	Description
Supervisor is more towards finding teachers' weaknesses.	2.85	0.94	Agree
Supervision done is trustworthy.	3.41	0.58	Agree
The supervision is aimed at sharing shared responsibilities between teachers and supervisors	3.52	0.56	Strongly Agree
Supervision is performed with the aim of control rather than upgrading.	2.76	0.94	Agree
Supervision is an examination and not a cooperation process.	2.67	0.93	Agree
Supervision creates excitement for teachers.	2.97	0.79	Agree
Supervision focuses heavily on teachers.	2.94	0.80	Agree
Supervision is a supportive process aimed at professional growth and improvement.	3.57	0.59	Strongly Agree
Supervision helps improve instructional strategies, student learning outcomes, and overall professional development.	3.63	0.53	Strongly Agree
Supervision fosters open communication, trust, and mutual respect between supervisors and teachers.	3.60	0.54	Strongly Agree
Supervisor is more towards finding teachers' weaknesses.	2.85	0.94	Agree
Supervision done is trustworthy.	3.41	0.58	Agree
The supervision is aimed at sharing shared responsibilities between teachers and supervisors	3.52	0.56	Strongly Agree
Overall	**3.19**	**0.45**	**Agree**

Table 1.5 shows the distribution of the respondents' attitude towards instructional supervision with an overall mean of 3.19 (SD=0.45), described as Agree and interpreted as Positive. This means that respondents perceive instructional supervision as beneficial, which is essential for fostering a supportive educational environment. It indicates that teachers see supervision as a tool for development rather than mere evaluation, they are more likely to embrace feedback and implement changes that enhance their teaching methods. This Positive attitude towards instructional supervision implies that when teachers perceive supervisors as allies, it can lead to increased sharing of best practices and mutual support and enhancing the overall educational experience. The findings underscore the importance of how instructional supervision is perceived by teachers can create avenues for teachers to provide feedback on supervisory practices, fostering an atmosphere of mutual respect and continuous improvement.

According to Elbana (2024) and Marshall (2019), teachers' attitudes toward instructional supervision can vary significantly, ranging from apprehension to appreciation, depending on the approach and execution of the supervisory process. Instructional supervision is a

process within educational settings where administrators or instructional leaders oversee and support teachers' professional development and instructional practices. It involves various activities such as classroom observations, providing constructive feedback, offering guidance on curriculum implementation, and facilitating professional development opportunities. The primary goal of instructional supervision is to enhance the quality of teaching and learning by promoting effective instructional strategies, addressing areas for improvement, and ensuring alignment with educational objectives and standards.

Notably, the indicator Supervision helps improve instructional strategies, student learning outcomes, and overall professional development received the highest mean score of 3.63 (SD = 0.53), described as Strongly Agree and interpreted as Very Positive. This means that respondents strongly believe in the beneficial impacts of supervision on their professional growth and the effectiveness of their teaching practices. The results imply that the instructional supervision by Master teachers is generally well-received in the Division, suggesting that it is perceived as beneficial and supportive for the majority of the teaching staff. The high levels of positive attitudes reflect that the teachers value the professional input and assistance given by the MTs as one of the significant employees of the school. This input and assistance are usually given by MTs during class observations, meetings, and in-service trainings and other related activities.

The results align with the findings of Villastique (2019), which state that supervision is viewed by teachers as a process that helps them identify and address shortcomings, leading to better teaching practices and student learning outcomes. This positive perception is particularly evident among less experienced teachers who are more open to feedback and guidance. Additionally, Elbanna (2024) asserted that teachers who have a positive attitude toward supervision often see their supervisors as knowledgeable and experienced mentors who can provide valuable insights and support. This collaborative approach fosters a sense of trust and cooperation, which is essential for effective supervision. Similarly, Berhanu (2024) explained that teachers who view supervision as a means to enhance their professional growth and development tend to have a more positive attitude towards it. This is because they see supervision as an opportunity to improve their teaching skills and stay updated on best practices in the field

On the other hand, the indicator Supervision is an examination and not a cooperation process received the highest mean score of 2.67 (SD = 0.93), described as Agree and interpreted as Positive. This means that some teachers possibly experiencing supervision as more controlling and evaluative rather than supportive. The minimal negative feedback indicates that only a small number of teachers have concerns or face challenges with the current supervision approach. It implies that if supervision is seen solely as an examination, it may hinder open communication and trust between supervisors and their supervisees that can result in a lack of feedback and support, ultimately affecting performance and morale of teachers. This could indicate a need for reforms in supervisory practices that promote collaboration among educators. Addressing these concerns through targeted support and open communication could further enhance the overall effectiveness and acceptance of instructional supervision in the division.

The study by Kurka and Berhanu (2019) claimed that teachers hold a negative attitude toward school-based instructional supervision and are dissatisfied with its implementation. Their attributed the results to supervisors who lack the necessary skills and knowledge to provide effective supervision, which negatively impacted teachers' attitudes. Hence, Basilio and Bueno (2021) posited that when instructional supervision is viewed as a collaborative and developmental effort focused on improving teaching practices and student learning outcomes, teachers are more likely to respond positively to it.

Research Question 2. What is the level of master teacher's instructional supervisory skills based on coaching, mentoring, clinical observation, pedagogical, technological and evaluation?

Table 2.1. Distribution of Master Teachers' Level of Instructional Supervisory Skills in Terms of Coaching

Indicators	Mean	SD	Description
Master teachers show commitment to their own continual learning, which is essential for guiding and supporting the professional development of other teachers	3.63	0.50	Strongly Agree
Master teachers have proven track record of high performance in teaching, including producing student gains in various settings.	3.48	0.54	Strongly Agree
They work with a diverse range of personalities among the teachers.	3.61	0.54	Strongly Agree
Master teachers are familiar with a wide range of teaching and learning styles and can support teachers with different approaches.	3.58	0.55	Strongly Agree
Master teachers understand that effective coaching is the application of adult learning theory and its application to especially to the new teachers.	3.54	0.52	Strongly Agree
Master teachers have strong interpersonal skills for sustaining a productive mentor-mentee relationship.	3.61	0.54	Strongly Agree
Master teachers have strong values, principles, and a coaching philosophy to guide teachers.	3.58	0.53	Strongly Agree
They can support teachers in navigating both successful and challenging situations.	3.62	0.52	Strongly Agree
Master teachers can demonstrate a willingness and ability to adapt and change coaching approaches based on the needs of the teachers.	3.65	0.51	Strongly Agree
Master teachers can establish a positive and supportive relationship with teachers to foster trust and collaboration.	3.70	0.48	Strongly Agree
Master teachers can provide instructional leadership by coaching colleagues, conducting observations, and facilitating professional development activities	3.63	0.55	Strongly Agree
Master teachers will empower teacher through asking powerful questions, providing constructive feedback, facilitating reflection, and encouraging action.	3.62	0.54	Strongly Agree
Overall	**3.60**	**0.40**	**Strongly Agree**

Legend: 3.41 – 4.00 Strongly Agree/Excellent *1.81 – 2.60 Disagree/Below Average*
2.61 – 3.40 Agree/Average *1.00 – 1.80 Strongly Disagree/Poor*

Table 2.1 presents the Master Teachers' level of instructional supervisory skills in terms of coaching, with an overall mean of 3.60 (SD = 0.40) described as Strongly Agree and interpreted as Excellent. This means that Master Teachers possess strong instructional supervisory skills, particularly in coaching. This suggests a high level of competence in

guiding and supporting other educators. The excellent rating of coaching skills implies that Master Teachers can serve as valuable resources for professional development within their schools and their expertise can be leveraged to train other teachers, facilitating a culture of continuous improvement. The strong agreement on coaching skills highlights the importance of ongoing professional development for educators, master teachers should continue to engage in learning opportunities to refine their skills and stay updated with the latest educational practices.

The study of Echeche (2022), in particular, focused on analyzing the coaching and mentoring performance and practices of master teachers by assessing their performance based on IPCRF ratings and their coaching and mentoring practices through a specially designed survey questionnaire encompassing eight components. The results indicated that teachers held master teachers in high regard, as evidenced by the computed negative t-values between the responses of the two groups. The correlation test revealed a significant moderate positive correlation between coaching and mentoring practices and various components. However, the performance of master teachers showed a low positive correlation with their coaching and mentoring practices in terms of interpersonal skills, and a very low positive correlation with the diversity of learners' domain.

In particular, the highest-rated indicator, with a mean of 3.70 (SD = 0.48), described as Strongly Agree and interpreted as Excellent is the ability of Master Teachers can establish positive and supportive relationships with teachers, to foster trust and collaboration. The score reflects a belief that Master Teachers contribute to a positive work culture, which can lead to increased job satisfaction and morale among teachers. These results highlight the importance of strong interpersonal skills, adaptability, and a coaching philosophy rooted in adult learning theory, which empowers teachers through constructive feedback and facilitating reflection. This implies that Master Teachers can take on leadership roles in professional development, guiding their peers in building positive and supportive relationships. When master teachers make themselves accessible to teachers and being visible throughout school days and beyond in extending their help to build trust and foster open communication, it is important for them to demonstrate that they are committed to supporting teachers and are willing to work together to achieve common goals, sense of unity and shared responsibility.

Similarly, Echeche (2022) posited that strengthening the coaching relationships between teachers and the Master Teachers helps to develop a shared language that promotes effective instruction. This collaboration enhances the selection, training, and support of mentors and improves schools' effectiveness in using observation, feedback, and coaching to support the development of new and seasoned teachers.

Conversely, the lowest-rated indicator with a mean of 3.48 (SD=0.54) described as Strongly Agree and interpreted as Excellent pertains to the Master teachers have proven track record of high performance in teaching, including producing student gains in various settings. This means that Master Teachers are viewed as credible and competent educators and their track record serves as validation of their expertise and effectiveness in fostering student achievement. It implies that the recognition of MT's extensive experience can lead to the establishment of professional learning communities where

educators collaborate, share experiences, and engage in reflective practice. This collaborative environment can foster continuous improvement and innovation in teaching. Networking and community engagement for Master Teachers to the wider community can fostering partnerships that enhance educational opportunities while their proven track record can attract resources, support, and collaboration from external stakeholders for a classroom environment that encourages academic success.

Hence, Abreu et al. (2019) emphasized that seeking feedback and continuous improvement is one critical aspect of improving MTs coaching skills. Regularly soliciting feedback from the teachers and even the students and using it to refine coaching strategies and improve overall effectiveness helps MTs stay adaptable and effective in their coaching roles. Master teachers have to work closely with teachers to improve their practice, focusing on content knowledge, pedagogy, and classroom management. This collaborative approach helps teachers develop their skills and confidence, leading to better student outcomes

Table 2.2. Distribution of the Master Teachers' Level of Instructional Supervisory Skills in Terms of Mentoring

Indicators	Mean	SD	Description
Mentor co-teachers in content and self-difficulties.	3.57	0.60	Strongly Agree
Assists in designing capacity development programs for teachers.	3.49	0.59	Strongly Agree
Conduct echo-seminars for co-teachers.	3.42	0.67	Strongly Agree
Serves as trainer in school-based INSET.	3.54	0.58	Strongly Agree
Helps in the proper and accurate dissemination or implementation of school policies.	3.60	0.56	Strongly Agree
Uses active listening skills as means to improve communication.	3.59	0.51	Strongly Agree
Conducts in-depth studies or action researches	3.22	0.84	Strongly Agree
Provide guidance and assistance as the novice teacher assumes new roles and responsibilities.	3.59	0.55	Strongly Agree
Provides a variety of growth experiences for the beginning teacher.	3.60	0.54	Strongly Agree
Assists beginning teachers in using the curriculum guide as aid for teaching.	3.68	0.51	Strongly Agree
Gives technical assistance to new teachers in formulating lesson plans.	3.64	0.60	Strongly Agree
Assists principal in instructional monitoring of teachers.	3.57	0.56	Strongly Agree
Describes the ways in which adults identify and solve problems.	3.46	0.61	Strongly Agree
Clarifies the role of observation and evaluation.	3.55	0.53	Strongly Agree
Evaluates teacher-made tests and interpret results.	3.44	0.63	Strongly Agree
Aids in applying varied teaching techniques to make teaching more fun and interactive.	3.56	0.63	Strongly Agree
Facilitates in conceptualizing training proposals during INSET.	3.51	0.60	Strongly Agree
Contributes ideas in crafting the School Improvement Plan (SIP) and Annual Implementation Plan (AIP).	3.45	0.70	Strongly Agree
Assist the school head in instructional monitoring of teachers.	3.60	0.59	Strongly Agree
Assists school head in class monitoring.	3.57	0.60	Strongly Agree
Overall	**3.53**	**0.44**	**Strongly Agree**

Legend: *3.41 – 4.00 Strongly Agree/Excellent* *1.81 – 2.60 Disagree/Below Average*
2.61 – 3.40 Agree/Average *1.00 – 1.80 Strongly Disagree/Poor*

Table 2.2 shows the distribution of the Master Teachers' level of instructional supervisory skills in terms of mentoring with an overall mean score of 3.53 (SD=0.44) described as Strongly Agree and interpreted as Excellent. The excellent rating of mentoring skills

means that Master Teachers are committed to their own professional development and to helping other teachers grow. They likely engage in ongoing learning to refine their mentoring strategies and stay updated with the latest educational practices. This implies that the strong mentoring skills are well-positioned to take on formal mentorship roles in guiding novice teachers or those who are seeking assistance to enhance their instructional practices that can help build a supportive teaching community and facilitate the transfer of knowledge and experience. The high level of mentoring skills among Master Teachers suggests a collaborative culture within the educational environment, the culture that encourages peer-to-peer learning and the sharing of best practices. Master Teachers may employ different mentoring approaches based on the needs and learning styles of their mentees to ensure that mentoring is tailored to individual needs while maximizing its effectiveness.

According to Buagas and Ching (2023) posited that mentoring as an aspect of instructional supervision aims to enhance learning outcomes and elevate the quality of education by enhancing students' cognitive achievements. Mentoring is geared towards equipping teachers with comprehensive competencies, including personal, pedagogical, professional, and social skills. Through mentoring, school principals and master teachers support teachers in managing the learning process and enhancing their professionalism, particularly in the preparation of learning materials. Hence, instructional supervision should prioritize the development of all aspects of teacher competence (Sartana, 2020).

The highest-rated indicator with mean scores of 3.68 (SD=3.64), described as Strongly Agree, and interpreted as Excellent was Assisst beginning teachers in using the curriculum guide as aide for teaching. The result means that Master Teachers are perceived as highly effective in supporting beginning teachers and play a crucial role in helping novice educators navigate the curriculum and utilize it effectively in their teaching practices, respectively. The implication is that providing strong support through effective mentoring can lead to higher retention rates among beginning teachers since new educators can feel that they are supported and equipped to succeed, they are more likely to strengthen their commitment as educators. The division implements structured mentorship programs where Master Teachers are assigned as mentors to new teachers. These programs include regular meetings, observations, and feedback sessions to support the professional growth of new educators.

The results which reflect the MTs efficiency in mentoring new teachers corroborate the claim of Dingal (2023) and Ikromova (2020) that the mentoring of master teachers consistently provides opportunities, especially for new teachers to enhance their knowledge and skills in developing teaching materials and employing various learning methods. These skills positively impact both teachers' performance and students' academic achievement (Sangalang, 2018). Similarly, Felisilda and Malaga (2019) found that mentoring practice helps teachers as they are provided with guidance that makes teaching and learning more manageable. It also involves sharing of experiences, provision of feedback, and offering of practical advice to navigate challenges and capitalize on opportunities.

On the other hand, the lowest-rated indicator, with a mean score of 3.22 (SD = 0.84), described as Strongly Agree and interpreted as Excellent pertains to Conducts in-depth studies or action research. This means that Master Teachers excel in direct mentorship and instructional support, but there is potential for growth in their involvement with research activities. Enhancing their skills in this area could make their mentorship even more effective as they could incorporate evidence-based practices and continuous improvement techniques into their mentoring strategies. The conduct in-depth studies imply that enhancement of mentoring skills can address specific classroom challenges, and implement strategies that are proven to be effective, ultimately enhancing the overall quality of education. They are encouraged to looked into specific problems or challenges in their classrooms, create innovations, and document the process through an action research so that their actions and innovations are supported with evidences. It suggests that the school or Division may conduct an annual division-wide research congress for educators to share their findings, collaborate, and further improve teaching practices across the board. Yet, many teachers and MTs are grappling with the challenges of conducting research, hence, it is an area that really needs improvement.

Basilio and Bueno (2021) posited that despite being a challenging task, conducting research can be a highly motivating and energizing experience for master teachers, as it allows them to explore new ideas, evaluate teaching practices, and re-evaluate daily choices based on evidence and guiding questions. Echeche (2022) emphasized that Master teachers can improve their mentoring of other teachers by adopting a more structured and supportive approach. This involves setting clear goals and expectations, providing regular feedback and guidance, and fostering a collaborative learning environment. Additionally, they can facilitate peer-to-peer learning by organizing workshops, coaching sessions, and professional development opportunities that allow teachers to share their expertise and learn from one another.

Table 2.3 Distribution of the Master Teachers' Level of Instructional Supervisory Skills in Terms of Clinical Observation

Indicators	Mean	SD	Description
Approach teachers with empathy, creating a safe environment for open communication.	3.72	0.45	Strongly Agree
Actively listen, provide constructive feedback, and articulate expectations clearly.	3.70	0.50	Strongly Agree
Engage in reflective practice enhances self-awareness and critical thinking.	3.68	0.49	Strongly Agree
Adapt supervision to individual learning styles and needs is crucial for effective guidance	3.61	0.54	Strongly Agree
Stay updated with the latest research, techniques, and ethical guidelines to inspire teachers to grow professionally.	3.44	0.63	Strongly Agree
Balance constructive feedback with praise motivates supervisees to excel and improve continuously.	3.62	0.54	Strongly Agree
Understand the role of clinical supervision in monitoring and ensuring quality services.	3.66	0.49	Strongly Agree
Familiarize with various theoretical models of clinical supervision and establish a productive learning.	3.46	0.60	Strongly Agree
Adherence to professional and ethical standards, such as protecting and maintaining confidentiality.	3.63	0.48	Strongly Agree
Create a respectful environment, seek.	3.71	0.46	Strongly Agree

Overall	**3.62**	**0.40**	**Strongly Agree**

Legend: 3.41 – 4.00 Strongly Agree/Excellent 1.81 – 2.60 Disagree/Below Average
2.61 – 3.40 Agree/Average 1.00 – 1.80 Strongly Disagree/Poor

Table 2.3 presents the Master Teachers' level of instructional supervisory skills in terms of clinical observation, including ten indicators assessed with the overall mean score of 3.62 (SD=0.40), described as Strongly Agree and interpreted as Excellent. The strong agreement on their skills in clinical observation means that the supervisory role that Master Teachers is important in guiding and mentoring other educators which reinforces their status as instructional leaders in school. Their proficiency in clinical observation implies that Master Teachers can lead professional development sessions focused on observation techniques and feedback strategies that can help other educators refine their teaching practices and enhance their own observational skills. It suggests that MT's may employ differentiated supervisory skills and observation techniques address the specific needs of the teachers they are observing to ensures relevant and actionable feedback and maximizing its impact on teaching practices.

According to Marciano et al. (2019) by observing teachers in action, Master Teachers can also model effective instructional techniques, foster reflective practice, and promote a culture of continuous improvement within the educational community

Among the indicators, the highest-rated aspect is on Approach teachers with empathy, creating a safe environment for open communication with a mean of 3.72 (SD=0.45), described as Strongly Agree and interpreted as Excellent. Approaching teachers with empathy means fostering a supportive educational environment through recognizing the importance of emotional intelligence in educational leadership and building rapport with teachers to foster open communication, and promote a positive and supportive atmosphere conducive to professional growth and development. This implies that schools can invest in training programs that focus specifically on developing empathy and communication skills among teachers such as workshops and seminars that can provide educators with practical strategies for fostering empathetic interactions. The emphasis on empathy can significantly influence the overall school culture that is likely to promote collaboration, reduce conflicts, and create a more positive work environment, which can enhance teacher retention.

According to Barrogo (2020) classroom observation using the standardized tools is made a requirement in the Philippine Professional Standards for Teachers-Results-Based Performance Management System (PPST-RPMS), enhancing its objectivity and standardization. Its multifaceted use in mentoring, coaching, performance review, and evaluation contributes to teachers' continuous professional growth. In line with this, Suparto (2020) highlighted that academic supervision utilizing clinical observation technique can enhance the quality of teacher learning.

Conversely, the lowest-rated indicator Stay updated with the latest research, techniques, and ethical guidelines to inspire teachers to grow professionally with a mean of 3.44 (SD=0.63) described as Strongly Agree interpreted as Excellent. This means that educators who prioritize staying informed in the recent researches can serve as role

models for their peers by demonstrating a commitment to professional growth and ethical standards, they can inspire other teachers to engage in similar practices. It implies that emphasizing the importance of staying updated can encourage teachers to engage in reflective practices, teachers should be prompted to assess how new information and ethical guidelines can be integrated into their teaching methods. The insights emphasize the importance of a lifelong learning mindset, ethical considerations, and collaboration in fostering a thriving educational environment to grow professionally that ultimately beneficial to both educators and students. It also points to the necessity of creating a more solid and appropriate system for professional growth that encourages and facilitates the ongoing acquisition of new knowledge and skills.

Felisilda and Malaga (2019) posited that engaging with current research enables master teachers to make informed, evidence-based decisions about curriculum, pedagogy, and assessment. This helps ensure that teaching practices are grounded in the latest findings and feedbacking during clinical observations are precisely aligned with proven educational strategies. Consequently, feedback during clinical observations becomes more constructive and targeted, allowing teachers to implement effective practices that have been validated through research. Meanwhile, Guanzon and Miranda (2023) explained that regularly reviewing academic journals of different researches, research databases, and other literature can help master teachers stay informed about cutting-edge research, techniques, and ethical considerations. This proactive approach ensures that they are well-equipped to integrate new methodologies and insights into their teaching practices.

Table 2.4. Distribution of the Master Teachers' Level of Instructional Supervisory Skills in Terms of Pedagogical Dimension

Indicators	Mean	SD	Description
Teaches accurate and updated content using appropriate approaches and strategies.	3.61	0.53	Strongly Agree
Aligns lesson objectives, teaching methods, learning activities and instructional strategies.	3.75	0.46	Strongly Agree
Encourages learners to use higher order thinking skills in asking questions.	3.77	0.44	Strongly Agree
Engages and sustains learners' interest in the subject matter by making content meaningful and relevant.	3.74	0.50	Strongly Agree
Establishes routines and procedures to maximize use of time, instructional materials.	3.67	0.53	Strongly Agree
Integrates language, literacy, skills and values in teaching.	3.71	0.48	Strongly Agree
Presents lesson logically in development manner.	3.72	0.45	Strongly Agree
Utilizes technology resources in planning, designing and delivery of the lesson.	3.68	0.47	Strongly Agree
Creates situations that encourage learners to use higher order thinking skills.	3.70	0.46	Strongly Agree
Sets lesson objectives within the experiences and capabilities of the learners.	3.72	0.47	Strongly Agree
Utilizes varied techniques and strategies suited to different kinds of learners.	3.71	0.45	Strongly Agree
Shows fairness in dealing with the learners.	3.76	0.43	Strongly Agree
Paces lesson appropriate to the needs and difficulties	3.70	0.52	Strongly Agree
Provides appropriate intervention activities for learners at risk.	3.69	0.52	Strongly Agree
Helps learners answer in own words at a desired cognitive level.	3.71	0.48	Strongly Agree
Facilitates students in asking questions relevant to the lesson.	3.73	0.44	Strongly Agree
Facilitates students in participating actively in the learning tasks with some levels of independence.	3.73	0.48	Strongly Agree
Guides students in showing appropriate behavior of individualism, cooperation competition in classroom interaction.	3.70	0.52	Strongly Agree

Helps students in imbibing the valuing learning from the teacher & classmates.	3.72	0.47	Strongly Agree
Invites students in demonstrating varied ways, learning achieved in the activities.	3.69	0.48	Strongly Agree
Overall	**3.71**	**0.36**	**Strongly Agree**

Legend: 3.41 – 4.00 Strongly Agree/Excellent 1.81 – 2.60 Disagree/Below Average
2.61 – 3.40 Agree/Average 1.00 – 1.80 Strongly Disagree/Poor

Table 2.4 highlights the result of the Master Teachers' level of instructional supervisory skills in terms of pedagogical dimension with an overall mean score of 3.71 (SD=0.36,) described as Strongly Agree and interpreted as Excellent. This means that Master Teachers are instructional leaders who possess the knowledge and skills necessary to guide and support other educators in improving their pedagogical practices and enhancing student learning outcomes. This implies that excellent pedagogical skills play a significant role in curriculum development to ensure that curricula are aligned with best practices, responsive to student needs, and promote active learning. The high level of pedagogical competencies among Master Teachers suggests a commitment to continuous professional growth especially when engaged in ongoing learning to refine their skills and stay updated with the latest research and best practices in education.

The study of Mendoza and Bautista (2023) revealed the significant relationship between master teachers' pedagogical practices and the instructional competence and performance of teachers.

Among the indicators, the highest score is observed in the indicator, encourages learners to use higher order thinking skills in asking questions with a mean score of 3.77 (SD=0.44) described as Strongly Agree and interpreted as Excellent. This means that master teachers excel in fostering critical thinking among students, which is crucial for their cognitive development and deeper understanding of the subject matter. The implication of this high score is that these educators are effectively cultivating a classroom environment that stimulates intellectual curiosity and promotes active engagement in learning. It suggests that Master Teachers can facilitate and encourage other teachers to use inquiry-based activities and investigations where students explore topics, pose questions, conduct research, and draw conclusions. Enhancing curiosity, independent thinking, and exploration, fostering critical thinking, problem-solving, and investigative skills.

The results aligned with the findings of Mendoza and Bautista (2023) that all teachers must infuse their lessons with real-world examples and applications, making the subject matter more relatable and engaging. This helps students connect abstract concepts to practical situations, fostering critical thinking.

Marciano et al. (2019) emphasized that master teachers exhibit and can illustrate pedagogical expertise by bridging theoretical concepts with practical application and exemplifying effective teaching methods. They serve as dynamic models of proficient teaching, fostering and prompting self-reflection among educators since they view learning as a mutual exchange and approach their interactions with teachers as collaborative partnerships. Therefore, mentoring not only facilitates the professional development of teachers but also enhances teaching methodologies. Moreover, it positively impacts students' academic achievements.

Conversely, the lowest score is indicator Teaches accurate and updated content using appropriate approaches and strategies, with a mean score of 3.61 (SD=0.53) described as Strongly Agree and described as Excellent. This means that while still within the realm of excellence, this indicator highlights an area where there may be some room for improvement, teachers are effectively aligning their instruction with curriculum standards and learning objectives that ensures the content taught is relevant and meets educational requirements, which in turn enhances the educational experience for students. The implication here could be that while the master teachers are proficient in structuring learning activities and facilitating academic growth, they still feel the need to access more opportunities that could help them enhance their guidance in promoting positive social interactions and behaviors among students. This is crucial as it would be difficult for them to aid newly-hired teachers on teaching pedagogy if they themselves are not updated and knowledgeable of the recent teaching strategies and methodologies. Strategies such as fostering a culture of collaboration, emphasizing empathy and respect, and providing clear expectations for behavior could also be beneficial in addressing this aspect of instructional supervision.

Abreu et al. (2019) expounded that schools can help Master teachers stay updated on the recent content and strategies of teaching by providing them with opportunities for continuous professional development. This can include seminars and trainings that focus on the latest developments in their subject area, as well as encouraging them to engage in professional activities that enhance their instructional competence and develop leadership capacity. Matias (2023) believed that Master teachers can also be encouraged to design training programs for their colleagues, which could provide technical assistance and enhance the overall teaching competence of the school workforce. Master teachers initiate activities that can enhance teacher's performance and productive student outcomes.

Table 2.5. Distribution of the Master Teachers' Level of Instructional Supervisory Skills in Terms of Technological

Indicators	Mean	SD	Description
Use various observation systems to analyze and understand the instructional process within a classroom setting.	3.47	0.52	Strongly Agree
Evaluate the effectiveness of instructional design and modifying technical training instruction accordingly.	3.62	0.62	Strongly Agree
Review, interpret and implement instructional materials to meet training readiness standards.	3.49	0.55	Strongly Agree
Incorporate technology into educational practices to enhance learning outcomes and support instructional programs effectively.	3.65	0.51	Strongly Agree
Competent in creating and delivering electronic presentations for teaching purposes.	3.46	0.58	Strongly Agree
Efficiently navigate the internet for educational resources and information using advanced search techniques.	3.50	0.52	Strongly Agree
Has skill in sending, receiving, and managing email communications effectively with colleagues and students.	3.54	0.60	Strongly Agree
Incorporate technology effectively into teaching practices to engage students in learning.	3.52	0.51	Strongly Agree
Uses data to inform teaching decisions, target areas for improvement, and track student progress over time.	3.58	0.51	Strongly Agree

Develop critical thinking, collaboration, communication, and creativity skills in students through technology use.	3.59	0.51	Strongly Agree
Engage students in technology tools like video, email, online programs, and video conferencing.	3.57	0.58	Strongly Agree
Updated with technological advancements in education and striving for excellence in technology skills.	3.52	0.61	Strongly Agree
Continuously improve technology skills through training, workshops, and networking opportunities within the educational community.	3.60	0.53	Strongly Agree
Efficiently navigate the web for educational resources and materials to enhance teaching practices.	3.53	0.57	Strongly Agree
Overall	**3.54**	**0.41**	**Strongly Agree**

Legend: *3.41 – 4.00 Strongly Agree/Excellent* *1.81 – 2.60 Disagree/Below Average*
2.61 – 3.40 Agree/Average *1.00 – 1.80 Strongly Disagree/Poor*

Table 2.5 shows the master teachers' instructional supervisory skills in terms of technology with an overall mean score of 3.54 (SD=0.41), described as Strongly Agree and interpreted as Excellent. This means that Master Teachers demonstrate a high level of proficiency in utilizing technology to support and enhance educational practices, reflecting their readiness to integrate modern technological tools into the classroom effectively. Given the strong technological skills, implies that integrating technology into the curriculum plays significant role to support learning objectives, promote active engagement, and develop digital literacy skills among students. Sharing of best practices and educational technology resources, teachers can collectively enhance their instructional effectiveness. Master Teachers may utilize educational technology to collect and analyze student performance data as baseline in choosing appropriate instructional strategies, identify areas for improvement, and personalize learning experiences for students.

In line with the study of Javier (2020) that the Department of Education can assist Master Teachers in enhancing their technological skills by providing them with professional development opportunities and resources. One such initiative is the Higher Order Thinking Skills Professional Learning Packages (HOTS-PLPs) program, which aims to support Master Teachers in mentoring their colleagues to improve their pedagogy and assessment practices. This program includes guide materials and technical assistance to help Master Teachers in their roles, focusing on integrating HOTS into classroom practices (Gita-Carlos, 2024). Additionally, the Department can offer training sessions and workshops on emerging technologies, such as online learning platforms and educational software.

Among the various indicators, the result indicates that the highest mean of 3.65 (SD=0.51) is on the indicator, incorporate technology into educational practices to enhance learning outcomes and support educational programs effectively, which is described as Strongly Agree and interpreted as Excellent. This means that Master teachers are particularly proficient in assessing the quality and impact of their instructional methods and are adept at adjusting technical assistance to improve outcomes. This high proficiency implies that these teachers possess strong technological skills, enabling them to critically analyze instructional design, identify areas for improvement, and implement necessary modifications effectively. The results reflect that the Master Teachers in the locale of study

are competent in their roles of evaluating instructional design and that they could also provide suggestions and recommendations to their fellow teachers on how to improve instructional designs for a positive learning outcome in the classroom. This capability is essential for fostering an adaptive and responsive teaching environment, ultimately enhancing the overall quality of education and ensuring that instructional strategies meet the evolving needs of students.

The results on the master teachers' technological skills align with the explanation of Barruga (2021) that Master teachers, just like other teachers, also require technological skills to fulfill key responsibilities like crafting self-learning modules, coaching on learning activity sheets, planning module distribution and retrieval, and preparing for classroom observations. Proficiency with online tools and platforms is essential for master teachers to provide technical assistance to teachers on new strategies and schemes for teaching and learning.

Conversely, the lowest mean score was recorded for the indicator, Competent in creating and delivering electronic presentations for teaching purposes, which has a mean of 3.46 (SD=0.58), described as Strongly Agree and interpreted as Excellent. This slightly lower score means that the Master teachers need more training and assistance in technological proficiency when it comes to creating and delivering online presentations. This could imply that there is a varying degree of technological skills among the respondents as indicated by the high standard deviation. Those who are less comfortable with basic technology may struggle more with advanced tasks like creating engaging electronic presentations. Additionally, the MTs may not have received adequate training focused specifically on creating and delivering electronic presentations. While general technology training might be available, specialized workshops or courses on presentation skills might be lacking. Trainings and seminars on the use of technology in the classroom can be conducted regularly for all teachers to be equipped with the necessary technological skills.

The results aligned with the findings of Bañares and Pimentel (2021), who revealed that master teachers commonly face challenges such as insufficient knowledge and skills, technical difficulties, and staying abreast of technological advancements in education. A majority of these master teachers express feelings of being ill-equipped to guide others in utilizing technology positively.

Table 2.6. Distribution of the Master Teachers' Level of Instructional Supervisory Skills in Terms of Evaluation

Indicators	Mean	SD	Description
Evaluate students' performances fairly and uses adequate and accurate standards measures of evaluation	3.70	0.46	Strongly Agree
Selects and utilizes criterion referenced tests.	3.51	0.52	Strongly Agree
Analyzes and interprets evaluation results skillfully.	3.56	0.50	Strongly Agree
Utilizes evaluation result as a basis for improving instruction.	3.63	0.49	Strongly Agree
Uses varied forms of evaluation tools.	3.59	0.53	Strongly Agree

Evaluates performance of the students on the basis of the course objectives through discussions, quizzes, and major examinations.	3.69	0.47	Strongly Agree
Gives grades on the basis of students' performance.	3.78	0.42	Strongly Agree
Treats each student fair and square.	3.77	0.42	Strongly Agree
Exercises no favoritism.	3.71	0.51	Strongly Agree
Acts according to own intellectual judgment.	3.55	0.55	Strongly Agree
Acts according to own intellectual judgment.	3.57	0.58	Strongly Agree
Provides evaluative activities appropriate to students' abilities, interest, and needs.	3.92	0.83	Strongly Agree
Gives evaluation result ratings that are well-accepted by the students.	3.66	0.49	Strongly Agree
Utilizes evaluation result as a basis for improving instruction.	3.66	0.55	Strongly Agree
Uses different methods in evaluating students' learning aligned to the learning objectives such as oral performance, projects and hands-on	4.01	0.75	Strongly Agree
Includes items in the tests that are based on lesson objectives consisted with actual discussions activities and classroom interactions.	3.69	0.52	Strongly Agree
Gives grades on the basis of students' actual performance.	3.75	0.46	Strongly Agree
Treats each student fairly in giving grades.	3.75	0.46	Strongly Agree
Bases ratings according to the objectives of the lessons & criteria set in class.	3.69	0.48	Strongly Agree
Allows students to rate their own performances in some of the activities in the class.	3.56	0.57	Strongly Agree
Overall	**3.69**	**0.42**	**Strongly agree**

Legend: *3.41 – 4.00 Strongly Agree/Excellent* *1.81 – 2.60 Disagree/Below Average*
2.61 – 3.40 Agree/Average *1.00 – 1.80 Strongly Disagree/Poor*

Table 2.6 shows the statistical result of the master teachers' level of instructional supervisory skills in terms of evaluation, as evidenced by an overall mean score of 3.69 (SD=0.42), described as Strongly Agree and interpreted as Excellent. Denoting excellence in the indicators mentioned means robust competency among master teachers in assessing student performance and utilizing evaluation results to enhance instruction. The consistently high ratings indicate their adeptness in employing fair and accurate evaluation measures, utilizing diverse evaluation tools, and aligning evaluation methods with learning objectives. Proficiency in evaluation can foster collaboration among educators by sharing best practices and insights gained from evaluations, they can help create a supportive professional learning community that enhances instructional effectiveness.

According to Sangalang (2018), master teachers, regarded as highly proficient instructional leaders, employ various methods to support their skills and duties by aiding teachers in orchestrating student learning through well-structured lesson plans and utilizing suitable, comprehensive, and up-to-date instructional assessment and evaluation materials

In particular, the highest-rated indicator has a mean of 4.01 (SD=0.75) described as Strongly Agree and interpreted as Excellent is about the abilities of master teachers to Use different methods in evaluating students' learning aligned to the learning objectives such as oral performance, projects, hands-on. This means a deep understanding of student diversity and a commitment to fostering equitable learning environments. The consistency among teachers in addressing student differences reflects positively on

instructional quality and promotes student engagement and motivation. In the context of the Department of Education, it implies that all the teachers are encouraged to use different forms of assessment, such as diagnostic, formative, standardized, and summative, to evaluate the learners' knowledge and skills. These competencies inform teachers on how they could contextualize their lessons and strategies to best fit the learners' learning style for the achievement of the education outcomes. Through evaluation, master teachers assess the effectiveness of instructional methods, curriculum materials, and learning strategies, ensuring alignment with educational goals and standards. They meticulously analyze student performance data to identify strengths and areas needing improvement, enabling targeted interventions to support diverse learning needs.

According to Sangalang (2018), master teachers, regarded as highly proficient instructional leaders, employ various methods to support their skills and duties by aiding teachers in orchestrating student learning through well-structured lesson plans and utilizing suitable, comprehensive, and up-to-date instructional assessment and evaluation materials. Similarly, Echeche (2022) advocated that effective teaching emerges when teams of master teachers engage in a cyclical process. This process involves analyzing data, establishing learning objectives for both students and educators derived from this analysis, collaborating to develop lessons incorporating evidence-based strategies, and evaluating the impact of their learning and teamwork on student achievement.

Conversely, the indicator with the lowest mean, 3.51 (SD=0.52), described as Strongly Agree and interpreted as Excellent was about the master teachers' skills in Select and utilizes criterion referenced tests. This means that MT's are perceived to have a strong ability to select and effectively utilize criterion-referenced tests in assessing student performance against specific criteria rather than comparing students to one another. The strong skills in utilizing criterion-referenced tests imply that Master Teachers can help align assessments with curriculum objectives. This ensures that assessments accurately measure student learning outcomes and inform instructional practices. This gap underlines the importance of ensuring assessments accurately measure student mastery of learning objectives and inform instructional decision-making.

Matias (2023) claimed that addressing the proficiency gap on designing criterion-referenced assessments can be done through strategic resource allocation, quality assurance measures, and a culture of continuous improvement that will not only strengthen assessment practices but also contribute to the overall quality and effectiveness of education within Department of Education.

Table 2.7. Summary of Master Teachers Level of Instructional Supervisory Skills

Variables	Mean	SD	Interpretation
Coaching	3.60	0.40	Excellent
Mentoring	3.53	0.44	Excellent
Clinical Observation	3.62	0.40	Excellent
Pedagogical	3.71	0.36	Excellent
Technological	3.54	0.41	Excellent

Evaluation	3.69	0.42	Excellent
Overall	**3.62**	**0.41**	**Excellent**

Legend 3.41 – 4.00 Strongly Agree/Excellent 1.81 – 2.60 Disagree/Below average
2.61 – 3.40 Agree/Average 1.00 – 1.80 Strongly Disagree/Poor

Table 2.7 reflects the summary of Master Teachers level of instructional supervisory skills across six different components- coaching, mentoring, clinical observation, pedagogical, technological, and evaluation which reflects consistently high ratings across all components, with an overall mean score of 3.62 (SD = 0.41), indicating an overall Excellent performance and interpreted as Strongly Agree. The results mean that master teachers demonstrate proficiency in coaching, mentoring, clinical observation, pedagogical knowledge, technological integration, and evaluation. The consistently high ratings suggest that the master teachers possess strong instructional leadership skills, which are crucial for guiding and supporting other teachers in improving their teaching practices. The high ratings underscore the effectiveness of master teachers in providing support and guidance to their peers in various aspects of teaching and learning, which highlights the importance of ongoing training and mentorship programs that have contributed to the development of these supervisory skills. Moreover, excellent performance in evaluation indicates a strong system of assessing teaching practices and student outcomes, which is essential for continuous improvement and quality assurance in education.

The results strengthen the position of Buagas and Ching (2023) that Master teachers play a vital role in schools by fostering a culture of lifelong learning and intellectual growth. They are leaders who set a positive example, encouraging students to take up the challenges of learning and teaching. These educators go beyond simply imparting knowledge, focusing on the intellectual, emotional, and physical development of their students.

Additionally, Ordanel and Dioso (2023) emphasized that the instructional supervisory skills of Master Teachers are crucial for effective teaching and learning in schools. Their expertise in instructional supervision also helps to foster a positive learning environment, accommodate diverse learners, and promote continuous professional growth among teachers. Moreover, Master Teachers' ability to engage in professional learning communities and discuss concerns related to their duties and responsibilities enhances their competence as instructional leaders.

Hence, Cortez (2023) asserted that the Master Teachers’ should be given extra assistance in their instructional supervision by providing necessary resources and support. One key strategy is to ensure that master teachers are equipped with the latest pedagogical knowledge and technological skills, which are crucial for effective instructional supervision. This can be achieved through regular training and professional development opportunities that focus on integrating technology into teaching and learning processes.

Research Question 3. What is the level of teachers' performance with regard to teaching and learning process, student's outcome, community involvement, professional growth and development?

Table 3.1. Distribution of the Teachers' Level of Performance in Terms of Teaching and Learning Process

Indicators	Mean	SD	Description
Chooses activities relevant to the prescribed curriculum	3.65	0.48	Strongly Agree
Plans student grouping according to instructional needs	3.63	0.49	Strongly Agree
Informs students of objective of the lesson	3.60	0.52	Strongly Agree
Relates the lesson to previous and future lessons	3.69	0.47	Strongly Agree
Monitors student learning continuously	3.66	0.50	Strongly Agree
Provides feedback and re-teaches when necessary	3.60	0.52	Strongly Agree
Provides opportunities for students to practice independently	3.65	0.50	Strongly Agree
Establishes a level of difficulty which encourages success	3.54	0.53	Strongly Agree
Demonstrates enthusiasm, vigor, involvement, and interest in lesson presentation	3.65	0.49	Strongly Agree
Presents learning content in a logical sequential order	3.58	0.52	Strongly Agree
Overall	**3.63**	**0.38**	**Strongly Agree**

Legend: 3.41 – 4.00 Strongly Agree/ Outstanding; 2.61 – 3.40 Agree / Very Satisfactory; 1.81 – 2.60 Disagree/ Satisfactory; 1.00 – 1.80 Strongly Disagree/ Poor

Table 3.1 shows the statistical results of the teachers' level of performance in terms of teaching and learning process with an overall mean score of 3.63 (SD=0.38), described as Strongly Agree and interpreted as Outstanding. This high mean means that teachers are consistently demonstrating proficiency in their instructional practices, creating an environment conducive to student engagement, learning, and growth. This reflects their ability to effectively facilitate the teaching and learning process, engage students, and achieve educational objectives. The emphasis on outstanding performance implies that teaching practices should continue to prioritize student-centered learning which includes engaging students through active learning strategies, differentiated instruction, and formative assessments that cater to diverse learning styles. It could be suggested that teachers need to be adaptable and responsive to the needs of their students. This flexibility is essential in addressing diverse learning needs and creating an inclusive classroom environment.

Pandolpho (2019) explained that the primary goal of schools is to design a teacher evaluation system that evaluates subtle aspects, implements adjustments as needed, and enhances the teacher's effectiveness. This is because the greater a teacher's effectiveness, the more successful their students are likely to be (Balanquit et al., 2023).

Among the indicator, Relates the lesson to previous and future lessons stands out with the highest mean score of 3.69 (SD = 0.47), described as Strongly Agree and interpreted as Outstanding. This means that teachers excel in establishing connections between current lesson content and past or future learning experiences, promoting coherence and continuity in students' understanding. Such integration of concepts across lessons not only enhances comprehension but also fosters a deeper understanding of the subject

matter and its relevance to broader contexts. Examples of classroom activities and strategies that teachers use to ensure that they relate their lessons to previous and future lessons are the use of review and preview sessions, concept mapping or mind mapping, journal writing, among others. These practices not only help students make connections between past, present, and future learning but also reinforce their understanding and retention of the material.

The results strengthen the claim of Pandolpho (2019) that designing lessons that show the connection between topics is crucial for helping students understand the relevance and significance of what they are learning. When lessons are structured to explicitly engage students' prior knowledge and actively explore new concepts through authentic inquiry, it can facilitate deeper learning and integration of new information.

Munna and Kalam (2021) advised that building connections between lessons can be done by identifying the desired learning outcomes and then planning the lesson activities to achieve those goals. This helps ensure the lesson is focused and coherent.

Meanwhile, the indicator Establishes a level of difficulty which encourages success presents the lowest mean score of 3.54 (SD=0.53, described as Strongly Agree and interpreted as Outstanding. This means that students may not be experiencing optimal growth in their learning without appropriately challenging tasks. Students miss out on opportunities to stretch their abilities and develop resilience in the face of difficult problems. This lack of challenge can lead to complacency, where students are not pushed to apply critical thinking or develop problem-solving skills, ultimately affecting their long-term academic performance and preparedness for future educational endeavors. suggests that most of the teachers do not create lessons and exams in a difficult manner. While teachers demonstrate overall effectiveness in designing instructional tasks, they think that they still do not establish enough level of difficulty that encourages success for the students. Thus, even though teachers are effective overall, adjusting the level of difficulty in their instructional design is essential to better support and encourage student success. This points to a potential need for more effective instructional differentiation, where teachers can better tailor the level of challenge to match the diverse abilities and learning needs of their students.

Tiplin (2022) expounded that making challenging or higher-order lessons is crucial for students' cognitive development and academic success. These skills are essential for preparing students to tackle complex problems, think creatively, and make informed decisions in their personal and professional lives. By incorporating higher-order thinking into lessons, teachers can move students beyond mere memorization and encourage them to develop deeper understanding and connections between concepts.

Table 3.2. Distribution of the Teachers' Level of Performance in Terms of Student's Outcome

Indicators	Mean	SD	Description
Communicates expectations of performance to students	3.59	0.50	Strongly Agree
Uses objective student data to set expectations	3.52	0.53	Strongly Agree
Uses evaluative feedback to determine level of skill acquisition	3.57	0.51	Strongly Agree
Encourages participation from all students	3.72	0.45	Strongly Agree
Use higher order questioning techniques to promote critical thinking skills	3.63	0.51	Strongly Agree
Provides opportunities for each student to meet success regularly	3.64	0.49	Strongly Agree
Creates a climate in which students display initiative and assume a personal responsibility for learning	3.61	0.51	Strongly Agree
Manages disruptive behavior constructively	3.53	0.53	Strongly Agree
Establishes and clearly communicates parameters for student classroom behavior	3.60	0.50	Strongly Agree
Makes opportunities for one-to-one conferences to discuss student progress	3.56	0.52	Strongly Agree
Overall	**3.60**	**0.39**	**Strongly Agree**

Legend:
3.41 – 4.00 Strongly Agree/ Outstanding
2.61 – 3.40 Agree / Very Satisfactory
1.81 – 2.60 Disagree/ Satisfactory
1.00 – 1.80 Strongly Disagree/ Poor

Table 3.2 reflects the statistical results of teachers' level of performance based on student outcomes with an overall mean score of 3.60 (SD=0.39), described as Strongly Agree and interpreted as Outstanding. This overall score means a high level of effectiveness among teachers in nurturing positive student outcomes across various performance indicators. Such a score implies that the majority of respondents agree on the effectiveness of teaching practices and their positive impact on learning outcomes. This highlights the need for continued investment in teacher development, comprehensive evaluation methods, and a focus on creating engaging learning environments. By understanding the factors that contribute to effective teaching can enhance student outcomes and prepare them to the 21st-century learning skills.

The results corroborate the findings of Batuguis et al. (2022) that the methods and resources employed by teachers are vital components of effective teaching practices that directly influence student outcomes. Utilizing diverse instructional strategies, such as active learning techniques, differentiated instruction, and technology integration, can help teachers cater to the diverse needs and learning styles of their students.

Among the ten evaluated indicators, the highest mean score is observed in the statement, encourages participation from all students, which has a mean of 3.72 (SD=0.45), described as Strongly Agree and interpreted as Outstanding. This means that teachers are particularly effective in engaging students and promoting inclusive participation in the classroom. The high mean score in this area underscores the importance of active student involvement as a critical component of effective teaching practices, as it can lead to better student engagement, motivation, and overall academic achievement. The teachers really encourage open-ended discussions where students are invited to question, debate, and discuss various topics that can promote active participation. Socratic

seminars, in particular, involve students in a structured dialogue based on a text or topic, fostering deep thinking and broad participation.

According to Andriani and Rasto (2019), learning outcomes represent the achievement of students in meeting the established learning objectives. These outcomes are considered successful when students have attained the learning goals and demonstrate changes in knowledge, attitudes, and skills. Moreover, Pido et al. (2023) emphasized that when teachers perform well, they are better equipped to create a dynamic and efficient teaching and learning process, which in turn enhances student learning outcomes. Effective teacher performance can lead to improved student understanding, retention, and application of knowledge, as well as positive changes in attitudes and skills.

Meanwhile, the lowest mean score is the indicator Uses objective student data to set expectations, with a mean of 3.52 (SD = 0.53) described as Strongly Agree and interpreted as Outstanding. This means that there are instances where teachers do not extensively rely on measurable and objective data about students' academic performance to guide their teaching strategies, set learning goals, or assess progress. Instead, they might use subjective judgments, impressions, or general observations. The implication here is that while teachers are adept in most areas, there is room for improvement in the use of data-driven decision-making to tailor and set realistic and challenging expectations for students.

In terms of using objective data, Sarabia and Collantes (2020) emphasized that objective assessments provide quick and accurate feedback on student performance, helping them identify areas where they need to focus their study efforts.

Table 3.3. Distribution of the Teachers' Level of Performance in Terms of Community Involvement

Indicators	Mean	SD	Description
Encourages community involvement with the school	3.59	0.50	Strongly Agree
Provides a climate which opens up communication between the teacher and parent	3.54	0.50	Strongly Agree
Communicates with parents in the best interest of the students	3.63	0.48	Strongly Agree
Supports parents/teacher activities	3.56	0.50	Strongly Agree
Provides information related to support resources	3.58	0.50	Strongly Agree
Cooperates with other teachers, the administration, and other educational personnel	3.62	0.50	Strongly Agree
Shares ideas and methods with other teachers	3.58	0.50	Strongly Agree
Informs administration and/or appropriate personnel of school related items	3.53	0.52	Strongly Agree
Makes use of support services as needed	3.55	0.52	Strongly Agree
Participates in community and stakeholder's engagement activities	3.62	0.49	Strongly Agree
Overall	**3.58**	**0.37**	**Strongly Agree**

Legend: 3.41 – 4.00 Strongly Agree/ Outstanding; 2.61 – 3.40 Agree / Very Satisfactory; 1.81 – 2.60 Disagree/ Satisfactory; 1.00 – 1.80 Strongly Disagree/ Poor

Table 3.3 shows the statistical results of the teachers' level performance in of terms of community involvement, with an overall mean score of 3.58 (SD=0.37), described as Strongly Agree and interpreted as Outstanding .This outstanding performance means a commitment to building partnerships that enhance educational experiences and outcomes for students by recognizing the significance of community involvement, educational stakeholders can prioritize strategies that support teachers in their efforts. It implies that community involvement is not just an ancillary aspect of teaching; it is a vital component that enriches the educational landscape and contributes to the holistic development of students. By continuing to invest in community engagement initiatives, schools can create a more supportive and effective educational environment. Teachers who engage with the community help build social capital, which can enhance trust, cooperation, and collective efficacy among community members. It further suggests that by advocating for educational issues and engaging in community service, teachers can become role models for students and inspire civic responsibility. Community involvement encourages collaborative learning environments where students, teachers, and community members work together toward common goals. This collaboration can lead to innovative educational practices and programs that address needs and challenges in educational environment.

The results align with the explanation of Daly (2022) that teachers are crucial in developing and maintaining effective school-community relations. They serve as liaisons, interpreting the school's program to the community and clarifying the school's role in society.

Among the ten evaluated indicators, the highest mean score is observed in Communicates with parents in the best interest of the students, which scored 3.63 (SD=0.48), described as Strongly Agree and interpreted as Outstanding. This indicator highlights the significance of effective communication between teachers and parents in fostering student success. By maintaining open and proactive dialogue focused on the welfare and academic progress of students, teachers can cultivate a supportive partnership with parents, which is crucial for student achievement. The constant communication with parents is practiced by the teachers by conducting regular PTA meetings, family day, and other school activities that encourage the parents to take an active participation as they are also the time that the parents can consult the teachers about the progress of their children. Additionally, the teachers see to it that the parents sign the test papers of their children after exams so they are aware of the scores. This is one way of indirectly informing the parents how their students are faring in their education.

Additionally, Francisco (2019) asserted that teachers who are involved in the community gain a deeper understanding of their students' needs and can tailor their teaching methods accordingly. This direct relationship with parents also helps teachers identify areas where students may need additional support.

Conversely, the lowest mean score of 3.53 (SD=0.52) described as Strongly Agree and interpreted as Outstanding is the indicator Informs administration and/or appropriate personnel of school-related items. This means that effective communication with school

administration and relevant personnel is essential for ensuring the smooth operation of school-related activities and addressing any issues or concerns promptly. This score implies that the majority of respondents agree on the effectiveness of teachers' efforts to keep administration and relevant personnel informed about important school matters. Teachers are always encouraged to enhance communication channels between them and administration as it could further optimize the overall effectiveness of community involvement initiatives. It suggests that if teachers effectively communicate with administrators and school leaders, it can lead to improved support for students. This support can take many forms, such as targeted interventions, additional resources, or professional development for teachers, all of which can positively impact student learning outcomes.

Roxas et al. (2018) emphasized that genuine school reforms invariably commence with heightened effective communication of the school's different stakeholders, which include primarily the teachers and the school administration. Effective communication fosters a shared vision and mutual understanding, which are critical for implementing and sustaining meaningful changes. This collaboration ensures that the reforms are aligned with the needs and expectations of the entire school.

Professional growth and development are essential for teachers to enhance their knowledge, skills, and instructional practices. Continuous professional development is associated to improved student learning outcomes, as it equips teachers with the latest pedagogical strategies and content knowledge. Collaborative learning, data-driven decision-making, personalized learning, reflective practice, and effective mentorship are key components that contribute to successful professional development. By investing in high-quality professional growth and development, schools can empower teachers to enhance their skills and ultimately improve student learning experiences. Continuous investment in teachers' professional growth is a pathway to achieving educational excellence and equity. Effective strategies for professional development will empower teachers to improve their practices, ultimately benefiting students and the broader educational community.

Table 3.4. Distribution of the Teachers' Level of Performance in Terms of Professional Growth and Development

Indicators	Mean	SD	Description
Gets involved in professional associations.	3.60	0.51	Strongly Agree
Participates on district/state committees, etc.	3.51	0.53	Strongly Agree
Participates in professional workshops.	3.63	0.51	Strongly Agree
Attends professional meetings.	3.63	0.49	Strongly Agree
Keeps current in subject area.	3.67	0.48	Strongly Agree
Engages in continuing education.	3.61	0.52	Strongly Agree
Publishes research or articles in peer-reviewed journals or educational publications related to their field of expertise.	3.22	0.78	Agree
Presents at conferences or workshops on topics related to their field of expertise.	3.34	0.66	Agree
Mentors or coaches' other educators to enhance their professional growth and development.	3.39	0.65	Agree

Leads or facilitates professional learning communities or study groups focused on advancing teaching practices and pedagogy.	3.39	0.60	Agree
Overall	**3.50**	**0.43**	**Strongly Agree**

Legend: 3.41 – 4.00 Strongly Agree/ Outstanding; 2.61 – 3.40 Agree / Very Satisfactory; 1.81 – 2.60 Disagree/ Satisfactory; 1.00 – 1.80 Strongly Disagree/ Poor

Table 3.4 presents the teachers' level of performance in terms of professional growth and development with an overall mean score of 3.50 (SD=0.43), described as Strongly Agree and interpreted as Outstanding. This means that most respondents share a similar view on the effectiveness of teachers in this area. This strong agreement highlights the importance of continuous professional development in fostering a culture of learning and improvement within educational settings. This implies that continuous professional development result to improved teaching practices. Teachers who engage in ongoing learning opportunities are better equipped with the latest pedagogical strategies, content knowledge, and classroom management techniques, which can lead to enhanced student learning outcomes. It suggests that schools need to prioritize professional growth among teachers to foster a culture of continuous learning. This culture encourages teachers to seek out new knowledge and skills, promoting an environment where innovation and improvement are valued so that students can benefit to a more dynamic and engaging learning experiences.

According to Schwartz (2023), investing in professional growth and development demonstrates a commitment to lifelong learning and professional excellence, which can enhance job satisfaction, teacher morale, and overall school effectiveness.

Among the ten evaluated indicators, the highest mean score is observed in keeps current in subject area, with a mean of 3.67 (SD = 0.48) described as Strongly Agree and interpreted as Outstanding. This underlines the importance of teachers staying updated with the latest developments and strategies in their respective fields, ensuring the delivery of relevant and high-quality instruction to students. The high mean score in this area reflects the proactive efforts of teachers in maintaining their subject knowledge and expertise. It implies that teachers need to be updated with recent advancements in teaching strategies and pedagogy. Moreover, the regional offices of the Department of Education also conduct the same trainings, which is specific for a teacher's subject area, on an annual basis. These programs play a crucial role in supporting teachers' professional growth and development. These programs help ensure that teachers remain effective and competent in their roles by providing them opportunities to engage in ongoing learning and staying abreast of recent advancements in teaching strategies.

The results support the claim of Mizell (2019) that professional development, stemming from externally provided activities, is merged with teachers' efforts to enhance knowledge and transform their approach to teaching, thus facilitating student support through learning. Without continuous professional growth and development, teachers face the potential of lagging behind and losing touch with the optimal practices essential for fostering student success (Schwartz, 2023).

Conversely, the lowest mean score is indicator publishes research or articles in peer-reviewed journals or educational publications related to their field of expertise, with a mean of 3.22 (SD=0.78), described as Agree and Very Satisfactory interpretation. This suggests a comparatively lower level of engagement in scholarly research among teachers. Despite being continually encouraged to conduct research, the demanding nature of teaching itself could be the reason why teachers have limited time and resources available for engaging in scholarly pursuits. Teachers often have heavy workloads, including lesson planning, grading, and extracurricular activities, which leave them with limited time to dedicate to research and writing. Additionally, the lack of incentives or recognition for scholarly publication within the DepEd system could have also contributed to the low publication rates among teachers. Unlike in higher education institutions where research and publication are often valued and rewarded, teachers within the DepEd do not receive the same level of support or encouragement to engage in research publications.

Thahir et al. (2021) emphasized that encouraging teachers to pursue research and publication opportunities can contribute to the advancement of knowledge in the field and further elevate the profession. Teachers can contribute valuable insights and perspectives to the educational discourse, enriching both theory and practice, when they engage in scholarly activities. Schweikhardt (2020) added that publishing in peer-reviewed journals can enhance the credibility and reputation of educators, fostering professional recognition and career advancement opportunities within the academic community.

Table 3.5. Summary of the Level of Teachers' Performance

Variables	Mean	SD	Interpretation
Teaching and Learning Process	3.63	0.38	Outstanding
Students Outcome	3.60	0.39	Outstanding
Community Involvement	3.58	0.37	Outstanding
Professional Growth and Development	3.50	0.43	Outstanding
Overall	**3.58**	**0.39**	**Outstanding**

Legend: 3.41 – 4.00 Strongly Agree/ Outstanding 1.81 – 2.60 Disagree/ Satisfactory
2.61 – 3.40 Agree / Very Satisfactory 1.00 – 1.80 Strongly Disagree/ Poor

Table 3.5 reflects the summary of the level of teachers' performance across four domains: the teaching and learning process, students' outcome, community involvement, and professional growth and development. The overall assessment of teachers' performance across various components reveals an exceptional level of effectiveness, with an overall mean score of 3.58 (SD=0.39), interpreted as Outstanding. This collective evaluation indicates a consistently high standard maintained across teaching and learning processes, student outcomes, community involvement, and professional growth and development. It further highlights the dedication and proficiency of teachers in various aspects of their roles. However, attention to areas with slightly lower mean scores, such as professional growth and development, is crucial for sustaining and enhancing overall teaching performance levels.

According to Sarabia and Collantes (2020), effective teaching performance is crucial for ensuring that students receive high-quality education and achieve their academic goals. A teacher's performance is not only reflected in their ability to convey complex concepts in a clear and concise manner but also in their capacity to create a supportive and inclusive learning environment. This includes fostering a sense of belonging among students, encouraging active participation, and providing personalized feedback that addresses individual needs (Ereje and Ambag, 2020).

Among the four dimensions of teaching performance, teaching and learning process has the highest mean of 3.63 (SD=0.38), interpreted as Outstanding. The result highlights the importance of engaging teaching strategies, positive learning environments, and continuous improvement in professional development. By recognizing and reinforcing effective teaching practices, educational institutions can further enhance student engagement, satisfaction, and academic success, ultimately leading to better educational outcomes for all learners. This implies that teachers are highly effective in their instructional methods, classroom management, and engagement strategies, leading to a superior educational experience for students. The outstanding performance in this dimension highlights the success of current teaching practices and potentially serves as a model for enhancing other areas of teaching performance to achieve similar excellence.

The result supports previous claim of Hoque et al (2020) that a teacher's performance is also influenced by their ability to adapt to diverse learning styles, incorporate technology into their teaching methods, and stay updated with the latest developments in their subject area. By doing so, teachers can ensure that their teaching practices remain relevant and engaging, ultimately leading to better student outcomes and a more fulfilling educational experience (Daly, 2022).

On the other hand, among the components of teaching performance, professional growth and development got the lowest mean of 3.50 (SD=0.43) interpreted as Outstanding. The score indicates that teachers are engaged in activities aimed at improving their skills and knowledge. This commitment to continuous improvement is essential for adapting to new educational challenges and enhancing teaching effectiveness. The result implies that while teachers are performing exceptionally well in this area, it is relatively less emphasized or prioritized compared to other components of teaching performance. This indicates that there may be opportunities for further enhancing teachers' professional growth and development initiatives to ensure continuous improvement and maintain high standards. Despite being the lowest-scoring component, the outstanding rating suggests a solid foundation upon which to build even more robust professional development programs, thereby ensuring sustained excellence in teaching performance across all dimensions.

According to Mizell (2019), ongoing professional development equips teachers with updated knowledge, skills, and best practices, fostering a culture of lifelong learning and continuous improvement. It also enhances teachers' ability to implement innovative instructional strategies, manage classrooms efficiently, and support students' academic and socio-emotional growth (Schwartz, 2023).

Research Question 4. Is there a significant relationship between Master Teacher's instructional supervisory skills and the teachers' performance?

Table 4.1. Relationship Between the Master Teacher's Instructional Supervisory Skills and Teachers' Performance

Master Teachers' Supervisory Skills	Teachers Performance				
	Teaching and Learning	Students' Outcome	Community Involvement	Professional Growth and Development	Overall
	r-value p-value	r-value p-value	r-value p-value	r-value p-value	r-value p-value
Coaching	0.47 0.030 S	0.36 0.078 NS	0.53 0.000 S	0.40 0.034 S	0.44 0.035 S
Mentoring	0.12 0.067 NS	0.56 0.048 S	0.44 0.032 S	0.34 0.014 S	0.37 0.04 S
Clinical Supervision	0.24 0.390 NS	0.29 0.043 S	0.02 0.824 NS	0.36 0.045 S	0.23 0.325 NS
Pedagogical	0.41 0.02 S	0.32 0.046 S	0.48 0.36 S	0.31 0.042 S	0.38 0.04 S
Technological	0.07 0.467 NS	0.06 0.516 NS	0.06 0.518 NS	0.02 0.851 NS	0.05 0.588 NS
Evaluation	0.36 0.008 S	0.46 0.031 S	0.50 0.000 S	0.28 0.02 S	0.34 0.01 S

Legend: Significant at p<.05 alpha level

Table 4.1 shows the statistical result of the correlation analysis that tested the relationship between master teachers' instructional supervisory skills and the teachers' teaching performance. The result shows that there is a weak positive relationship between the variable supervisory skills in coaching and teaching performance. The r-value of 0.44 indicates a weak positive correlation between the two variables, suggesting that as the instructional supervisory skills of Master Teachers in coaching improve, there is a corresponding enhancement in teachers' work performance. The p-value of 0.035 indicates that this correlation is statistically significant, this implies that master teachers can provide targeted feedback and modeling to help teachers improve the teaching and learning and in the same way that coaching helps teachers develop more effective, research-based instructional strategies. Therefore, the data strongly suggest that effective instructional supervision by Master Teachers in teaching and learning, community involvement and professional growth and development is associated with better performance among teachers.

The result verifies the same relationship established by previous researchers (Buagas & Ching, 2023; David et al., 2023; Ordavisa & Cañon, 2020) on the positive relationship between Master Teachers' instructional supervisory skills and teachers' performance.

Meanwhile, the mentoring supervisory skill of master teachers have strong positive relationship with the teacher performance having r-value of 0.37 and statistically significant with p-value of 0.04. The results indicate that there is a positive relationship even though it was moderate in strength. Although the relationship is moderate in strength, the statistical significance underscores its reliability and suggests that enhancements in mentoring skills can lead to noticeable improvements in teaching performance. This finding highlights the importance of developing and investing in mentoring programs for master teachers, as their ability to mentor effectively plays a crucial role in elevating the overall quality of education. The results highlight some areas where master teachers may need additional training or support to strengthen their mentoring competencies, especially on developing stronger interpersonal and mentoring skills. Its implication is that school systems and policymakers should consider a more holistic approach to teacher development, where master teacher mentoring is one component alongside other supports, rather than relying on mentoring alone to drive teacher performance. Also, evaluation and refinement of master teacher mentoring programs may be needed to identify areas for improvement and ensure that mentoring is having the desired impact on teaching and learning.

Moreover, Ordanel and Dioso (2023) posited that the leadership capacity of Master Teachers is critical for improving teacher performance, as it allows MTs to set clear goals, provide guidance and support, and foster a positive learning environment. Additionally, the study found that master teachers' mentoring skills, such as co-teaching and providing guidance, are essential for developing the instructional competence of their colleagues.

Additionally, a weak positive relationship between master teachers' skills in clinical supervision with r-value of 0.23 and statistically no significant relationship with p-vaule of 0.325 is shown in the table. The low r-value suggests that master teachers' clinical supervision skills account for only about 5% of the variation in teacher performance this means other factors likely play a much larger role and the high p-value of 0.3255 indicates there is a 32.55% probability that the observed relationship occurred by chance. This exceeds the typical 5% threshold for statistical significance which means we cannot confidently conclude that there is a true relationship between the variables. The weak relationship and lack of statistical significance suggest that simply possessing strong clinical supervision skills may not be enough for master teachers to meaningfully impact teacher performance there are other factors, such as the quality of feedback, frequency of observations, and teachers' receptiveness to coaching, likely moderate the effectiveness of clinical supervision.

The result implies that master teachers should not overemphasize clinical supervision skills when selecting and training master teachers, these skills alone do not appear to be a key reason of improved teacher performance. Master teacher training programs may need to expand beyond just clinical supervision to include other competencies, such as

adult learning principles, emotional intelligence, and change management. Thus, it is significant that evaluating the impact of master teachers should consider multiple measures beyond just teacher performance, such as student outcomes, teacher retention, and even school culture.

The result is confirmed by previous researchers (David et al., 2023; Basilio & Bueno, 2021; Bush et al., 2017), who claimed why clinical supervision often fails to positively affect teaching performance. Oftentimes, the structured and often rigid nature of clinical supervision can stifle teacher creativity and autonomy. Teachers may feel constrained by the strict protocols and assessments, leading to a lack of innovation in their teaching methods. Moreover, they claimed that focus on compliance and adherence to standardized procedures during clinical supervision may not address the individual needs and contextual challenges faced by teachers. This can result in generic feedback that does not help teachers improve their specific areas of weakness or leverage their strengths effectively.

In pedagogical dimension, results showed that the relationship is statistically significant between master teachers' supervisory skills and teachers' performance with p-value of 0.38 and r-value of 0.04 which has strong positive relationship. This finding implies that improvements in master teachers' supervisory abilities could potentially enhance teachers' pedagogical practices and subsequently impact student learning outcomes. However, given the weak correlation, additional factors beyond supervisory skills likely influence pedagogical effectiveness, highlighting the need for comprehensive support and development strategies to optimize teaching practices in this dimension.

The result confirms the claims of Asio et al. (2018) that teaching performance can be improved through continuous professional development, effective use of technology, and regular feedback. Professional development opportunities, such as workshops and training sessions, help teachers stay updated with the latest educational practices and methodologies. Integrating technology in the classroom can enhance learning experiences and engagement. Additionally, regular feedback from peers, students, and administrators can provide valuable insights for teachers to refine their teaching strategies and address any areas of improvement.

Master teacher's supervisory skills in technological aspect has no linear relationship with the teacher's performance having an r-value of 0.053 and a p-value of 0.59 showed that statistically no significant relationship. This means that changes in master teachers' technological supervisory skills are not associated with any meaningful changes in teachers' performance.

The findings suggest that master teachers' supervisory skills in the technological aspect do not play a significant role in determining teachers' performance. These results provide valuable insights for educational leaders and policymakers to focus on a broader range of factors beyond just master teachers' technological supervisory skills when developing strategies to improve teachers' performance in the technological aspect of their work. Investing in teacher training, providing adequate technological resources, and fostering a

supportive environment for technology integration may be more effective in enhancing teachers' performance in this area.

This implies that other factors, such as teachers' own technological skills, access to technology resources, strong internet connectivity and the integration of technology into the curriculum, may be more important in shaping teachers' performance in this area. The lack of a linear relationship between the two variables suggests that improving master teachers' technological supervisory skills alone may not lead to significant improvements in teachers' performance. It also suggests more comprehensive approach that addresses various aspects of technology integration in education may be necessary to enhance teachers' performance in this domain.

Batuiguis et al. (2022) asserted that teachers need to have strong technological skills to effectively integrate technology into their teaching. This includes understanding how to use various devices, software, and online tools, as well as being able to troubleshoot issues that may arise. Without these skills, teachers may feel overwhelmed and less confident in using technology, which can limit its effectiveness in the classroom.

Lastly, the evaluation supervisory skills of master teachers with r-value of 0.034 suggests there is a linear relationship between master teachers' evaluation supervisory skills and teachers' performance. This means that changes in master teachers' evaluation supervisory skills are associated with any meaningful changes in teachers' performance. The p-value of 0.01 is well below the commonly used significance level of 0.05, indicating that the observed linear relationship between the two variables is statistically significant. This means that the finding did not occur by chance instead shows a more reliable and meaningful relationship. It also further implies that there is sufficient evidence to conclude that a linear relationship exists between the two variables under investigation.

The finding suggests that improvements or declines in supervisory skills are consistently associated with changes in teachers' performance. While the effect size is minimal, the consistent association implies that efforts to enhance supervisory skills are still relevant, as even small changes in these skills can impact teachers' performance. This finding underscores the importance of continuous professional development for master teachers, though it highlights that such efforts may result in modest performance gains among teachers.

These findings provide valuable insights for educational administrators and policymakers to look beyond just the evaluation of the supervisory skills of master teachers when developing strategies to improve teachers' performance. Focusing on a broader range of factors, such as creating a supportive and collaborative work environment, providing targeted professional development, and fostering effective feedback mechanisms, may be more effective in enhancing teachers' performance.

Comighud et al. (2020) explained that Master Teachers’ competencies are crucial for effective supervision, as they enable them to guide and support their colleagues in delivering high-quality instruction. Specifically, master teachers' proficiency in curriculum

planning and assessment and reporting skills helps them to develop and implement effective lesson plans and evaluate student performance accurately, which in turn enhances the overall academic performance of the school. Lopez (2018) advised that to enhance the MTs instructional supervisory skills, the Department of Education may provide professional development opportunities, such as regular training sessions and workshops focused on pedagogical knowledge, content knowledge, evaluation skills, and mentoring skills.

Research Question 5. Is there a significant difference in the teachers' performance when grouped according to their characteristics?

Table 5 Test of Difference between Teachers' Performance and Each of the Respondents' Characteristics

Respondents Characteristics	**Teachers Performance**				
	Teaching and Learning	**Student's Outcome**	**Community Involvement**	**Professional Growth and Development**	**Overall**
	t-value p-value	t-value p-value	t-value p-value	t-value p-value	t-value p-value
Sex	0.129 0.897 NS	0.291 0.772 S	2.004 0.093 NS	0.050 0.961 NS	0.396 0.693 NS
Highest Educational Attainment	0.815 0.016 S	0.786 0.002 S	0.790 0.000 S	0.444 0.022 S	0.702 0.002 S
Teaching Experience	0.729 0.04 S	0.91 0.072 S	0.647 0.018 S	0.850 0.02 S	0.629 0.03 S
Ethnicity	0.344 0.913 NS	0.460 0.838 NS	0.502 0.807 NS	0.517 0.796 NS	0.409 0.853 NS
Attitude Towards Supervision	24.004 0.000 S	22.708 0.000 S	22.165 0.000 S	34.898 0.000 S	23.216 0.000 S

Legend: Significant at p<.05 alpha level

Table 5 reflects the statistical result of the test of difference conducted to determine the significant difference in the teachers' performance when grouped according to sex, highest educational attainment, teaching experience, ethnicity and attitudes towards supervision. The table presents the results of a t-test conducted to determine if there is a significant difference in the teachers' performance based on gender. The sample consisted of 65 male teachers and 351 female teachers. The t-value is 0.396, with and the significance level (p-value) is .069. The results indicate that there is no statistically significant difference in the performance of teachers based on sex, as the p-value of .693

is well above the common threshold of .05. The result suggests that gender does not play a significant role in determining teacher performance within the context of local of the study. It further implies that the teachers' excellent performance, presented in the previous tables, was attained regardless of the teachers' gender preferences. Therefore, efforts to improve teacher performance should focus on factors other than gender, as both male and female teachers perform at similar levels. The division can create fair and unbiased policies and programs that support teacher development and performance enhancement without regard to gender.

The same result was established in the study of Graham et al. (2020), who posited that gender does not significantly influence teachers' teaching performance because it is not a determinant of their instructional style or classroom management. Accordingly, it does not necessarily dictate the type or quality of instruction that occurs in the classroom, nor does it affect their ability to manage and engage students effectively. Therefore, performance outcomes are more likely influenced by individual skills, experience, and professional development opportunities rather than gender. Contrary to the result, Sarabia and Collantes (2020) found that gender and position emerged as positive predictors of teaching performance, suggesting that female teachers and those in higher positions tended to have better teaching performance.

The t-test results on the teachers' performance when grouped according to highest educational attainment. The t-value from the ANOVA test is 0.702 and the significance level (p-value) is 0.002. The results indicate that there is a statistically significant difference in the teachers' performance based on their highest educational attainment, as the p-value of 0.002 is below the common significance threshold of .05. This suggests that the level of academic qualification whether having MA units, an MA degree, PhD units, or a PhD degree significantly affect teachers' performance. The p-value well below the common significance threshold that this difference is not due to chance. This implies that the level of academic qualification—whether having MA units, an MA degree, PhD units, or a PhD degree—has a significant effect on teachers' performance. Therefore, higher educational attainment among teachers is associated with better performance, highlighting the importance of encouraging advanced studies and continuous professional development for educators to enhance their teaching effectiveness and overall performance.

The results affirm the findings Balanquit et al. (2023) that teaching performance do not necessarily hinges on the teachers' highest educational attainment. While advanced degrees provide theoretical knowledge, practical skills such as classroom management, instructional techniques, and the ability to engage and motivate students play a crucial role in teaching efficacy. However, according to Pido et al. (2023) teachers with advanced degrees are often thought to have superior teaching competencies that positively impact student learning. This enhanced teaching ability is expected to lead to higher performance and increased school productivity. Pama (2023) added that ongoing professional development, teaching experience, and personal attributes such as enthusiasm, adaptability, and empathy are critical in shaping a teacher's performance.

Further, the comparison of teachers' performance when grouped according to teaching experience. As reflected in the table, the teacher respondents were grouped into five categories according to their years of teaching experience. The t-value obtained from the analysis is 0.629, and the significance level (p-value) is 0.03. Since the p-value is below the conventional threshold of 0.05, the differences in teachers' performance across the different experience groups are statistically significant. This implies that, based on this data, teaching experience have a significant impact on teachers' performance ratings. This underscores the value of accumulated teaching experience in enhancing teaching effectiveness, classroom management skills, instructional strategies, and overall professional competence. The findings also suggest that educational institutions and policymakers should consider strategies to support and retain experienced teachers, as their accumulated expertise contributes positively to educational outcomes.

The result coincides with the findings of Ekaterini et al. (2022) and Irvine (2019) who both suggested that teacher experience significantly affects teacher effectiveness, primarily during the initial years of a teacher's career. They argued that improvement generally occurs over the first 4 to 5 years but note that this is an average, with some less experienced teachers improving much more rapidly than others. Pama (2023) elucidated that while experience matters, more is not always better. The relationship between teaching experience and effectiveness is nonlinear, with the greatest gains in the first few years. After that, factors like the teaching environment, subject area, and individual teacher characteristics become more important in determining the effectiveness than total years of experience alone.

On another note, the t-test result of the comparison on the teachers' performance when grouped according to ethnicity. The study categorizes teachers into eight ethnic groups: Bukidnon, Higaunon, Manobo, Matigsalog, Talaandig, Tigwahanon, Umayamnon, and a category for those identifying as none of the above. The t-value obtained from the analysis is 0.439 and a significance level (p-value) of 0.853. Given that the p-value is significantly higher than the conventional threshold of 0.05, the differences in teachers' performance across different ethnic groups are not statistically significant. The study cannot fully determine the effect of ethnicity because majority of the respondents are not part of the Bukidnon tribe. This result implies that teacher performance does not significantly differ based on ethnicity within the respondents of this study. The similarity in performance across ethnic groups suggests that factors other than ethnicity are playing a more critical role in influencing teacher effectiveness.

The results align with the findings of Steinberg and Sartain (2020) that ethnicity does not significantly influence their performance because the professional environment, training, and support systems provided to teachers are designed to be inclusive and standardized across all ethnic groups. This standardization ensures that all teachers have access to the same resources, professional development opportunities, and support networks, thereby creating a level playing field where individual performance is more influenced by these professional factors rather than ethnic background (Joshi & James, 2022).

Finally, the t-test result of the comparison on the teachers' performance when they are grouped according to their attitude towards supervision. The study categorizes teachers into four groups based on their attitudes: very negative, negative, positive, and very positive. The t-value is 23.216 and the significance level (p-value) is 0.000, indicating that the differences in teachers performance are statistically significant. The results imply that a teacher's attitude towards supervision has a significant impact on their performance. Teachers with very positive attitudes towards supervision perform markedly better than those with negative or very negative attitudes. This suggests that a constructive and receptive attitude towards supervision can enhance teacher performance, potentially due to greater openness to feedback, willingness to improve, and a more collaborative relationship with supervisors. Teachers who have positive attitude towards supervision, they are more likely to feel confident in their abilities and more receptive to feedback and guidance from supervisors.

Buagas and Ching (2023) posited that the teachers' positive attitudes toward instructional supervision are positively correlated with their job performance. When teachers view instructional supervision as a tool for professional growth and improving student performance, it leads to better teaching outcomes. Similarly, Echeche (2022) asserted that the impact of positive attitudes on supervision can be seen in the way teachers approach their work. Teachers who have a positive view of supervision are more likely to be proactive in seeking feedback and support, and to be open to new ideas and strategies. This can lead to a more collaborative and dynamic teaching environment, where teachers feel empowered to take ownership of their professional development and to make a positive impact on student learning. Moreover, Dingal (2023) expounded that effective supervision practices by master teachers and supervisors can improve teachers' perceptions of supervision, which in turn enhances their job performance. Felisilda and Malaga (2019) added that the relationship between instructional supervisory practice and teacher job performance is mediated by teachers' attitudes, meaning that positive attitudes help translate effective supervision into improved teaching. Teachers who perceive supervision as meeting their professional needs, fostering collaboration and trust, and providing support and guidance tend to have more positive attitudes.

Research Question 6. Based on the findings of the study, what instructional supervisory plan can be designed?

Table 6. Matrix of School Instructional Supervisory Plan

Year 1							
Areas of Concern	**Objectives**	**Strategies/Activities**	**Time Frame**	**Persons Involved**	**Source of Funds**	**Estimated Budget**	**Expected Outcome**
Professional Growth and Development .	Publishes research or articles in peer-reviewed journals or educational publications related to	Publishes research or articles in peer-reviewed journals Seminar workshops on crafting action research	Whole year round	Master Teacher School Principal Division Office Key Officials	MOOE PTA Fund	100, 000.00	Publish research on international journals Completion of online courses Annual professional development evaluation

	their field of expertise.	Workshops, seminars, and online courses.					
Mentoring on Conduct action research	Conduct in-depth studies or action research	Provide training on action research methodologies. Organize action research symposiums to share findings. Increase teacher participation in action research projects. Improve instructional practices based on research findings**.**	Whole year round	Master Teacher School Principal Division Office Key Officials	MOOE PTA Fund	100, 000.00	Research-based instructional materials Innovative teaching strategies embedded in the lesson exemplar Certificate of trainings Improve students data by applying research findings Completed and implemented action research

Year 2							
Areas of Concern	**Objectives**	**Strategies/Activities**	**Time Frame**	**Persons Involved**	**Source of Funds**	**Estimated Budget**	**Expected Outcome**
Professional Growth and Development	Presents conferences or workshops on the topics related to their field of expertise Equip teachers with the skills to analyze student data Use data to set informed and realistic expectations for the students	Data-Driven Instruction Planning Session Group discussions and activities. Hands-on exercises and simulation Peer-to-peer sharing and feedback.	Throughout academic year	Master Teacher School Principal All teachers (grouped according to their field)	MOOE PTA Fund	50, 000.00	Sample data sets Lesson plan Lesson study results
Supervisory skills on mentoring teachers	Conduct echo seminars in content and self-difficulties	collaborative planning and co-teaching Engage teachers in problem-solving and discussion					Reflective journal Teachers portfolio Students progress report chart

		Encourage teachers to reflect on their experiences, challenges, and growth					

Year 3							
Areas of Concern	**Objectives**	**Strategies/Activities**	**Time Frame**	**Persons Involved**	**Source of Funds**	**Estimated Budget**	**Expected Outcome**
Professional Growth and development	Assist teachers to enhance professional growth and development. Facilitate professional learning communities on advancing teaching practices and pedagogy	Learning action cell sessions In-service training on content and pedagogy Demonstration teaching to enhance teaching practices Class monitoring and evaluation Lesson planning for effective teaching strategies	Throughout academic year	Master Teachers School Principal All teachers (grouped according to major) Division Office Key Officials	MOOE PTA LGU	100,000.00	Post training report and evaluation Teacher-made lesson plans Class observation rating Instructional plan
Supervisory skills on mentoring teachers	Evaluate teacher-made tests and interpret results	Training for teachers in developing high-quality Reviewing and providing feedback on teacher-made tests Analyzing test results	Throughout academic year	Master Teachers School Principal All teachers Division Office personnel	MOOE PTA LGU	100,000.00	Post training report Quarterly test analysis result Test questions with table of specification

Conclusions

From the findings and discussions outlined, the following conclusions are drawn:

1. The characteristics of Master Teachers and teachers within the Division of Valencia City demonstrate a diverse spectrum, encompassing gender imbalance, strong educational commitment, mid-career stability, and ethnic diversity. Moreover, the positive attitudes towards instructional supervision underscore its perceived importance in

enhancing teaching practices and fostering professional growth within the educational community.
2. The excellence of Master Teachers' instructional supervisory skills in pedagogical dimension, and across various domains, proves their profound ability to guide and enhance teaching practices. This mastery not only ensures effective delivery of curriculum but also fosters continuous professional growth among educators.
3. The excellence of teachers' teaching performance in the area of teaching and learning process, and across various dimensions, reflect a commitment to excellence in education. It further affirms their significant contributions to student success and the broader educational community.
4. The significant relationship between Master Teachers' instructional supervisory skills and teachers' teaching performance emphasizes the crucial role of effective instructional supervision in enhancing teaching quality and student learning outcomes.
5. The significant difference of the teachers' performance when grouped according to highest educational attainment and teaching experience underscores the impact of advanced knowledge and seasoned practice on classroom outcomes. This differentiation highlights the important contributions that diverse educational backgrounds and extensive teaching tenure bring to the educational landscape, shaping both student achievement and institutional success.
6. Based on the conclusions established, this study proposed the Theory of Supervisory Impact on Teaching Excellence. This theory posits that consistent and effective instructional supervision by Master Teachers is fundamental in enhancing teaching performance, strengthening educational attainment and teaching experience to increase student success and overall educational improvement.

Recommendations

Based on the relevant findings and conclusions drawn, this study proposed the following recommendations:

1. Master Teachers may continuously refine and expand their instructional supervisory skills, particularly in mentoring and supporting less experienced educators.
2. The teachers could embrace opportunities for professional growth and development, such as participating in workshops, conferences, and continuing education programs to stay update with recent advancements in teaching methodologies, technology integration, and subject area knowledge.
3. The Division may facilitate the adoption and implementation of this study's proposed School Instructional Supervisory Plan by providing comprehensive training for school leaders and instructional supervisors. This can be done through workshops and seminars that focus on the components and benefits of the plan, as well as practical strategies for effective implementation.

Compliance with Ethical Standards

Prior to commencing the study, the researcher undergone an ethics review and earned clearance from the office of the Graduate Studies spearheaded by the research

coordinator. After which a permit letter to conduct the study signed by the dean was given to the researcher. The researcher forwarded it to the Division of Valencia City Schools Division Superintendent for endorsement to the school principals to gather necessary data for the study. The research participants were informed of the purpose and nature of the study, emphasizing that their participation is purely voluntary and does not, therefore, include any monetary remuneration. The researcher also stressed that the participants had the choice to refrain from answering questions that made them feel uneasy. Furthermore, they were assured that the data gathered from their participation was handled with strict adherence to ethical considerations in research. This included maintaining confidentiality, ensuring anonymity where appropriate, and obtaining informed consent prior to participation. Finally, the participants were asked to sign a consent letter, signifying their intention to participate in the study.

Acknowledgments

Immeasurable appreciation and deepest gratitude are extended to the following persons and institutions that in one way or another have made valuable contributions to the success of this study:
Dr. Braziel L. Ongcachuy, the Dean of the School of Graduate and Professional Studies, for her unwavering focus and consistent assistance;
Dr. Gina F. Labitad, her adviser, for the valuable expertise, corrections and suggestions
Dr. Gerlinda G. Corpuz, together with panel members namely Dr. Pepa V. Pontillas, Dr. Carmelita O. Elbanbuena and Dr. Estrella S. Ferenal for the persistent encouragement, intellectual guidance, enduring motivations, patience, and unselfish effort that inspired the researcher;
Ms. Verge Samson, School of Graduate and Professional Studies staff for continuous aid and help.
Jesnar Dems S. Torres, for allowing the researcher to conduct this study through the school heads and all teacher participants in the Division of Valencia City;
Dr. Jahzeel M. Candilasa and Dr. Rosalie Ambasa, for the brilliant ideas and comments contributed;
Dr. Sarah Jane A. Valdez, Dr. Rosalia E. Pastrana, Dr. Melanie P. Suldano and Dr. Jahzeel M. Candilasa for patiently sharing their expertise in the content validation of the research questionnaire;
Her children Yrral Xian and Lyrra Yovela, for the unwavering support, the strength, inspiration and bundle of joy that made her unbearable days brighter.
Her father who is now in heaven, Roberto Mondejar Damacino and to her mother Ninfa Molase Amit, brothers Ronnie, Ronald, Rodjune, Roldan and Robert Rode sisters Rodani and Ronalie, in-laws, nieces, nephews, relatives and friends for their undying support and unfailing trust despite the researcher short comings.
Above all, to God Almighty for the strength in times of burden and challenges, for the bountiful blessings and good health. All these for the glory of God.

REFERENCES

Abreu, A., Cardoso, A. P., & Rocha, J. (2019). Teachers' perception of the Head of Department's performance and pedagogical supervision. Millenium Journal of Education, Technologies, and Health, 2(3), 47-59.

Andriani, R. & Rasto, S. (2019). Learning motivation as a determinant of student learning outcomes. Journal of Office Management Education, 3(4), 1-7.

Asio, J. M. R., & Riego de Dios, E. (2018). 21st-century attributes and skills of a teacher in the perspective of college students. Zenodo. http://doi.org/10.5281/zenodo.3961838

Balanquit, E. P., Ladia, M. a. P., & Nool, N. R. (2023). The influence of faculty members' educational attainment on the performance in the licensure examination for teachers (let) among state universities and colleges in the Philippines. Journal of Curriculum and Teaching, 12(1), 247. https://doi.org/10.5430/jct.v12n1p247

Bañares, M. & Pimentel, K. R. (2021). Positive use of technology of master teachers in sdo Antipolo using samr model: Input for capability building. Research Gate, 1-11

Barrogo, S. (2022). Teachers' perception of standardized classroom observation tool. International Journal of Academic Pedagogical Research (IJAPR), 4(7), 33-37.

Barruga, J. (2021, April). The role of master teachers this pandemic. Retrieved from https://www.depedmasbatecity.com/the-role-of-master-teachers-this-pandemic/

Basilio, M., & Bueno, D. (2021). Instructional supervision and assessment in the 21st-century and beyond. Institutional Multidisciplinary Research and Development Journal, 4(33), 1-8.

Batuiguis, F., Leyson, F., Fernandez, L., Napil, J., Sumanga, C. (2022). Factors affecting teaching performance of junior high school teachers of madridejos national high school. Asia Research Network Journal of Education, 2(1), 40-47.

Buagas, R. C., & Ching, G. L. (2023). Instructional supervisory practices of school heads during the full implementation of Face-To-Face classes in the third congressional district of Quezon: Basis for a supervisory plan. Zenodo (CERN European Organization for Nuclear Research). https://doi.org/10.5281/zenodo.8071738

Bukidnon.gov.ph (2012). The people of Bukidnon. Retrieved from https://bukidnon.gov.ph/brief history/#: ~:text=The%20term%20%E2%80%9CBukidnon%E2%80%9D%20(mountain, %2C%20Matigsalug%2C%20Manobo%20and%20Tigwahanon.

Berhanu, K. Z. (2024). The mediating role of teachers' attitudes toward instructional supervision in the association between instructional supervisory practice and teachers' job performance. Participatory Educational Research,11(2), 212-229.

Bush, T., Glover, D., Ng, A., Romero, M. (2017). Master teachers as teacher leaders: evidence from Malaysia and the Philippines. International Studies in Educational Administration, 43(2), 47-63.

Carraway, J. H., & Young, T. (2014). Implementation of a districtwide policy to improve principals' instructional leadership: Principals' sensemaking of the skillfull observational and coaching laboratory. Educational Policy, 29(1), 230-256. doi:10.1177/0895904814564216

Comighud, S.M., Futalan, M. T., Cordevilla, R. (2020). Instructional Supervision and performance evaluation: A correlation of factors. International Journal for Research in Social Science and Humanities, 6(4), 1-19.

Cortez, B. (2023, March 3). Greater role of a master teacher. Press Reader. Retrieved from https://www.pressreader.com/philippines/sunstar-pampanga/20230329/281646784396213

Dahl, P.K. (2021). Women and teaching profession women and teaching profession. Women & Teaching Profession, 3(1), 22-36.
Daly, C. (2022, June). How community involvement in schools will help students prosper. Thought Exchange. https://thoughtexchange.com/blog/community-involvement-in-schools/
David, D.L., Edward, K., Eria, M., Samuel, H. (2023). Instructional supervision and teachers' performance in bidibidi refugee settlement primary schools in Yumbe District-Uganda: A conceptual paper. Journal of Research in Humanities and Social Science, 11(8), 357-368.
Dingal, E. (2023). Effect of mentoring skills of master teachers on instructional practices of teachers and pupils' academic performance. International Journal of Advanced Multidisciplinary Studies, 3(2), 420-443.
Echeche, G. M. (2022). Coaching and Mentoring Practices of Master Teachers towards Effective Teaching. International Journal of Science and Research (IJSR), 11(7). https://www.ijsr.net/archive/v11i7/SR22630083559.pdf
Ekaterini, A., Koutouba, M., & Koutouba, E. (2022). Effective Teacher Professional Development. Learning Policy Institute. Retrieved from https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_BRIEF.pdf
Ereje, B., & Ambag, S. (2020). Teachers' performance and students' learning outcome in the division of Cavite Province, Philippines. International Journal of Theory and Application in Elementary and Secondary School Education, 2(2), 143-158. DOI: 10.31098/ijtaese. v2i2.388
Elbana, A. (2024). The mediating role of teachers' attitudes toward instructional supervision in the association between instructional supervisory practice and teachers' job performance.
Elbanna, A. (2024, January). The huge importance of the process of supervision in education. Skolera. Retrieved from https://blog.skolera.com/importance-of-supervision-education/
Felisilda, A. C., & Malaga, A. N. (2019). Peer mentoring in the full mission bridge, 5 (9), 143–146
Francisco, A. R. (2020). Teachers' personal and professional demographic characteristics as predictors of students' academic performance in English. International Journal of Management, Technology, and Social Sciences (IJMTS), 5(2), 2581-6012.
Ganal, N., Guiab, M., Sario, M.L. (2019). Assessing the training needs of teachers on the 21st century pedagogical skills and personal development. The Normal Lights, 13(2),177-200. DOI:10.56278/tnl. v13i2.1391
Gestupa, G. (2023). Instructional supervision and technical assistance of master teachers in the division of Taguig City and Pateros. International Journal for Research in Applied Science & Engineering Technology, 11(3), 923-934. https://doi.org/10.22214/ijraset.2023.49146
Gita-Carlos, R. (2024, January). Tech adoption, teachers' specialization seen to improve learning. Philippine News Agency. Retrieved from https://www.pna.gov.ph/articles/1216756
Graham, L. J., White, S. L., Cologon, K., & Pianta, R. C. (2020). Do teachers' years of experience make a difference in the quality of teaching? Teaching and Teacher Education, 96, 103190. https://doi.org/10.1016/j.tate.2020.103190
Guanzon, L. & Miranda, A. M. (2023). Professionalism and technical assistance skills of master teachers in relation to teachers' performance. International Journal of Scientific Research and Management (IJSRM), 11(12), 3091-3116. DOI:

10.18535/ijsrm/v11i12.el02
Hoque, H., Kenayathulla, K., Subramaniam, M., Islam, R. (2020). Relationships between supervision and teachers' performance and attitude in secondary schools in Malaysia. SAGE Open, 3(7),1–11. DOI: 10.1177/2158244020925501
Ikromova, A.A. (2020). The concept of pedagogical skills, its role and importance in teaching. The American Journal of Applied Sciences, 2(8), 8-17. doi:10.37547/tajas.
Irvine, J. (2019). Relationship between teaching experience and teacher effectiveness: Implications for policy decisions. Journal of Instructional Pedagogies, 3(22), 1-20.
Javier, B.F. (2020). Practices of Filipino public high school teachers on digital teaching and learning technologies during the covid-19 pandemic: Basis for learning action cell sessions. International Journal of Computing Sciences Research, 6, 707–722. https://doi.org/10.25147/ijcsr.2017.001.1.67
Joshi, P. R., & James, M. C. (2022). An ethnic advantage: teacher-student ethnicity matching and academic performance in Nepal. Education Inquiry, 15(2), 164–187. https://doi.org/10.1080/20004508.2022.2073055
Kanya, K., Fathoni, A.B., Ramdane, Z. (2021). Factors affecting teacher performance. International Journal of Evaluation and Research in Education (IJERE), 10(4), 1462~1468. DOI: 10.11591/ijere. v10i4.21693
Kurka, A., & Berhanu, E. (2019). Attitude of teachers towards school-based instructional supervision at secondary schools of wolaita zone. Research on Humanities and Social Sciences, 9(15), 35-54.
Laude, T., Ralar, T.J., Arcenal, J. (2014). Master teachers as instructional leaders: an exploration of school leadership capacity in the division of Biliran. International Journal of Sciences: Basic and Applied Researches 40(1), 50-74.
Lopez,M.C.A. (2018). Classroom supervisory practices and their relationship to teacher effectiveness as perceived by secondary teachers. SMCC Higher Education Research Journal, 2, 119-131.
Luftiyana, A., Sugito, S. (2020). Factors influencing teacher professionalism development on secondary school. KnE Social Sciences, 1(3), 97-110. DOI: 10.18502/kss. v3i17.4630
Ma, D. (2022). The role of motivation and commitment in teachers' professional identity. Frontiers in Psychology, 13(2), 1-5. https://doi.org/10.3389/fpsyg.2022.910747
Magcanas, E.D.J. (2019). Technical assistance of school heads and teacher's performance of public elementary school of Taytay district, division of Rizal. University of Rizal System, Philippines
Makavec, D. (2018). The teacher's role and professional development. International Journal of Cognitive Research in Science, Engineering and Education, 6(2), 33 - 46.
Marshall, K. (2021). Effective teacher supervision, coaching, and evaluation. AWSA. Retrieved from https://awsa.memberclicks.net/update-article--effective-teacher-supervision--coaching--and-evaluation
Matias, S. (2023). The instructional supervisory competencies of master teachers in the division of Rizal: Inputs for an enhanced professional development program. Psychology of Education, 14, 489-511. doi:10.5281/zenodo.8437399,
Mendoza, J. J., & Bautista, S. C. (2023). Leadership factors of educational leaders, organizational culture and teacher competence in selected private higher education institutions (HEIs) in Binan, Laguna. Technium Social Sciences Journal, 44, 560.
Mizell, H. (2019). Why professional development matters. Learning Forward:USA
Munna, A.S. & Kalam, A. (2021). Teaching and learning process to enhance teaching effectiveness: A literature review. International Journal of Humanities and

Innovation, 4(1), 1-5.
OECD (2024), Women teachers (indicator). doi: 10.1787/ee964f55-en. Retrieved from https://data.oecd.org/teachers/women-teachers.htm#indicator-chart
Ordanel, A. R. & Dioso, E. (2020). Effects of supervisory practices of school principals to work performance of teachers. International Journal of Environmental Economics, Commerce and Educational Management Journal, 10(8), 18-30. DOI: 10.36713/epra0414
Ordavisa, P. & Cañon, I. (2020). Relevance of instructional supervision to teachers and school heads‟ performance. Asia Pacific Journal of Education, Arts and Sciences, 7(1), 89-94.
Pama, P. (2023). Affecting teachers' performance and effectiveness in public secondary schools in Agusan del sur, division, Philippines: Determinant factors inquiry. Psychology and Education, 7(3), 65-71. DOI: 10.5281/zenodo.7607549
Pandolpho, B. (2019, May). Designing lessons for engagement. Edutopia. https://www.edutopia.org/article/designing-lessons-engagement/
Pardillo, G., Manguilimotan, R., Capuno, R., Espina, R. (2021). Professional development activities and teacher performance. International Journal of Education and Practice, 9(3), 497-506. DOI: 10.18488/journal.61.2021.93.497.506
Pido, M. R., Mahmud, M., & Sudirman, S. (2023). Teacher performance on student learning outcomes. Journal of Economic and Business Education, 1(1), 21–29. https://doi.org/10.37479/jebe.v1i1.16928
Ramin, R. (2014). EFL Teachers' Attitudes towards Being Supervised in an EFL Context. Journal of Language Teaching and Research, 5(2), 358-366. Retrieved from Academy Publisher
Rungduin, T. T., & Miranda, P. A. (2018). An exploration of the factors affecting graduate degree completion in a teacher education institution (tei): inputs for graduate program management and pedagogy. AsTEN Journal of Teacher Education, 3(2),
Roxas, L. B., Viuya, P. C., & Vallejo, O. T. (2018). Community involvement of public secondary school teachers in Northern Aurora, Philippines. International Journal of Scientific and Research Publications, 8(10). https://doi.org/10.29322/ijsrp.8.10.2018.p8258
Sangalang, L. (2018). Mentoring skills and technical assistance of master teachers in Pangasinan. PSU Multidisciplinary Research Journal, 1(1), 1-9.
Sarabia, A. & Collantes, L. (2020). Work-related stress and teaching performance of teachers in selected school in the Philippines. Indonesian Research Journal in Education, 4(1), 6-27.
Sartana, S. (2020). Improving school principal competence in implementing academic supervisionthrough monitoring and evaluation methods in indragiri hulu regency. JURNAL PAJAR (Pendidikan dan Pengajaran), 4(2), 347-355.
Schwartz, S. (2023, July). Teacher professional development, explained. https://www.edweek.org/leadership/teacher-professional-development-explained/2023/07
Schweikhardt, M. (2022, January). Why is professional development important for teachers? Education Solutions. https://www.smekenseducation.com/why-is-professional-development-important-for-teachers/
Seameo Innotech (2023, December). Technologies for teacher training. https://www.seameo-innotech.org/portfolio_page/technologies-for-teacher-training/#
Sharp, C. & Ashton, K. (2024). Ethnic diversity in the teaching workforce: Evidence review. Slough: NFER.
Sharrock, E. (2023, October 19). Investing in mentorship can help the teacher retention

crisis. eSchool News. Retrieved from https://www.eschoolnews.com/educationalleadership/2023/10/19/mentorship-teachers-retention/
Steinberg, M. P., & Sartain, L. (2020). What explains the race gap in teacher performance ratings? Evidence from Chicago Public Schools. Educational Evaluation and Policy Analysis, 43(1), 60–82. https://doi.org/10.3102/0162373720970204
(PDF) Teacher Performance on Student Learning Outcomes. Available from: https://www.researchgate.net/publication/368661683_Teacher_Performance_on_Student_Learning_Outcomes [accessed Jun 10 2024].
Suparto, S. (2020). Improving the learning quality of Math teachers through the academic supervision with technique of class observation. International Research Based Educational Journal, 2(1), 21-24.
Teaching and Learning International Survey (2018). A profile of the teacher population and the schools in which they work. Retrieved from https://www.oecd.org/education/talis/
Thahir, M., Komariah, A., Kurniady, D. A., Suharto, N., Kurniatun, T. C., Widiawati, W., & Nurlatifah, S. (2021). Professional development and job satisfaction on teaching performance. Linguistics and Culture Review, 5(S4), 2507–2522. https://doi.org/10.21744/lingcure.v5ns4.2046
Tiplin, M. (2022, July). Understanding teacher performance. Onvu Learning. Retrieved from https://blog.onvulearning.com/a-thought-about-understanding-teachers-performance
Villastique, J. (2019). Teachers perceptions, attitude, and challenges in instructional supervision: basis for improving teachers' competence. Psychology & Education Journal, 7(2), 1-23.
Wong, A. (2019). The U.S. teaching population is getting bigger, and more female. The Atlantic. Retrieved from https://www.theatlantic.com/education/archive/2019/02/the-explosion-of-women-teachers/582622/

APA Citation:

Concepcion, R. D., & Labitad, G. F. (2024). MASTER TEACHERS' INSTRUCTIONAL SUPERVISORY SKILLS AND TEACHERS PERFORMANCE: BASIS FOR SCHOOL SUPERVISORY PLAN. Ignatian International Journal for Multidisciplinary Research, 2(8), 1133–1186. https://doi.org/10.5281/zenodo.13346407

Corresponding author: *rossanna.concepcion@deped.gov.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

MEDIA EXPOSURE AND PARENTAL MEDIATION: IMPLICATIONS ON KINDERGARTNERS' DEVELOPMENTAL SKILLS

Rezzel Mae A. Montecillo

Lourdes College, Cagayan de Oro City, Philippines

https://doi.org/10.5281/zenodo.13291926

ABSTRACT

As digital technologies permeate communication channels, concerns arise regarding the media's influence on young minds. This study investigated if the different types and durations of media affect cognitive, socio-emotional, language, and physical skills, as well as how parental mediation influence these developments. A total of 100 kindergartners who are enrolled in a public school under the Division of Iligan City school year 2023-2024 participated in the study. The study employed a descriptive–correlational research design and used frequency, percentage, mean, and regression analysis. The Early Childhood Care and Development Checklist and a modified parental mediation questionnaire served as the primary research instruments. Findings revealed that the kindergartners' media exposures and parental mediation do not significantly influence their developmental skills. The kindergartners primarily used media for educational and entertainment purposes, with most spending 1-3 hours weekly, although a significant number also engaged for 7-9 hours per week. The developmental skills of the children were generally highly advanced across all measured domains, indicating effective educational practices. Parental mediation was found to be moderate, often involving setting boundaries and providing guidance rather than engaging in shared media activities. The study's significance extends to various stakeholders. Parents gain insights into media's effects on child development, aiding in making informed decisions about media consumption. Kindergarten teachers can adapt teaching strategies to integrate media effectively into the curriculum. School administrators can develop evidence-based programs and policies to enhance students' developmental skills. Additionally, the study offers a foundation for future research on media exposure and parental mediation.

Keywords: *Media Exposure, Parental Mediation, Developmental Skills, Kindergartners, Media Content*

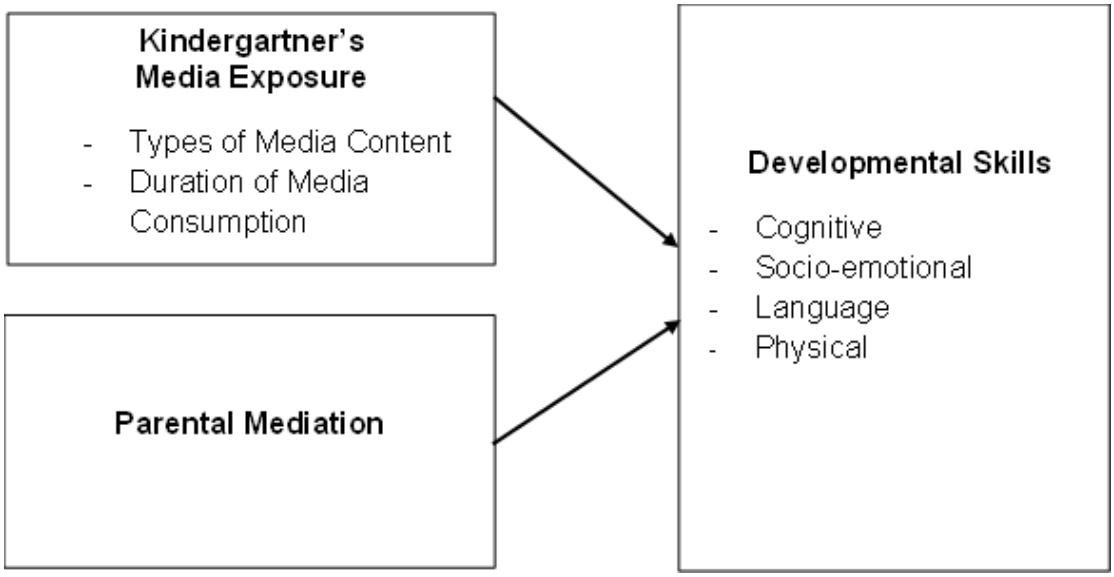
INTRODUCTION

Today's young children engage with media and technology more than ever before as screens permeate their daily lives. Examining how media exposure shapes capacities across domains like cognition, emotion regulation, language, and physicality is vital. Insights can inform guidance around balanced usage in early childhood to promote healthy academic and life trajectories (Hartnett et al., 2023). Exploring media's effects on kindergartners spans child psychology, education, communication, and media studies. As digital immersion escalates in childhood, caregivers, teachers, and policymakers must grasp how media affects developmental competencies. Substantive studies examined connections between screen media exposure and cognitive development in early childhood. Researchers probe how excessive screen engagement may hinder capacities like attention, academic progress, and language. For instance, Madigan and colleagues (2019) found links between higher screen time and reduced verbal expression in toddlers. Similarly, Tamana et al. (2019) associated preschoolers' screen use with escalated risks of attentional difficulties. Additional work by Watt et al. (2019) tied early television watching to poorer executive function at age five. High ambient screen exposure also appears potentially detrimental – Park et al. (2022) tied it to decreases in caregiver-child interaction quality. According to studies, when parents and children discuss what they're viewing or doing online, it may significantly affect how much media influences children (Lafton et al., 2024). This emphasizes that parents can strengthen their bonds with their children and can give them wise decisions in dealing with gadgets and online. In the end, these conversations are crucial in forming kids' digital habits and media resilience. Despite expansive research, gaps persist around media exposure's attributes and parental mediation's role (Cliff et al., 2018; Zahra et al., 2021). This study aimed to address these knowledge gaps by examining media contents and durations of exposure most likely to shape developmental skills, both constructively and problematically. Kindergartners' complex, evolving media landscape (Sahoo et al., 2021) propels an urgent need to equip caregivers, educators, and policymakers with evidence-based guidance around developmentally appropriate usage.

Framework

This study assumes that kindergartners' media exposure and parental mediation influence their developmental skills. For the researcher to be able to explicate this study and achieve its aim, various theories had also been consulted to support the primary factors. The study is mainly anchored upon two different theories; Attachment Theory and Social Cognitive Theory. Attachment Theory, originally formulated by John Bowlby in 1950, has implications for understanding the impact of media exposure on the developmental skills of kindergartners. This theory emphasizes the importance of secure emotional attachments for healthy development and can be a lens through which we examine how media exposure affects the emotional and social skills of young children.

The second theory where this study can be anchored is on Social Learning Theory (Bandura,1986). This theory posits that children learn by observing and imitating others, and as such, media exposure can serve as a potent source of learning and skill development for young children. Kindergartners are in a critical phase of cognitive, social, and emotional development, and the media they engage with can shape these crucial skills. Positive role models and educational content in media can contribute to the enhancement of their cognitive abilities, social interactions, and emotional intelligence (Chen & Xiao, 2022).



Research Objectives

This study aims to investigate the types and durations of media exposure among kindergartners and examine its influence on their cognitive, socio-emotional, language, and physical skills development. Additionally, it seeks to analyze the role of parental mediation in the media consumption of kindergartners and its impact on their developmental skills. The study provides insights for parents, kindergarten teachers, and school administrators regarding the effects of media on child development and offers guidance on media usage and parental involvement. Furthermore, it aims to establish a foundation for future research on media exposure and parental mediation in early childhood development.

METHODOLOGY

The total number of kindergartners is 100 and 100 parents participated in the study. The study employed a descriptive–correlational research design during the conduct of the research. The researcher utilized a standardized questionnaire from Michael Chia (2018) to determine the extent of media exposure. Also, this research adapted and modified an instrument from Nimrod, Elias, and Lemish (2019) on parents' mediation. As to the level

of developmental skills, the researcher adapted the Early Childhood Care and Development Checklist from the Philippine ECCD Checklist. Frequency, percentage, mean, and regression analysis were used to analyze and interpret the results/findings of the study.

RESULTS AND DISCUSSION

Table 1 presents the frequency distribution of kindergartners' media exposure in terms of types of media content. The data illustrate how often kindergartners engage with different types of media content and highlight the varying levels of media usage among them.

Table 1

Frequency and Percentage of Kindergartners' Media Exposures (Types of Media Content)

	RESPONSE MODES								
Activity	**Never**	**1-3 hours / week**	**3-5 hours / week**	**5-7 hours / week**	**7-9 hours / week**	**9 or more hours / week**	**M**	**Int.**	**SD**
Using media for education / learning (e.g. reading digital e-book learning math via educational apps)	18	39	11	22	7	3	2.70	M	1.34
Using media for entertainment (e.g. watching movies, clips, playing games, listening to music)	17	39	30	7	3	4	2.52	M	1.18
Creating media (e.g. interactive digital toys)	34	28	8	24	5	1	2.41	M	1.36
Communicating (e.g. Video chatting with relatives via facetime/ skype/ messenger)	27	35	21	11	3	3	2.37	M	1.24

The data denote that a good number of 39 kindergartners who engaged for 1-3 hours per week utilized media for educational purposes. However, the kindergartners had varying levels of media exposure for education; 18 kindergartners did not use media for education at all and therefore came up to an average engagement of 2.70 hours per week with moderate variability. In contrast, 22 kindergartners utilized educational media for 5-7 hours per week, and smaller data fell into other categories. That kindergartners spend time using media for education might indicate that receivers consider it useful or efficient at least to some extent; however, to make more definite conclusions concerning the role of media in education, more quantitative results and subjective assessments of learning results should be obtained.

Furthermore, the data on kindergartners' media exposure for entertainment purposes show that 30 kindergartners spent 3-5 hours weekly in entertainment media, including watching movies and playing games, which has a higher engagement, 39 kindergartners engaged for 1-3 hours, 17 kindergartners never used it for entertainment, and a few spent up to 9 or more hours per week, with a mean of 2.52, signifying entertainment media is used less intensively than educational media. However, when it comes to media creation, involving activities like using interactive digital toys, is showing the least common type of media activity among kindergartners, with 34 of them never engaging or never using media for that purpose and only 1 kindergartner dedicating 9 or more hours per week. This implies that while kindergartners are consumers of media content, they are not actively involved in producing or creating media themselves, leading to a wide range of engagement levels within this activity having the highest variability among the categories. The data also shed light on the use of media for communication purposes, such as video chatting with relatives, shows that 35 participants affirmed that they used media for 1 to 3 hours a week to communicate, while 27 kindergartners never used it for this purpose and a small data engage for up to 9 or more hours every week. This clearly explains how at such a tender age the media is used as a tool to facilitate communication as well as interpersonal interactions among kindergartners.

Overall, the data denote that media is primarily used for entertainment and communication purposes among kindergarteners, while content creation is not a common activity. A study by Ebbeck, Yim, and colleagues (2019), while primarily focusing on outdoor play, also touched upon the use of media in early childhood education.

Table 2 presents the frequency of kindergartners' media exposure in terms of duration. It highlights the different amounts of time they spend on various media forms.

As regards television usage, the participants are characterized by different exposure times with 20 kindergartners who never watched TV, 24 of them who watched for 1-3 hours or 7-9 hours weekly, and a smaller number of kindergartners who fall into other time categories. The mean usage is 3.10, indicating television is a frequent media form. The findings of the study suggest that parents should limit children's activities to no more than 2 hours of screen time per day excluding the time for doing homework (Legner, 2024). One further important factor is role modeling. The amount of screen time parents and kids spend together is strongly correlated. Such excessive self-watching can be observed when children are brought up in a family where television watching is encouraged (for instance, eating meals in front of the TV, the TV is switched on as soon as the child comes home from school).

Table 2

Frequency and Percentage of Kindergartners' Media Exposures (Duration of Media Consumption)

Total Average Estimated Time Your Child Used Screen Media Per Week	RESPONSE MODES						Mean	Int.	SD
	Never	1-3 hrs/wk	3-5 hours / week	5-7 hours /week	7-9 hours / week	9 or more hours / week			
Television	20	24	16	11	24	5	3.10	M	1.60
Computer (e.g. desktops, laptops)	57	8	10	17	7	1	2.12	L	1.47
Mobile devices (e.g. smartphones, tablets)	19	25	19	21	7	9	2.99	M	1.53
Video game devices (e.g. console and handheld gaming players, virtual reality headset)	37	18	15	6	9	5	2.27	L	1.56
Blu-ray / DVD / CD / Videotape	50	15	17	11	6	1	2.11	L	1.35
Intelligent / technology toys (e.g. programmable toys)	45	20	20	8	5	2	2.14	L	1.32

The use of computers is found to be low, with 57 kindergartners who did not have computers to use, while 17 of them engaged for 5-7 hours, and a minimal number of kindergartners fall into other categories. Mobile devices, including smartphones and tablets, had a more spread of usage with 25 kindergartners who used them for 1-3 hours, 19 of them used it for 3-5 hours, and 21 kindergartners for 5-7 hours per week. A small number of them reached to 9 or more hours; this raised concerns about the potential impact on early childhood development. Video game devices were less used, with 37 of kindergartners never engaging, and only 5 of them used it for extensively or 9 or more hours. Traditional media formats like Blu-ray, DVD, and Videotape are mainly out of favor, with 50 kindergartners never using them or did not own videotapes, minimal engagement in other time duration, and a low mean of 2.11 hours. This indicates that these media formats are becoming obsolete in the context of modern childhood media consumption. Similarly, intelligent technology toys were also underutilized, with 45 kindergartners having no access to technology toys, and very few using them extensively for 1-3 hours weekly for 20 kindergartners and 3-5 hours weekly for still 20 kindergartners. This results in a low mean usage of 2.14 and moderate variability proposing that these toys are not yet a significant part of kindergartners' media habits.

Table 3 shows the amount of parental mediation engaged in by parents with children in kindergarten in terms of frequency, percentage, and mean. It illustrates the extent of parental mediation regarding children's media use, detailing the frequency and level of parental involvement.

Table 3

Frequency, Percentage, and Mean Distribution of Kindergarten Parents' Parental Mediation

Range	Description	Frequency	Percentage
4.51-5.00	Very High	5	5.0
3.51-4.50	High	38	38.0
2.51-3.50	Moderate	42	42.0
1.51-2.50	Low	10	10.0
1.00-1.50	Very Low	5	5.0
	Total	**100**	**100.0**
	Overall Mean	**3.31**	
	Interpretation	**Moderate**	
	SD	**0.81**	

The data revealed that out of 100 parents, only 5 were at a very high level of mediation, while 38 of the parents were actively involved in a high level of mediation.

Furthermore, it reveals that 42 parents had a moderate mediation which means that these parents have a reasonable level of control on the use of the digital media. More so, the data also show that 10 parents were at a low level and 5 at a very low level of mediation, which shows they rarely interfere with their children's use of digital media.

Recent studies support the importance of parental mediation in promoting healthy digital media habits among young children. A study by Livingstone et al. (2021) found that active parental mediation, such as discussing the content and setting boundaries, was associated with reduced screen time and improved digital literacy skills among children aged 4-8 years. Looking at the specific indicators of parental mediation, it is evident that parents tend to have higher levels of involvement in certain areas. For instance, parents scored high in advising their children on the educational or helpful aspects of digital media usage (M=3.78), specifying when their children can play and/or use applications (M=3.69), and specifying how long their children can play and/or use applications (M=3.61). These findings imply that parents recognize the importance of setting boundaries and providing guidance on the appropriate use of digital media. Parents scored moderately in discussing with their children the appropriate use of games, internet, and/or apps (M=3.30), having chats with their children regarding the specific activities they undertake when using digital media (M=3.18), and remaining in the room to monitor the screen when their children use games, websites, and/or apps (M=3.07). These findings indicate that parents could benefit from more active engagement and communication with their children about their digital media experiences. A study by Pérez-Escoda et al. (2021) highlights the importance of parent-child communication in fostering digital literacy skills and promoting responsible media use. However, doing something together with a media device (M=2.75) and engaging in fun activities using a media device, were the lowest among the moderate interpretations. This indicates that parents were less likely to engage in shared digital media activities compared to other mediation practices.

The moderate level of parental mediation can also be attributed to a lack of information on appropriate or efficient ways of mediating. Society should urge parents to be more involved in the way that their children are using digital media hence reducing the effects

that may be brought about by bad use of the devices. Brito et al. (2021) provide information on the need for concerned parents and teachers to ensure the development of young children in the aspects of digital citizenship and media safety.

Table 4 presents a summary of the level of developmental skills among the kindergartners in the study, specifically in the domains of cognitive, socio-emotional, language, and physical development. The mean scores for each domain indicate that the participants exhibited highly advanced skills across all areas.

Table 4

Summary Table of Developmental Skills

Developmental Skills	Mean	Maximum (# of items)	Interpretation	SD
Physical	21.64	24	Highly Advanced	3.92
Socio-Emotional	20.45	23	Highly Advanced	3.45
Cognitive	18.45	21	Highly Advanced	3.82
Language	11.99	13	Highly Advanced	1.84

The mean score for physical development is 21.64 out of a maximum of 24, showing "Highly Advanced" physical skills. Socio-emotional skills have a mean score of 20.45 out of 23, also categorized as "Highly Advanced". Cognitive development is slightly lower but still falls under "Highly Advanced" with a mean score of 18.45 out of 21. Language development, with a mean score of 11.99 out of 13, is again "Highly Advanced," with the least variability.

The interpretation of the mean scores as "Highly Advanced" indicates that the participants demonstrated skills and abilities that are significantly above the expected level for their age group. The highly advanced developmental skills exhibited by the participants underscored the importance of providing high-quality early childhood education that nurtures the holistic development of children. However, the findings highlight also the need for ongoing assessment and monitoring of children's developmental progress. By regularly evaluating children's skills and abilities, educators can identify areas of strength and areas that require additional support (Shine, 2023). This information can then be used to design targeted interventions and adapt the curriculum to ensure that all children have the opportunity to reach their full potential.

Table 5 presents the regression analysis of the influence of different types of media exposure, duration of media exposure, and parental mediation on their developmental skills. Data reveal that the whole model is significant (F=6.94, p=0.000).

Table 5

Regression Analysis of the Influence of the Types of Media Exposure, Duration of Media Exposure, and Parental Mediation on the Kindergartners' Developmental Skills

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.647	.050		13.03	.000
Using Media for Education/Learning	.021	.014	.241	1.46	.149
Using Media for Entertainment	.033	.011	.334	3.15**	.002
Creating Media	-.031	.015	-.354	-2.10*	.038
Video Game Devices	.008	.008	.105	.946	.346
Blu-ray/ DVD/ CD/ Videotape	.036	.011	.417	3.38	.001
PARENTAL MEDIATION	.027	.013	.186	2.02*	.046

Model Summary

R = .556	R2 = .309	Adjusted R2 = .265	F = 6.94**	p = .000

Thus, the null hypothesis is rejected. Kindergartners who are exposed to media and whose parents get highly involved in what their children watch, also have high developmental skills. Furthermore, 30.9 percent of the variability in their developmental skills can be accounted for by a combination of their media exposures and parental mediation. The remaining 69.1 percent can be attributed to other factors not covered in this study such as parental education levels and socioeconomic status, which can provide a more stimulating and supportive environment for development. Additionally, the quality of preschool or kindergarten, including teacher qualifications and peer interactions, plays a critical role. Taking the independent variables individually, data reveal that Blu-ray/ DVD/ CD/ Videotape came out as having the highest significant influence on their developmental skills, indicating that for every unit increase in the parental mediation they received, there is a corresponding .036 increase in the children's developmental skills (B = .036, t = 3.38, p = .001). According to Deepa (2020), these tools facilitate the development of cognitive, language, and socio-emotional skills through content that is attractive and promotes academic information and pre-literacy. Readily available at virtual corner stores with easy-to-use, autoplay options, instructional CDs and DVDs are beneficial in the home school setting. It is also important to point out that DVDs can store considerably more information and transfer it with higher speed than CDs making them more preferable for large-scale educational materials." CDs and DVDs are a useful and flexible means of teaching and consolidating certain skills that will be useful both at home and in school for children even without using the internet.

Using Media for Entertainment ranks the second highest impact variable after the Blu-ray/ DVD/ CD/ Videotape. This has a beta value of = 0. 334 indicating the fact that for

every one standard deviation in the extent to which media is utilized for entertainment, the developmental skills of the kindergartners also improve by 0. 334 standard deviations (B = .334, t = 3.15, p = .002). This signifies a high positive correlation, meaning that an increased amount of media for entertainment is beneficial for the development of children. Furthermore, the significance level (p-value) of 0.002 indicates that this relationship is statistically significant. According to Carson et al. (2021), carefully organizing and balancing educational media with entertainment content resulted in significant enhancements across various cognition domains, including sustained attentiveness, focused attention, and recall achieved under vigilance conditions.

The table also denotes that Creating Media is likely to be significant at a third rank in the significance level. In the following model, it has a standardized coefficient of -0. 354 (B = -0.354, t = -2.10, p = .038) point to the fact that creating media correlates positively with the decline in kindergartens' developmental competency. That is; as the time toward the creation of media increases, the developmental skills inherent among the kindergartners are most likely to decrease. The p-value of 0. 038 indicates that this relationship is statistically significant since it was giving a significance value. This dispels the possibility of the observed effect being chance in this study as well as in the prior research.

The fourth highest influence on kindergartners' developmental skills is parental mediation. This has a beta of 0.186, indicating that there is an increase of 0.186 in every standard deviation (B = .186, t = 2.02, p = .046). This shows a moderate positive impact, suggesting that greater involvement of parents in mediating their children's media use is associated with better developmental outcomes. The study by Zimmer et al. (2019) highlighted the importance of parental mediation in the digital media usage of kindergarten children, emphasizing controlled and supervised media use. This means that parents need to be involved in their children's media activities by monitoring how much time children spend in media and involved in activities being immersed by their children. Similarly, Anyaegbunam et al. (2019) conducted a study in Nigeria to examine whether parental mediation moderates the relationship between exposure to violent media content and aggressive behavior in adolescents. Their results confirmed the significant moderating role of parental mediation in managing children’s media content consumption.

Conclusions

Several implications can be drawn concerning the effects of media exposure and the role of the parents in mediating their children's developmental skills at this early age of readiness for school. The learners achieve impressive results in all the areas, cognitive, socio-emotional, language, and physical skills, which shows that the kindergartners are ready to meet both academic and personal tasks in further stages of their early learning process. In this regard, parental mediation is at a middle level where parents are moderately involved in direct communication with their children concerning media use and in setting guidelines and offering directions, but there is lesser interaction in the co-use of digital devices that could create a stronger bond of parent-child relationship and also in effective mediation. This leads to an agenda for parents to take steps to attend enjoyable media experiences with their children and thus ensure that the technology is

used appropriately. Moreover, media type exposure and parental mediation of these types exert a considerable influence on the kindergartners' development skills. Namely, Blu-ray/DVD/CD/Videotape, entertainment media, creating media, and the active parental mediation processes facilitate these skills. Nevertheless, not all media exposures work to the same advantage therefore pointing out the need to be selective in the usage of Media. In general, it can be stated that the research results stress the importance of appropriate media usage and parents' engagement for the holistic child development of the children. Perhaps, a stronger positive effect on the development of the respective skills can be achieved if parents talk to their child more during media use.

The results of this study align with the Social Cognitive Theory of Albert Bandura, which emphasizes the crucial role of parents in monitoring and guiding their children's activities to ensure that their learning is not hindered. The theory highlights the importance of parental involvement in children's experiences, as it can have a significant impact on their overall development. By actively mediating their children's media consumption, parents can ensure that kindergartners spend an appropriate amount of time using available media at home and engage in activities that promote their cognitive, social, emotional, and physical growth. Similarly, the study also shows a link with John Bowlby's Attachment Theory, with emphasis on the child's attachment to media. Bowlby's theory focuses on the idea that a child with attachment to a certain person who makes him/her feel protected is critical in his/her development. Reflecting on media as an attachment figure, one can touch upon the patterns in children's attachment to media content and devices, as well as the role of development and parental mediation. Kindergartners utilize the media most in the areas of education and entertainment with exposure to media ranging from 1-3 hours to 7-9 hours in one week. This denotes that media is an essential part of their daily existence and thus could serve as media as an object of attachment serving the basic functions of attachment figures in those people's lives. As with objects of attachment, children desire certain interactions and stimulating media experiences that can even be compared to basic needs for the care of parents.

Overall, the present study underscores the critical role of parental mediation and controlled media exposure in fostering the developmental skills of kindergarten learners. As foundational abilities, these skills lay the groundwork for children's future success and well-being. Promoting a balanced approach to media usage, encouraging active parental involvement, and implementing supportive policies and practices, can create an environment that nurtures the holistic development of young children in the digital age.

Compliance with Ethical Standards

The author of this study obtained the respondents’ informed consent and informed them of their freedom to withdraw from the study at any time. Anonymity of the respondents was maintained and the respondents’ well-being was safeguarded. There was no conflict of interest in the conduct of the study. Plagiarism and bias in the interpretation of the findings were strictly avoided and the results were used purely for research.

REFERENCES:

Anyaegbunam, C. L., Okorie, N., & Ndubuisi-Okolo, P. (2019). Parental mediation, exposure to violent media content and aggressive behavior among adolescents in Anambra State, Nigeria. African Journal of Children and Media, 1(1), 1-19.Bergqvist-Norén et al., 2022

Brito, R., Dias, P., & Oliveira, G. (2021). The importance of parents' mediation strategies on children's digital literacy competencies. Journal of Children and Media, 15(3), 323-339. https://doi.org/10.1080/17482798.2020.1832143Chen & Xiao, 2022

Carson, V., Lee, E. Y., Hewitt, L., Jennings, C., Hunter, S., Kuzik, N., Stearns, J. A., Unrau, S. P., Poitras, V. J., Gray, C., Adamo, K. B., Janssen, I., Okely, A. D., Spence, J. C., Timmons, B. W., Sampson, M., & Tremblay, M. S. (2017). Systematic review of the relationships between physical activity and health indicators in the early years (0-4 years). BMC Public Health, 17(5). https://doi.org/10.1186/s12889-017-4860-0

Chen, P., & Xiao, X. (2022). Explaining interactive media use among children from a social cognitive perspective. Journal of Children and Media, 16(1), 61-77. https://doi.org/10.1080/17482798.2020.1867035

Chia, M., Tay, L. Y., & Chua, T. B. K. (2018). The development of an online surveillance of digital media use in early childhood questionnaire - SMALLQ® - for Singapore. http://mjssm.me/?sekcija=article&artid=185

Cliff, D. P., Howard, S. J., Radesky, J. S., McNeill, J., & Vella, S. A. (2018). Early childhood media exposure and self-regulation: Bidirectional longitudinal associations. Academic Pediatrics, 18(7), 813–819. https://doi.org/10.1016/j.acap.2018.06.006Deepa (2020

Deepa, K. (2020). CD and DVD. https://deepaeducation.blogspot.com/2020/08/cd-and-dvd.html

Ebbeck, M., Yim, H. Y. B., & Warrier, S. (2019). Early childhood teachers' views and teaching practices in outdoor play with young children in Singapore. Early Childhood Education Journal, 47(3), 265-273. https://doi.org/10.1007/s10643-018-0924-8

Hartnett, A.L., Stuart, D., Munzer, T. & Lipkin, P.H. (2023). Smart Tech Use During Early Childhood and Child Health Outcomes. JAMA Network Open, 6(1), e2243677. https://doi.org/10.1001/jamanetworkopen.2022.43677Hu et al. (2021)

Lafton, T., Wilhelmsen, J. E. B., & Holmarsdottir, H. B. (2024). Parental mediation and children's digital well-being in family life in Norway. Journal of Children and Media, 1–18. https://doi.org/10.1080/17482798.2023.2299956Livingstone et al. (2021)

Legner, L. (2024, June 7). Kids' screen time: How much is too much? | OSF HealthCare. OSF HealthCare Blog. https://www.osfhealthcare.org/blog/kids-screen-time-how-much-is-too-much/

Livingstone, S., Mascheroni, G., & Staksrud, E. (2021). European research on children's internet use: Assessing the past and anticipating the future. New Media & Society, 23(5), 1263-1280. https://doi.org/10.1177/1461444820929480

Madigan, S., Browne, D. T., Racine, N., Mori, C., & Tough, S. (2019). Association Between Screen Time and Children's Performance on a Developmental Screening Test. JAMA Pediatrics, 173(3), 244. https://doi.org/10.1001/jamapediatrics.2018.5056

Nimrod, G., Elias, N., & Lemish, D. (2019). Measuring mediation of children's media use. International Journal of Communication, 13(1932–8036/20190005). https://ijoc.org/index.php/ijoc/article/viewFile/10237/2535

Park, E., Miller, E., Lombrozo, T., & Zosh, J. M. (2022). Hey Google, do unicorns exist? Smart speakers impair parent-child conversations during joint media engagement. Journal of Children and Media, 16(2), 131–151. https://doi.org/10.1080/17482798.2021.1946238 Pérez-Escoda et al

Pérez-Escoda, A., Iglesias-Onofrio, M., & Sánchez-Gómez, M. C. (2021). Parental mediation and digital skills in primary school students in Spain. Comunicar, 29(68), 49-59. https://doi.org/10.3916/C68-2021-04

Sahoo, S., Padhy, S.K., Singh, S., Sahu, T., Meher, C., Brooks, J., Bhattacharya, J.P., Sarkar, S., & Grover, S. (2021). Screen Time in School-Age Children Before and During COVID-19 Lockdown. Indian Journal of Pediatrics, 88(1), 53–56. https://doi.org/10.1007/s12098-020-03465-1 Shine, 2023

Shine, R. A. (2023, April 14). Why monitoring your child's development is so important - Children's National. Rise and Shine by Children's National. https://riseandshine.childrensnational.org/why-monitoring-your-childs-development-is-so-important/

Tamana, S. K., Ezeugwu, V., Chikuma, J., Lefebvre, D. L., Azad, M. B., Moraes, T. J., Subbarao, P., Becker, A. B., Turvey, S. E., Sears, M. R., Carson, V., Rasmussen, C., Pei, J., & Mandhane, P. J. (2019). Screen-time is associated with inattention problems in preschoolers: Results from the CHILD birth cohort study. PLOS ONE, 14(4), Article e0213995. https://doi.org/10.1371/journal.pone.0213995

Watt, E., Fitzpatrick, C., Derevensky, J. L., & Pagani, L. S. (2019). Too Much Television? Prospective Associations Between Early Childhood Televiewing and Later Cognitive and Psychosocial Outcomes. Archives of Pediatrics & Adolescent Medicine, 173(10), 968–975. https://doi.org/10.1001/jamapediatrics.2019.2104

Zahra, A., Hussain, S., & Khan, M. A. (2021). Technology use during COVID-19 and development of preschool children in Pakistan. Early Child Development and Care, 1–16. https://doi.org/10.1080/03004430.2021.1877058

Zimmer, M., Christakis, D. A., & Meltzoff, A. N. (2007). Television and DVD/video viewing in children younger than 2 years. Archives of pediatrics & adolescent medicine, 161(5), 473–479. https://doi.org/10.1001/archpedi.161.5.473

APA Citation:

Montecillo, R. M. A. (2024). MEDIA EXPOSURE AND PARENTAL MEDIATION: IMPLICATIONS ON KINDERGARTNERS' DEVELOPMENTAL SKILLS. Ignatian International Journal for Multidisciplinary Research, 2(8), 484–496. https://doi.org/10.5281/zenodo.13291926

rezzel.montecillo@lccdo.edu.ph

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

NEWSROOM TO GOVERNMENT: THE CONTRIBUTIONS OF FORMER MEDIA PRACTITIONERS TO PUBLIC SERVICE DELIVERY TOWARDS THE ENHANCEMENT OF TRANSPARENCY AND ACCOUNTABILITY IN THE BUREAUCRACY

Charissa Luci-Atienza

Graduate School of Business, University of Perpetual Help System DALTA, Las Piñas City, Philippines

https://doi.org/10.5281/zenodo.13371391

ABSTRACT

The study zeroed in on former media practitioners' significant roles and contributions to public service delivery towards the enhancement of transparency and accountability in the bureaucracy. It explored how the migration of former print, broadcast, and multimedia journalists to the government contributed to the delivery of transparent and accountable delivery of public services. The study employed Qualitative Research Design, specifically transcendental phenomenology, to look into and document newsroom-to-government experiences of the 15 research participants in 10 government agencies and institutions. The researcher employed a purposive sampling technique to choose the participants, and used a self-designed and detailed questionnaire, and one-on-one, semi-structured key informant interview sessions as research instruments. The qualitative data collected were manually analyzed, using a combination of narrative and thematic analysis. Based on the study's findings, the participants are mostly print journalists, and are Millennials and Generation X, and majority of whom left their media profession mainly due to economic reasons. Most participants are heavily involved in the delivery of public information services as public communicators for the policies, projects, and programs being implemented by Executive agencies, and Congress. An enhancement policy seeking to strengthen the Public Information Offices (PIOs) of every government agency and instrumentalities by accelerating the level of communications in the public sector through continued skills upgrading; and the creation of fora where they can share best practices, was proposed to strengthen the involvement of former media practitioners in the transparent and accountable delivery of public service.

Keywords: *Former Media Practitioners, Contributions, Public Service Delivery, Transparency, Accountability, Bureaucracy*

INTRODUCTION

The coronavirus disease 2019 (COVID-19) pandemic not only changed the country's political, and socio-economic scene, but also significantly affected the national media landscape. During this period, several key events affecting national and even local media or press happened, including closure of broadcast networks, newsroom layoffs, and overhauls of radio and television (TV) programming, particularly during the government's imposition of lockdowns and quarantines. Economic losses forced the print media sector to suspend their print editions and prioritize strengthening their online presence. Most of the news outlets implemented work-from-home policies, with some adopting skeletal staffing arrangements.

The COVID-19 caught the news media sector flat-footed, given the declining revenues, and the need to tap digital technology to reach out to ballooning social media users. The traditional economic model of journalism which considered advertising revenues and subscriptions as its lifeblood was disrupted by the emergence of digital platforms such as Google and Meta (formerly Facebook), which now control more than half of the global digital advertising market (Westberg, 2024).

Aside from newsroom downsizing, journalists and media workers had faced harassments, imprisonments, and attacks for their doing their job as watchdogs (United Nations Educational, Scientific and Cultural Organization, 2022). Examples include the arrest of Nobel Peace Prize laureate Maria Ressa over tax evasion charges and cyber libel charges, and the infamous killing of famous broadcaster and radio commentator Percy Lapid, highlighting state-sanctioned attacks against journalists.

Amid this challenging media landscape during COVID-19, a number of media practitioners left their profession to join the government service. It was during the pandemic that the transfer of media practitioners to government was remarkably observed.

The Philippine government as the most secured employer during the pandemic welcomed into its arms members of "fourth estate" or the media to be part of its working force. But even before the pandemic, it has been noted that there were broadcast media personalities who entered government through election such as Vice President Noli de Castro and Senator Loren Legarda.

This study aimed at exploring the migration of private media practitioners (the traditional print media, broadcast media covering both radio and TV, and multimedia) to the government service. While there were articles on the cases of media personalities entering the government service and even politics, the reasons behind this trend and its impact on the delivery of government services remained largely unexplored.

There is no available, and official data yet on the total number of journalists from the private sector who entered the government service. The National Union of Journalists of the Philippines, National Press Club (NPC), the Presidential Task Force on Media Security (PTFoMS), and the Philippine Statistics Authority (PSA) relayed to this UPHSD researcher that they do not have the data on the total number of Filipino journalists who lost their jobs or resigned during the pandemic, and who entered the government service. Moreover, the total number of Filipino journalists in the Philippines is also not yet available, according to the NUJP Secretariat, NPC president Leonel Abasola, and PTFoMS Executive Director Paul M. Gutierrez.

As to the number of media outlets under the mainstream or traditional media, Gutierrez disclosed that more than half or 53 percent are radio stations (735), followed by 421 newspapers at 30 percent; 162 television and cable stations at 12 percent; and 73 magazines at five percent, citing the Philippine Information Agency (PIA) data as of July 2023 (Rita, 2024). Rita (2024) reported “the thousands” of media outlets utilizing social media platforms were not included in the total number of media outlets.

The roles and contributions of former journalists in their respective government agencies cannot be overstressed. The study sought to determine as to whether the inclusion of the “fourth estate” or the media in the 1.7 million-strong state workforce is beneficial for the government, particularly in the transparent and accountable delivery of public service.

As of 30 June 2023, the Inventory of the Government Human Resource System (IGHRS) recorded 1, 973, 300 workers (Civil Service Commission’s Integrated Records Management Office, 2023). Of the total, 1,751,975 workers have secured career positions, and 221, 325 have occupied non-career positions (Civil Service Commission’s Inventory of Government Human Resource – Career and Non-Career, 2023, p.1). A total of 832,812 personnel were hired under Job-order (JO) and Contract of Service (COS) status (Civil Service Commission’s Inventory of Government Human Resource – JO/COS Data, 2023).

Considering the need for more empirical evidence on the former media practitioners’ perceptions about public service delivery, this study aimed at probing these gaps by digging into their roles and contributions to public service delivery, particularly in the fulfillment of their respective agencies’ mandate. Data on this aspect is warranted, as this could boost the potential of government’s workforce particularly in the aspect of effectively and efficiently disseminating the programs and projects of the national government, as well as in the national government’s fight against corruption, and campaign for transparency and accountability.

To come up with comprehensive interpretation and analysis of the impending issues on the migration of private media practitioners to government service, parameters were set for the clear appreciation of the respondents’ profile as to their age, gender, length of media experience; media affiliation or news outfit (Print, Broadcast, or Multimedia); Government Agency-Employer (Executive, Legislative, Judiciary or

Independent Public Institution); and Position (Executive, Managerial, Supervisory, or Non-Supervisory).

This paper explored ways on how former media practitioners can effectively engage with the government to curb corruption, and promoting transparency and accountability in the bureaucracy. Likewise, this study developed an enhancement policy that could strengthen the involvement of former media practitioners in the transparent and accountable delivery of public service.

Research Questions

This study aimed to scrutinize the country's media landscape, analyzing the political, social, economic, and personal factors that prompted the media practitioners to leave their job and enter the government service.

This study delved into the roles and contributions of former media practitioners to public service delivery, and to the dissemination and promotion of government's programs and projects in general, and their perception about the delivery of public service.

This paper necessitated the former media practitioners to effectively engage with the government as partners in disseminating its programs and projects to curb corruption, and promote transparency and accountability in the bureaucracy. This study aimed at developing an enhancement policy that could strengthen the involvement of former media practitioners in promoting transparency and accountability in public service delivery.

Specifically, this study sought to answer the following questions:

For purposes of determining the appropriate coding strategy, the following demographics were determined.

- Age;
- Gender;
- Length of Service as Media Practitioner;
- Media Outfits (Print, Broadcast, or Multimedia);
- Government Agency-Employer (Executive, Legislative, Judiciary or Independent Public Institution); and
- Position (Executive, Managerial, Supervisory, or Non-Supervisory).

1. What are the reasons behind the migration of print, broadcast and multimedia journalists to the government service in terms of:
   1.1. political
   1.2. economic
   1.3. social
   1.4. personal?

2. What are the roles of former media practitioners in their respective agencies?

3. What are the perceptions of former media practitioners about public service delivery?

4. What are the former journalists' contributions to public service delivery, particularly in the fulfillment of their agencies' mandate?

5. How can former journalists effectively engage with the government as partners in disseminating its programs and projects to curb corruption, and promote transparency and accountability in the bureaucracy?

6. What policy can be developed to enhance and strengthen the involvement of former media practitioners in promoting transparency and accountability in public service delivery?

METHODOLOGY

This study focused on the major issues and concerns behind the transfer of former media practitioners to government agencies, and their contributions and roles to public service delivery towards the enhancement of transparency and accountability in the bureaucracy.

Scope, Research Locale, and Delimitations/Limitations of the Study

The locale of the study was confined to Metro Manila where major media companies and key government offices and institutions are located.

The study was conducted in nine (9) government agencies and institutions under the Executive, Legislative, and Judicial branches of government, and in one (1) independent public financial institution where fifteen (15) former media practitioners from print, broadcast, and multimedia news sectors are currently working.

Not all former journalists formed part of the study, considering the lack of official data on the total number of Filipino journalists in the country, and the total number of media practitioners who left their profession and entered the government service.

Although, the study took note of the participants' previous media affiliations and years of experience in the news media sector covering the three branches of government: Executive, Legislative, and the Judiciary.

The study only covered the concerned individuals and not their respective agencies. Other issues and concerns related to migration of former journalists to the public sector, and to the private sector were not be thoroughly studied due to time restraint and constrained resources of the researcher.

Participants of the Study

The participants of this study were fifteen (15) former media practitioners, especially those field reporters, who left their profession, and are currently working in nine (9) government agencies and institutions under the Executive, Legislative, and Judicial branches of government, and in one (1) independent public financial institution.

This study looked into their contributions and roles to public service delivery towards the enhancement of transparency and accountability in the bureaucracy via an in-depth one-on-one interview.

Fifteen (15) former media practitioners who worked for Metro Manila-based media organizations were interviewed based on the following inclusion criteria:

1) Worked as a field news reporter or news writer affiliated with print, broadcast (either radio or television), and multimedia companies in Metro Manila;

2) Covered any of the following branches of government: Executive, Legislative, and Judiciary as beat assignment;

3) Had experience in any of the following areas: broadcast, online, documentaries or investigative, public service program or political reporting; and

4) Working in the government regardless of the status of appointment.

The researcher employed a purposive sampling technique to choose the participants of this study and determine their credentials to ensure that they were credible and key sources of factual information, and were qualified to share their inputs and opinions about the research topic.

Demographic Profile of Participants

Amid the use of qualitative approach, the researcher found it significant to know the demographic profile of the participants to fully describe the phenomenon in the study.

These include age, gender, length of service as a media practitioner, previous media outfit or affiliation (Print, Broadcast, or Multimedia), Government Agency-Employer (Executive, Legislative, Judiciary or Independent Public Institution), and Position (Executive, Managerial, Supervisory, or Non-Supervisory).

As to the length of service as a media practitioner, the researcher, as advised by the Research Panel, decided to put a bracket to track down participants' career record in the private sector.

Based on the years of media service in the private sector, the participants were clustered as follows: a. 5 years and below; b. 6-10 years; and c. 11-20 years or more.

These variables were vital for the determination of appropriate coding strategy, creation of the anchor code for each research question, and identification of the relevant excerpts. In this way, there was clear labeling of the codes.

Research Instrument

A critical informant interview guide for the respondents was prepared. The researcher used Key Informant Interviews (KIIs) as a data collection method.

The self-designed and detailed questionnaire zeroed in on the political, social, economic, and personal issues and concerns that prompted the 'fourth estate' members to leave their media profession and enter the government service.

It also focused on the roles and contributions of former journalists in their respective government agencies. It likewise delved into the importance of having media persons in the 1.7 million-strong state workforce, particularly in the delivery of public service.

The researcher used the questionnaire and interview sessions as the research instruments.

Conducting one-on-one interview is needed to excavate crucial and in-depth information from the research participants.

A semi-structured interview was used as a "more powerful" tool to obtain detailed information and evidence from the respondents while considering the focus of the study (Ruslin et al., 2022). The conduct of semi-structured interview due to its flexibility allowed the researcher to bring forward new questions during the interview as a consequence of what the research participants have said.

Reliability and Validation of the Instrument

As the main instrument in the study, the self-designed and detailed questionnaire underwent a stringent validation process. First and foremost, the researcher submitted the questionnaire to the research adviser for review, and comments and suggestions were elicited for fine-tuning.

The interview guide questions were validated by experts on the field of public administration and communications.

The valuable insights of the content validators were pertinent to researcher's quest to have reliable and valid research instrument.

The inputs made by the adviser, Research Panel, and the content validators, particularly the comments and suggestions, were thoroughly considered and included in the questionnaire for its relevance and validity.

Data Generation

After formally securing the green light from the Research Panel and the University of Perpetual Help System- DALTA (UPHSD) Graduate School on 14 July 2024, the researcher proceeded to data gathering, mindful that the reasons why former media practitioners flocked to government service and the determination of their contributions to the delivery of public service were to be described under phenomenological approach.

The researcher prepared a critical informant interview guide for the research participants that included a set of clear, concise, and relevant questions in sync with the research objectives.

The questions prodded the respondents to share their transition from the newsroom grind to government service delivery; the reasons behind their migration to government; their perception about public service delivery; their contributions to public service delivery; and their suggestions regarding the strengthening of their partnership with the government in curbing corruption, and in promoting transparency and accountability in the bureaucracy, and on how to fortify their involvement in promoting transparency and accountability in public service delivery.

After the validation of the questionnaire by the research adviser, Research panel, and experts on the field of public administration and communications, the letter request to conduct the study, and the questionnaire coupled with informed consent form and certificate indicating that the respondents' participation in the study is entirely voluntary, were sent out to the respondents via e-mail and FB messenger from July 21 to July 26, 2024.

Twelve (12) respondents received these documents through e-mail, while three (3) participants got them through FB messenger as their preferred mode of transmittal.

The researcher individually contacted the randomly selected respondents for their preferred interview schedule via e-mail, Facebook messenger, and Viber.

Anticipating the busy schedule of the probable respondents, the researcher made an initial *tête-à-tête* or private conversation with some of them so as to gauge their willingness to participate in the study during the last week of June.

Some of them even referred their colleagues in the government service who could participate in the study.

The researcher formally sought a written or verbal permission from the participants before conducting the face-to-face interviews.

Three (3) respondents managed to sign the Consent Certificate, while the rest opted to signify their voluntary participation by responding affirmatively to the e-mailed letter request, and by saying "Yes" before the start of the Zoom-recorded interview.

The purpose of the study was explained to the respondents in various communication channels. Before conducting the interview, the researcher made sure that the respondents positively responded and voluntarily gave their consent to be part of the study.

The researcher likewise assured the participants that confidentiality, privacy, and anonymity were strictly observed, and that Zoom recordings both audio and video, and all data and information collected were solely used for the research analysis, and scholarly pursuits.

The researcher conducted the in-depth interviews via Zoom from July 23 to July 27, 2024. The interviews lasted 15 to 75 minutes, and were recorded for documentation, transcription, analysis, and decoding.

During the interviews, the researcher took notes to capture unpredictable themes, uncover more insights, and bring forward additional new questions as a follow-up to the information, data, or narratives previously provided by the respondents.

After the interviews, the researcher transcribed verbatim the narratives, and carefully took a second look at notes to ensure accuracy, and to gain a comprehensive understanding of the issues at hand.

Thematic Reflections

Using a combination of narrative and thematic analysis, the qualitative data collected were manually analyzed to find common themes and patterns of occurrence in the responses made by the respondents.

The experiences that were divulged by the research participants were interpreted based on the context of this research. Using the descriptive-focused coding strategy, the researcher engaged in coding the data; identifying, reviewing, refining, defining, and naming the themes.

All relevant excerpts were highlighted and were given a designated code. The researcher likewise managed to establish the link of a new code to existing code.

As part of qualitative data analysis technique such as content analysis, the participants' answers to each question were coded and categorized.

After categorizing the codes, the researcher consolidated the categories and arranged them alphabetically in matrix format via MS Word. A code count was then assigned to identify frequency counts or how many times such particular code was repetitively mentioned by the participants.

Code sorting involved the clustering of answers in a tabular format, while cluster labelling was done to determine the themes for discussion (Adu, 2021).

The researcher found it necessary to allot at least more time for the coding and processing of themes in the coding-recoding process until the final theme was arrived at.

After thoroughly reflecting on the themes in the narratives, the researcher was bound to present the significant insights or findings into the lived experiences of the participants while mindful of the research purpose and the research questions that must be addressed. From these essential insights and findings, conclusions and recommendations were objectively drawn.

RESULTS

The information and the data that were collected, including the narratives of the respondents were presented in text and tabular format.

The systematic presentation of the data was in sync and corresponded to the research questions under the Statement of the Problem, paving the way for evidence-based findings, informed conclusions and data-driven recommendations.

The study, "Newsroom to Government: The Contributions of Former Media Practitioners to Public Service Delivery Towards the Enhancement of Transparency and Accountability in the Bureaucracy," aimed at providing an in-depth analysis of the political, social, economic, and personal issues and concerns that prompted the media practitioners to leave their job and enter the government service.

Furthermore, the study also delved into their roles and contributions to public service delivery, as part of the suggested recommendation to enhance transparency and accountability of the bureaucracy.

Fifteen (15) former journalists working in Metro Manila took part as participants (P) in this study as key informants (as shown in Table 1).

In terms of age, the participants are within the ages of 25 and 58 — three of them belong to the 25 - 35 age brackets; six belong to 36 - 46 age brackets; six belong to 47 - 57 age brackets.

Of the total, seven participants are male, and eight are women.

Based on their profiles, seven participants had extensive media experience ranging from 10 years to 20 years.

Based on the years of media service in the private sector, the participants were categorized as follows: A. 5 years and below; B. 6-10 years; and C. 11-20 years or more.

Following this category, seven participants fall under Category B, five under Category C, and three under Category A.

Data shows that most participants belong to Category B (6 – 10 years) with a media experience ranging from six to 10 years.

During the data gathering, it was uncovered that three participants left their media profession to join the government service during the COVID-19 pandemic.

In terms of media affiliations, nine participants worked as print media journalists, three were employed at multimedia news platforms, and remaining three participants were broadcast journalists.

In terms of government-employer, eight participants are working at agencies under the Executive branch of government, while five are with the Legislative. The two remaining participants work in the Judiciary, and in an independent government financial institution, respectively.

In terms of government positions, most participants are holding key, supervisory, and permanent positions in their respective agencies.

Given the flexibility of the semi-structured interview employed by the researcher, the stints of the participants in their current government agency were uncovered. Eight participants have been working in the government for 10 to 25 years.

The participants' names, media organizations, government agency-employers and current specific positions were not revealed and were kept confidential. The 15 respondents were given aliases (P1 to P15).

All Zoom-recorded interviews which lasted 15 to 75 minutes were held from July 23 to July 27, 2024 with the informed consent of the participants.

Participant 1 worked as print media journalist for 15 years, and has been working in an agency under the Executive branch of government for 25 years.

Participant 2 was affiliated with a broadcast media company, had a nine-year stint in the news media sector, and has been serving an Executive agency for 16 years.

Participant 3 worked at the broadcast news media with 20 years of media experience, held the post of Undersecretary, and is working in the Legislative branch of government.

Participant 4 is a former print journalist for 10 years, and has been working in the Legislative for 14 years.

Participant 5 was with the print media for seven (7) years, and has been working in the Judiciary for 22 years.

Participant 6 was a print journalist for five (5) years before serving the government for 14 years, and has been with an Executive agency.

Participant 7 had a print media experience of six (6) years, and has been working in an independent government financial institution for 16 years.

Participant 8 came from print news media sector with eight (8) years of experience, and has been working in an Executive agency.

Participant 9 was print journalist for 13 years and has been with an Executive agency for six (6) years.

Participant 10 worked with a broadcast media company, had a media experience of 11 years, and has been working in the government for 20 years.

Participant 11 was affiliated with a broadcast media company for 20 years, and has been with an Executive agency for three (3) years.

Participant 12 had a one-year stint in a newspaper company, and has been working with an Executive agency for four (4) years.

Participant 13 worked at a multimedia news platform for six (6) years, and has been with the Legislative for three (3) years.

Participant 14 was a multimedia journalist for 10 years, and has been working in the Legislative for three (3) years.

Participant 15 was a print journalist for four (4) years, and has been affiliated with an Executive agency for three (3) years.

Table 1

Profile of the Former Media Practitioners in Metro Manila

Alias	Age	Gender	Years in Media	Media Outfit	Gov't Agency	Position	Years in Gov't
P1	57	M	15	Print	Executive	Executive	25
P2	47	F	9	Broadcast	Executive	Executive	16
P3	47	M	20	Broadcast	Legislative	Managerial	1
P4	49	M	10	Print	Legislative	Supervisory	14
P5	50	M	7	Print	Judiciary	Supervisory	22
P6	43	F	5	Print	Executive	Supervisory	14
P7	43	F	6	Print	Independent Financial Institution	Managerial	16
P8	43	M	8	Print	Executive	Supervisory	17
P9	45	F	13	Print	Executive	Supervisory	6
P10	53	M	11	Multimedia	Legislative	Managerial	20
P11	39	F	20	Broadcast	Executive	Supervisory	3
P12	25	F	1	Print	Executive	Non-Supervisory	4
P13	29	F	6	Multimedia	Legislative	Non-Supervisory	3
P14	37	M	10	Multimedia	Legislative	Non-Supervisory	3
P15	27	F	4	Print	Executive	Non-Supervisory	3

This study is grouped into six major segments to correspond to the research questions under the Statement of the Problem (SOP): (1) Political, economic, social, and personal reasons behind the migration of print, broadcast and multimedia journalists to the government service; (2) Roles of former media practitioners in their respective agencies; (3) Perceptions about public service delivery; (4) Contributions to public service delivery; (5) Suggestions to strengthen partnership to curb corruption, and promote transparency and accountability in the bureaucracy, and (6) Policies to be recommended for promotion of transparent and accountable public service delivery.

I. Reasons Behind the Migration of Print, Broadcast and Multimedia Journalists to the Government Service

What are the reasons behind the migration of print, broadcast and multimedia journalists to the government service in terms of:

1.1 Political?

Table 1.1

Political Reasons

Participant Number	Verbatim	English Translation
I. POLITICAL INFLUENCE		
3	So, pinahiram kasi talaga ako nung boss ko, ni Cong X sa campaign ni AAA para maging writer niya. And then, after nung manalo siya, kinuha siyang Secretary. And then, ayun, sumunod naging Usec naman niya ako. So, ayun.	My boss, Cong X asked me to support the campaign of AAA to be his writer. And then, after he won, my boss was appointed as Secretary. And then, I became his Undersecretary.
4	I'm working with former Senate President X. So for me, it was a very prestigious and privileged position working with him.	
5	I'm holding a coterminous post… So I started with Chief Justice X. So from Chief Justice X, now I'm with Chief Justice Y… Kasi pag-co-term trust and confidence ng appointing authority.	I'm holding a coterminous post. So I started with Chief Justice X, and now I'm with Chief Justice Y… Because when you're coterminous, it's based on the trust and confidence of the appointing authority.

II. POLITICAL DENIAL		
4	Dati may sinulat akong articles about, ginagawa pa lang yung Mall X noon. Na-interview ko yung isang official ng City Government X and he told me na may mga crack talaga yung Mall X sa likod. So sinulat ko yun pero dineny niya.	I once wrote articles about the construction of Mall X. I interviewed an official from the City Government X, and he told me that there were indeed cracks at the back of Mall X. So, I wrote about it, but he denied it.
III. MEDIA HARASSMENT		
4	So yung editorial namin kinausap ako. So yun yung time na feel ko na parang, mawawalan pa ako ng trabaho dahil nagsulat ka lang ng totoo. So, may libel case din ako. Siyempre, pag may libel case ka, kasama yung editors mo, parang feeling mo napahamak mo sila. Pero okay naman, na-dismiss naman.	Then our editorial team talked to me. That was the time when I felt like I might even lose my job just because I exposed the truth. I also had a libel case. Of course, when a libel case is filed against you, your editors are your co-respondents, and you feel like you've put them in a difficult position. But it turned out okay, the case was dismissed.
IV. REPRESSION DUE TO MEDIA OWNER'S VESTED INTERESTS		
10	I kind of did not agree with some policies in the workplace, so I left.	
10	Sa private media kasi naka-experience na rin talaga ko ng heartbreak dahil there were stories na trinabaho	In private media, I really experienced heartbreak because there were stories that I worked on,

	mo, yun pala they did not go well with…[the media owner] you know…	but it turned out they didn't go well with… [the media owner] you know…
10	Though there are some cases na desk ang papalit ng angulo without informing me, kasi nabangga ang gusto ng owner. May feeling of betrayal kasi the private outlet claims to be objective.	In some cases, the desk would change the news story angle without informing me because my story did not sit well with the media owner. There's a feeling of betrayal because the private outlet claims to be objective.

Table 1.1 discusses the four major political reasons why former media practitioners left their profession to enter the government service. These are Political Influence, Political Denial, Media Harassment, and Biased and Anti-Workers' Workplace Policies.

I. Political Influence: Three respondents (P3, P4, and P5), two of whom are occupying coterminous posts, entered the government service through political influence or their affiliation with the officials in the government. The researcher believes that given the participants' extensive media experience (ranging from seven to 20 years) and exposure to government dealings and processes, political leaders tapped their expertise to be of service to the government.

II. Political Denial: P4, a former print journalist for 10 years, narrated his experience of writing an exposé about a large shopping mall and eventually being denied by his source who happened to be a city government official. The researcher surmises that there are efforts to restrict press freedom and the public's rights of access to information The press freedom is under threat as shown in the declining support and respect for media autonomy (*Reporters sans frontières* or RSF, *"Global Analysis: 2024 World Press Freedom Index – journalism under political pressure,"* 2024).

III. Media Harassment: P4 experienced harassment for playing his role as a watchdog. He, together with his media company, was slapped with a libel case for publishing an exposé and later, got reprieve from the court by dismissing the case. The World Trends in Freedom of Expression and Media Development: Global Report 2021/2022 titled "Journalism is a Public Good" showed that journalists are threatened with harassment, imprisonment, violence, or death for doing their jobs (United Nations Educational, Scientific and Cultural Organization, 2021). The researcher supposes that the tradition of watchdog in the country's media remains amid threats and harassments.

IV. Media Repression Due Media Owner's Vested Interests: P10 got frustrated with some biased and repressive policies in his previous media company. He felt betrayed after the stories he was working on never got published because they were turned down by the media owner. The news story angles were sometimes changed to cater to the interest of the media owners. The researcher posits that media owners' supposed vested "political and economic interests" caused repression within their organization. The trend of media ownership remains –that "a handful of conglomerates and influential families" have wielding power and influence on news stories that get published to pursue their vested interests (Nuval, 2024). Herman et.al (2023) shared the same concern that the media is being used for political propaganda and the political interests of media owners.

What are the reasons behind the migration of print, broadcast and multimedia journalists to the government service in terms of:

1.2 Economic?

Table 1.2

Economic Reasons

Participant Number	Verbatim	English Translation
I. FINANCIAL SECURITY IN PUBLIC SECTOR		
A. SECURITY OF TENURE		
1	Siyempre, tiningnan mo rin naman, yun, yung Foreign Service, may security of tenure ka.	Of course, you also considered that in the Foreign Service, you have security of tenure.
4	Mas stable yung government. Kasi ang government, habang may tax na kinocollect, di naman nasisira yung government. Nandiyan lang yung government. Unlike yung private companies, pwedeng mag-shutdown, ma-bankrupt, anytime, di ba?	The government is more stable. As long as taxes are being collected, the government won't collapse. The government will always be there. Unlike private companies, they can shut down or go bankrupt at any time, right?

4	Pinaka-stable na trabaho talaga yung sa government. Maganda siya para sa edad ko na ano eh, yung paretire na rin.	Government jobs are the most stable. It's ideal for someone my age who's nearing retirement.
5	Siguro ang best example nito was during the pandemic, na maraming nag-hold up ng mga private organizations. Nung nasa government ka, secured ka eh, regardless of the position.	I think the best example of this was during the pandemic when many private organizations were holding up. But if you are in government, you are secure, regardless of your position.
7	Yung family ko nagsabi na mas stable nga sa government.	My family said that it's indeed more stable in government.
9	Of course, I know that tenure in the government and then yung yung years mo is may value.	Of course, I know that tenure in the government and your years of service have value.
13	I left Print Media Company X at the height of the pandemic and I needed security.	I left Print Media Company X at the height of the pandemic because I needed security.
B. HIGHER COMPENSATION		
3	Siyempre, alam naman natin na mas okay yung sweldo, lalo na sa government. At that time, may position pa, may rank kami, so official kami, so mas mataas talaga yung sweldo.	Of course, we know that the salary is better, especially in government. At that time, I had a position and a rank, so I was an official, and the salary was indeed higher.
4	Compensation really was far [much better] compared to the benefits that we have [had] as journalists.	

5	Kasi (because) the pay is more competitive at least with the [Judiciary].	
7	Feeling ko mas financially stable sa government.	I felt that it was more financially stable in the government.
8	Because the pay wasn't enough. So… and at that time, I wasn't getting any younger. You need something more stable.	I was also seeking better compensation, and yes, better compensation was actually probably the major reason I left the media industry in general.
9	Other [reason] siyempre 'yung compensation.	Another reason, of course, was the compensation.
12	So economic [reason] is yung higher salary.	So, the economic reason was the higher salary.
15	I was also seeking better compensation sana. And yes, better compensation, that's actually like probably the major reason kung bakit po ako umalis ng media industry in general.	I was also seeking better compensation, and yes, better compensation was actually probably the major reason I left the media industry in general.
C. PROVISION OF BENEFITS		
3	Kasi, alam naman natin yung mga benepisyo ng government. Yung lahat, yung mga overtime, nabibigay lahat yun.	Because, as we know, the benefits in government are good. All of them, including overtime, are provided.
3	Ako, sa personal experience ko yan ah, na parang, kumbaga nung nalipat ako sa gobyerno, mas well-compensated, yung mga benepisyo nabibigay, may	Based on my personal experience, when I transferred to the government, I was well-compensated, the benefits were given,

	mga overtime, yung nababayaran nang tama.	overtime was paid properly.
9	Mas maraming benefits. And, of course, there's retirement. I know that there will be a retirement package once I retire. So, compared to the previous company that I worked for, na wala.	There are more benefits. And, of course, there's retirement. I know there will be a retirement package once I retire. So, compared to the previous company I worked for, which had none.
10	Although sa government, particularly sa [Legislative], maayos ang benefits.	Although in the government, particularly in the [Legislative], the benefits are good.
12	I think mas marami rin po benefits sa government compared sa private. And also yung mga scholarship benefits. And then, so, maraming opening for trainings.	I think there are more benefits in government compared to the private sector. Also, there are scholarship benefits. There are many opportunities for training as well.
15	Kasi yung mga former colleagues ko, actually contractual yung ano nila eh, position nila sa government. But, parang na-outweigh talaga ng compensation and benefits yung the fact na they have to be renewed every six months.	Some of my former colleagues were actually in contractual positions in the government, but the compensation and benefits really outweighed the fact that they had to be renewed every six months.
II. FINANCIAL INSECURITY IN MEDIA SECTOR		
A. NO SECURITY OF TENURE		
10	Sa (In) private media, usually there's no clear tenure eh. Sometimes if they want, if they don't want you working for them anymore,	

	somehow, mangyayari ‘yan (that will happen).	
11	Walang sense of stability.	There’s no sense of stability.
B. LOW COMPENSATION		
3	Yung mababa yung sweldo.	The salary is low.
5	I think it's a fact that salary in the media industry isn't competitive, especially in the newspaper industry. Mababa ang salary ko (My salary is low).	
8	The pay for media work was not enough. So I have to look out for, better opportunities for me to use my skill. So, I opted to work in government after.	
14	I think economic kasi mababa lang ng sahod natin eh. Kasi parang ‘yung mga kaklase ko, parang ang tataas na ng mga sahod, tapos parang after 10 years, parang pulubi pa rin ako.	I think it’s economic because our salary was low. My classmates seemed to have higher salaries, and after 10 years, I still felt like I was a pauper.
C. LACK OF BENEFITS		
3	Alam naman natin yung condition natin sa media, di ba, na may mga yung, alam naman natin yung mga kwento na walang benepisyo, gaano, di ba?	We all know the conditions in the media, right? We know the stories about how there are hardly any benefits, don’t we?
4	Not all media entities, not all media outfit gives yung well-compensated package para	Not all media entities, not all media outfits offer a well-compensated

	sa isang journalist, gaya natin.	package for journalists like us.
9	Kung may, kung na-aksidente, parang wala na [insurance].O wala rin namang hazard pay. Parang wala rin hazard pay, night differential. Wala. Ang meron lang is transportation allowance. Pero sobrang liit lang din naman.	If you have an accident, it's like there's no insurance. There's also no hazard pay, no night differential. None. The only thing provided is transportation allowance, but it's very minimal.
11	I think at that time Broadcast Company X particularly don't have any provisions for media practitioners because of the pandemic. I'm working on field kasi documentaries yung mga hawak ko. So, lumalabas kami, pero parang wala ako makita at the time na parang proper provisions of the Office, number one, for health concerns, for our hazard pays.	I think at that time, Broadcast Company X didn't have any provisions for media practitioners because of the pandemic. I was working in the field because I was handling documentaries. So, we went out, but at that time, I couldn't see any proper provisions from the Office, especially for health concerns and our hazard pay.
11	Masyadong masalimuot yung sa amin kasi may utang pa kami sa kumpanya. Kasi hindi nila kami pinapasahod. Ang rule kasi for airing basis kayo. So, syempre, wala kaming ayuda. So, parang ang ginawa nila, they want us to, pwede kaming, alam mo yun, parang pwede kang mag-cash advance. Ako, I have to cut it down eh. Kasi, yun nga, I'm afraid that, you know, if I wanted to leave, hindi ko siya mabayaran. Parang ganon. So, ako,	Our situation was very complicated because we even had debts to the company. They weren't paying us. The rule was that we were paid based on airing. So, of course, we had no provision of assistance. What they did was allow us to take a cash advance. But I had to cut it down because I was afraid that should I decide to leave, I would not be able to pay them. That's how it was. I was

	nakaalis naman ako, kahit may kulang ako sa kanila.	allowed to leave even if I still owed them money.
12	Compared po sa media, and sa private sector, [yung trainings] parang hindi masyadong ine-encourage, or hindi naman ine-ecourage.	Compared to the media and private sector, trainings are not really encouraged or supported.
III. FAMILY NEEDS		
3	I have a family to raise, so yun yung reason din talaga.	I have a family to raise, so that was really another reason.
8	I mean, if you want to start a family after, hindi [salary in media] siya ano eh, hindi siya viable. So, I have to look for a job that would be more suitable to what are my plans.	I mean, if you want to start a family later, [the salary in media] is not viable. So, I had to look for a job that would be more suitable for my plans.
10	But after marriage and having a child, economic also played, also became a factor in leaving my profession as a private media practitioner.	But after getting married and having a child, economics also became a factor in leaving my profession as a private media practitioner.

Table 1.2 presents varied economic reasons why former print, broadcast, and multimedia journalists migrated to the government service. To thresh out the economic difficulties and challenges hounding the news media sector, this study came up with three major themes: (1) Financial Security in the Public Sector, (2) Financial Insecurity in the Media Sector, and (3) Family Needs.

Under “Financial Security in Government” segment, the sub-themes were Security of Tenure, Higher Compensation, and Provision of Benefits. Listed under the “Financial Insecurity in the Media Sector” were No Security of Tenure, Low Compensation, and Lack of Benefits.

I. Financial Security in the Public Sector

A. Security of Tenure: Six (6) participants who are mostly and previously worked as print journalists with age brackets ranging from 29 to 57 years old – P1, P4, P5, P7,

P9, and P13 identified security of tenure as a reason why they jump shipped from the news media sector to the government. The participants believed that the government is providing security of tenure than the private news media sector. This was seen during the COVID-19 pandemic, which significantly affected the country's media landscape as observed by P4 and P5. The World Trends in Freedom of Expression and Media Development: Global Report 2021/2022: *"Journalism is a Public Good,"* stated that the "already shaky" financial fundamentals of the news media industry were hit by the pandemic, which resulted in substantial decline in advertising revenues, job losses or retrenchments, and newsroom closures (United Nations Educational, Scientific and Cultural Organization, 2021).

B. Higher Compensation: Higher, better, and more competitive salary being offered by the government was mentioned as another major factor that attracted former journalists to leave their newsrooms. P3, P4, P5, P7, P8, P9, P12, and P15 did not think twice about leaving their profession because of the government's compensation package. Seven of the respondents came from the print media sector with one (1) to 20 years of media experience. In the World Trends in Freedom of Expression and Media Development: Global Report 2021/2022, *"Journalism is a Public Good,"* the UNESCO (2021) noted the reduction in global newspaper advertising revenue declined by half in the last five years, and that there was a 13-percent decline in global newspaper circulation between 2019 and 2020, citing the PwC's Global Entertainment and Media Outlook 2021-2025. In its 2023 Digital News Report Philippines, the Reuters Institute for the Study of Journalism revealed that print media as source of news among Filipinos is "on a steady decline" from 2020 to 2023 (Media Ownership Monitor Philippines 2023, *"Print media: Readership on the decline",* Vera Files 2023).

C. Provision of Benefits: The government's provision of benefits was identified by P3, P9, P10, P12, and P15 as another reason why they left their profession. Among the benefits cited were overtime pay, retirement package, scholarships, and trainings.

II. Financial Insecurity in the Media Sector

A. No Security of Tenure: The participants from the multimedia and broadcast media sectors who both had extensive media experience mentioned the lack of security of tenure as a reason for leaving the news media industry. P10 and P11 discussed that there is no clear tenure and sense of stability in the private media sector. P10 narrated that they were at the mercy of media owners who have the final say on their fate. Nuval (2024) cited that the media companies are owned by "a handful of conglomerates and influential families." This year's shutdown of the CNN Philippines that displaced 300 employees showed the financial vulnerability of the country's media sector (Cordero, 2024).

B. Low Compensation: Four participants who belonged to print, broadcast and multimedia sectors and whose ages range from 37 to 50 years old zeroed in on low compensation as the reason behind their transfer to government service. P3, P5, P8, and P14 looked at their low compensation as key reason why they chose to work in the public sector. The National Union of Journalists of the Philippines (2023) sought better pay and

working conditions for all Filipino journalists, citing that their "economic and labor rights are as much press freedom issues" (NUJP Labor Day Statement, *"Solidarity on Labor Day: Media Workers Are Workers Too,*" 2023).

C. Lack of Benefits: The lack of benefits was identified as among the reasons why the participants left their print and broadcast media companies. P3, P4, P9, P11, and P12 looked for the following benefits: insurance, hazard pay, night differential, enough transportation allowance, and healthcare protection. P11, who had a 20-year media stint, specifically lamented their broadcast company's failure to provide healthcare protection and hazard pays given the risks of actually contracting the virus at the height of COVID-19 pandemic. The survey conducted by the ICFJ and the Tow Center for Digital Journalism at Columbia University showed that 30 percent of the 1,406 journalist-respondents stated no single piece of recommended protective equipment had been supplied to field reporters, and that the risk of actually contracting the virus was among the biggest challenges faced by the journalists (Posetti et.al. 2020). The survey also found that 67 percent of the respondents rated financial concerns "as a significant difficulty."

III. Family Needs

The participants whose ages range from 43 to 53 years old commonly identified that their quest to start and raise a family prodded them to leave their jobs for government service. P3, P8, and P10 were in unison that they had to find viable and stable source of income for their family.

What are the reasons behind the migration of print, broadcast and multimedia journalists to the government service in terms of:

1.3 Social?

Table 1.3

Social Reasons

Participant Number	Verbatim	English Translation
I. SERVICE TO COUNTRY		
1	Yung nakikita mo nga, yung opportunities available, yung chance to serve the country in a different capacity.	You are seeing the available opportunities, the chance to serve the country in a different capacity.

7	Syempre, siguro, isa na rin na [reason], sa UP ako nag-aral, so parang ni-rationalize ko na giving back din sa government. Giving back to the Filipino people na pinag-aral naman ako, scholar.	Of course, I guess, one reason is that I studied at UP (University of the Philippines), so I rationalized it as giving back to the government. Giving back to the Filipino people who funded my studies, as a scholar.
II. SENSE OF MISSION		
1	You know, when we go into service, sabi ko nga eh (like I said), it's just like I'm still in the newspaper profession eh, because part of our job is to report, right? It's just like I'm just a reporter, like manning the bureau of the Republic of the Philippines, looking for stories to report, stories about developments that affect the Philippines, stories about how our people are, and then you prepare the report.	
2	So it was really a big sacrifice to shift, or to jump ship from private sector to government.	
4	We really roam around the country to help our under privileged fellow Filipinos.	
7	Ang siguro turning point ko na pwede ko ikwento yung isa sa mga last major stories na na-cover ko, yung na lumubog yung Princess of the Stars. Tapos bumabagyo, bumalik pa ako ng pier, tapos i-interview ako ng mga pami-pamilya na	I guess my turning point was, maybe I can share one of the last major stories I covered—the capsizing of the Princess of the Stars. There was a storm, and I went back to the pier and I interviewed the families—about six

	mga anim sa pamilya nila, nalunod yung mga ganon. Tapos parang iniisip ko, para saan ito lahat? So isusulat ko siya, so? Tapos, ano nang mangyayari? Parang yun yung iniisip ko, ano na? Paano ko makakatulong? Eh, isusulat ko lang naman 'to, tapos nakakaiyak. Tapos, so? Ano nga? Ano nangyari? Ano nangyari sa… Although alam ko napakababaw, no?	of them—whose relatives had drowned. I was thinking, what is all this for? So, I'll write about it, and then what? What will happen? I was thinking, what's next? How can I help? I'm just going to write about this, and it's so heartbreaking. So, what then? What happened? What happened to... Although I know it sounds really trivial, right?
III. SOCIAL INFLUENCE		
1	I first heard about the Foreign Service, at a very young age. I would hear my aunt mentioned embassy, consul general, ambassador, and etc. So alam ko na yung mga terms na yan eh (I was already familiar with those terms). Then in, in high school, I had a friend who told me that her mother worked with the former senator Shahani, that she would want to be a diplomat like her one day. So alam mo yun, nasa radar screen (So you know, it was on my radar screen)… But ano, hindi ko siya masyadong siniseryoso noon (But, I didn't take it too seriously back then). But of course, pumasok yan eventually (I considered it eventually).	.

1	Sa (In) Saudi Arabia, I was covering the Consulate, the Philippine Consulate in Jeddah. So the Vice Consul then was telling me that, you know, as a journalist, you have the qualities needed for one to become a diplomat. So, you write well, articulate yourself. So binanggit niya yon (he mentioned it). So he gave me a book, the Foreign Service Code for me to read and see.	
2	Because at that time, what really prompted me to join government was my coverage of the Department of Foreign Affairs when I was asked about the ASEAN Summit in Bali in 2003. And at that time, I had so many questions that no one could answer. So I thought, why am I asking the questions? Maybe I should just pursue the answers myself.	
15	What also prompted me to try sa (working in) government agency is I was influenced also by former colleagues sa (in) Broadsheet X, who made the switch to government agency service.	
IV. WORKING CONDITIONS IN MEDIA SECTOR		
A. SLOW CAREER PROGRESSION		
1	So, this is more on your career change… Parang, if I	So, this is more about your career change… It felt like if I stayed in the

	stay in the newspaper, so I'll be stuck here.	newspaper, I'd be stuck there.
1	So for you to be editor-in-chief, even if I aspire to be one, it's going to take me years.	
9	I decided not to be a reporter anymore because during that time, I was already old enough in the beat and then new reporters are coming in, younger reporters so I just decided to have a career shift.	
B. NO SYSTEM OF MENTORSHIP		
11	So, parang when we are expanding, syempre, yung mga magagaling, nag-expand din yung galing nila to other projects, other programs. So, nawala na yung system of mentorship. Naging, napalitan na lang sya ng raket raket lang yung mga tao.	So, as we expanded, naturally, the talented people also extended their skills to other projects and programs. As a result, the system of mentorship was lost. It was replaced by a situation where people just took on various sideline jobs.
C. DANGEROUS AND RISKY COVERAGES		
4	During 2001, di ba yung EDSA 2, we covered yung ousting of former president Joseph Erap Estrada. So nasa middle kami ng Mendiola noon eh, nung nag-barge yung pro, saka yung nag-ano sila eh, parang collide talaga yung pro and anti-Erap. So, it's very dangerous din.	In 2001, during EDSA 2, we covered the ousting of former President Joseph Erap Estrada. We were in the middle of Mendiola when the pro-Erap groups barged and clashed with anti-Erap groups. It was a very dangerous situation.
4	I also experienced covering 'yung Basilan. 'Yung first	I also experienced covering Basilan during

	Abu Sayyaf hostage-taking incident. I was assigned there. But during that time, nasa Broadsheet X pa ako. So, yung sabi ng editor ko na, mag-cover ka doon for two weeks lang. Tumagal ng isang buwan, di ba? So, yun 'yung mga risky operations.	the first Abu Sayyaf hostage-taking incident. I was assigned there, but at that time, I was still with Broadsheet X. My editor told me to cover it for just two weeks, but it ended up lasting a month. Those were risky operations.
4	Walang ganong clear na ano eh, na agreement [on hazard pay, insurance], wala akong pinirmahan. Basta coverage lang, tawag ng trabaho. Passion. Gano'n naman tayo, di ba? Pag binigyan ka ng assignments, gagawin mo rin. Tsaka during that time, bata ka pa, so very eager ka rin to cover yung mga ganung significant events…Wala kaming pinag-usapan about compensation. Kung anong mangyari sa'yo o insurance, di ba?	There wasn't a clear agreement on things like hazard pay or insurance; I didn't sign anything. It was just coverage, a call of duty. It was all about passion. That's how it is with us, right? When you're given assignments, you do them. Plus, at that time, I was still young and very eager to cover such significant events. We didn't discuss about compensation or any benefits or insurance just in case something happens to me.
D. IRREGULAR WORKING HOURS		
6	Given that our work at Broadsheet X that time was six (6) days a week. We only have 1 rest day. And we, even on rest days or holidays we are on call. So that's why I decided to transfer to a more scheduled occupation	
7	So, medyo nag-take na ang toll yung irregular hours na. Kunyari nung time na umalis ako, medyo may mga mga events non na kahit	So, the irregular hours really started to take a toll. For example, when I left, there were events where you had to go out

	bumabagyo, lalabas ka. Tapos, kahit gabi tatawagan ka…Pati yung mga meeting kasi gabi.	even if it was stormy. And you'd get calls even at night… Plus, meetings were often held in the evening.
7	Galing sa work, pupunta ka pa sa office para mag-attend ng meeting ng gabi. Hindi mo alam hanggang anong oras yun. Siyempre, mga editors, gabi pa sila natatapos. So, hintayin mo yun.	After work, you'd still have to go to the office to attend a meeting at night. You never knew how long it would last. Of course, editors often finished late, so you had to wait for them.
12	Yun din po pala, yung pagpasok, six (6) days per week. So, compared sa government na parang ano lang, 40 hours per week. And then, kapag holidays, holiday talaga. And then, kapag may suspension, suspended din. So, ayun din po. So, naka-contribute din yung mga days off.	Also, working six days a week was another factor. In comparison, government work usually has a 40-hour work week. Plus, holidays are actually observed, and if there's a suspension, it's also enforced. So, the days off were a significant factor as well.
E. MOBILITY		
4	Nag-cocommute tayo, kailangan natin puntahan yung mga event na pumuputok. Pag may sunog, may patayan, kailangan natin puntahan.	We had to commute and needed to go to events where things were happening, like fires or killings.
9	Siguro yung unsafe is dahil wala namang mobility. So, pupunta ka sa coverage na ikaw lang din. Tapos, uuwi ka rin ng ikaw lang din,wala ka namang din sasakyan.	The unsafe part was that there was no mobility support. You'd go to the coverage on your own and then return home alone as well, no vehicle provided for you

F. INTENSE WORKLOAD/UNCLEAR WORK DELINEATION		
4	Ang dami nating beat. And then, ang lawak nung kino-cover natin. Ako yung buong South. So, ilang cities meron sa South. Makati, Taguig, Paranaque, Pasay, Muntinlupa, Las Piñas, Pateros.	We had a lot of beats to cover, and the areas we covered were vast. I was responsible for the entire South. So, that included several cities: Makati, Taguig, Parañaque, Pasay, Muntinlupa, Las Piñas, and Pateros.
11	Binubugbog ako sa trabaho…I was trained to exert all of my efforts di ba?. Lahat kasi doon, parang, money mo, physical mo, lahat. Lahat ang pwede mo ibigay, di ba?	I am really trained to handle intense workload … I was trained to put in all of my effort, right? Everything there was about giving it all—your money, your physical effort, everything. You gave all that you could, right?
13	To be honest po, parang nawalan po ng boundary kasi since we're all working at home and as a media, as a journalist, we work literally 24/7. So, natanggalan po ng boundary ang work and life	To be honest, it felt like there was no boundary anymore because, since we're all working from home and as a media, as a journalist, we work literally 24/7. So, the boundary between work and life disappeared.
15	Sa akin po kasi, I also parang dumating din ako sa point na I wanted clear delineation ng work and personal time. So, I'm pretty sure you understand this na parang kahit na siguro patulog ka na tapos biglang may nag may nag-break na balita, kailangan mong bumangon and you have to work. So parang it's okay for the first few years pero parang you realize then later on na parang mapaisip ka if	For me, I also reached a point where I wanted a clear separation between work and personal time. I'm pretty sure you understand this feeling—where even if you're about to sleep and suddenly there's breaking news, you have to get up and work. It's manageable for the first few years, but then you start to question if this is

	this is something that you can do in the longer run.	something you can sustain in the long run.
V. DYING PRINT MEDIA		
7	Although nung pag-alis ko hindi pa naman ganon ka grabe yung kunwari, effect ng social media sa ano sa newspaper industry. Pero ngayon, super apparent na yun. Pero yun, yung isa ko naisip nung time na yun kasi medyo looming na siya na.	Although when I left, the impact of social media on the newspaper industry wasn't yet that severe. But now, it's become very apparent. That time, it was one of the things crossed my mind, that there was a looming [crisis].
7	So, nung time na yun kasi may looming na parang problem or challenge sa media industry na newspapers are dying parang ganon, so nung time na yun pa, what, 2007 ganon? So may ganon na. So, parang inisip ko, super, super ano eh, parang medyo nakaka-stress din yung isipin yung hindi mo alam kung ano na yung next sa… Ngayon, wala na ng Metro Page, di ba?	So, at that time, there was already a looming problem or challenge in the newspaper media industry, like it was dying This was around 2007, if I recall correctly. It was already becoming apparent. I thought about how stressful it was not knowing what the future would hold. Now, there's no more Metro Page, right?
VI. MEDIA CORRUPTION		
1	Siyempre meron pa rin mga bumabanat na dyan, yung mga ACDC (attack-collect-defend-collect) na mga kasama natin. Kung mayaman lang ako, I want to have a broadsheet for Central Luzon. Train young journalists. Pay them well. Pay them well. Para hindi sila ma-tempt dun sa tumanggap.	Of course, there are still those who criticize, our colleagues in the media who are the ACDC (attack-collect-defend-collect) type. If I were rich, I would want to have a broadsheet for Central Luzon. I would train young journalists and pay them well—pay them well—so they

		wouldn't be tempted to accept bribes.
5	It's a fact din naman, merong developmental journalism. It's something na hindi ko siya ma-take. So, sabi ko, rather than engage in that, you might as well, hanap ka na lang na mas malaki yung sweldo, di ba? I mean, you have to earn your keep, you have to earn your salary. So, para maging effective ka muna, kailangan you have integrity.	It's also a fact that there is developmental journalism, which I find unacceptable. So, I said to myself, rather than engage in that, you might as well look for a job with a higher salary, right? I mean, you have to earn your keep and your salary. To be effective, you need to have integrity first.
VII. MORE TIME WITH FAMILY		
4	I mean, the government we, especially in the [Legislative], we work Monday to Thursday. So you have three days for your family. That's quite convenient for us and spending quality time with my family is one of the most very important things for me as a father, as a husband. Because sometimes if you are a journalist, you cover during weekend, holiday, rainy seasons, typhoon like this, so parang limited yung family time (so family time is quite limited).	
6	At that time, I was newly married and had just given birth. So, I wanted an 8-to-5 job. So that's mainly my motivation, that was my main motivation for transferring to government office.	

7	Inisip ko, siguro, family, yung gano'n na parang ano na next step ko? Paano na 'to?.. Sa media kasi medyo…may priority ka na hindi pamilya mo. Although, meron din naman kaya nila pamilya, pero parang hindi ko kaya eh. Wala akong energy sa ganon	Maybe, I was thinking of my family. So, I was figuring out what my next step should be. In media, you often have priorities and that don't include your family. Although some people manage to balance family life that I couldn't handle. I didn't have the energy for that.

Table 1.3 indicates diverse social reasons why former journalists from print, broadcast, and multimedia companies decided to work for the government. To dig deeper into the social reasons that prodded the participants to leave their profession, this study came up with three major themes: (1) Service to Country, (2) Sense of Mission, (3) Social Influence, (4) Working Conditions in Media Sector, (5) Dying Print Media, and More Time with Family.

The participants exhaustedly narrated their experiences on "Working Conditions in Media" segment that allowed the researcher to create the following sub-themes: Slow Career Progression, No System of Mentorship; Dangerous and Risky Coverages; Irregular Working Hours, Mobility, and Intense Workload/Unclear Work Delineation.

I. Service to Country: The participants, namely P1 and P7 who were an activist, and a government scholar, respectively expressed their patriotic fervor, mentioning that service to country as their reason to serve the government.

II. Sense of Mission: The participants' sense of mission was commonly identified as a reason behind the migration to government service. Making a big sacrifice to make a difference, doing their job dutifully for the interest of the country, and helping their fellow compatriots were mentioned by P1, P2, P4, and P7. Holliday (2021) tagged journalism as "a power-replicating machine" – meaning "without a driving mission", it is guided by profit and, often, power.

III. Social Influence: The participants' involvement in significant national and foreign coverages influenced them to join the government. P1, and P2, who are holding Executive positions, narrated that their exposure to government officials and their kins, and their immersion stint in their respective beats prepared them to be part of government's working force. P15 even cited that her former colleagues in Broadsheet X who joined the public sector convinced her to join the government service.

IV. Working Conditions in Media Sector

A. Slow Career Progression: The participants from print media sector identified the slow career progression in the news media sector. P1, a veteran editor and now an experienced government official, and P9 who had 13-year stint in a daily broadsheet realized the need to change their career because of slow career movement in their respective news outfits.

B. No System of Mentorship: P11, an experienced journalist from the broadcast media, identified the absence of mentorship as among the reasons why she left the industry. P11 narrated that given the changing media landscape due to digital technology developments and the journalists' need to be financially secure, the system of mentorship was not prioritized.

C. Dangerous and Risky Coverages: P4, a male print journalist, narrated his experience of covering dangerous and risky national events, including the ouster of former President Joseph Estrada and the Abu Sayyaf hostage-taking incident in Basilan as among the reasons why he chose to shift from dangerous and risky coverages to government service, realizing that he was sent on a dangerous mission without any security blanket in terms of hazard pay, insurance, and any form of compensation in case of death or injury. In its World Trends in Freedom of Expression and Media Development: Global Report 2021/2022, *"Journalism is a Public Good,"* the United Nations Educational, Scientific and Cultural Organization (2021) said journalism continues to be a "deadly" and "dangerous profession." In 2023, at least 120 journalists and media workers, 68 of whom were involved in the Gaza conflict, lost their lives (International Federation of Journalists, 2023). Based on the UNESCO Observatory of Killed Journalists, print journalists are the second most attacked group (22 percent) (International Federation of Journalists, 2023).

D. Irregular Working Hours: The irregular working hours was factored in by P6, P7, and P12 for leaving their print media companies as the government offered a work schedule that allows more personal and family time. In a statement issued on Labor Day, the National Union of Journalists of the Philippines (2023) pushed for better pay and working conditions for all Filipino journalists, citing that their "economic and labor rights are as much press freedom issues." The journalists' union lamented that media companies do not provide overtime, holiday and night differential pay to compensate the long hours of work being rendered by many journalists, and added that when disasters or calamities strike, many journalists "cover without hazard pay or insurance" (NUJP Labor Day Statement, *"Solidarity on Labor Day: Media Workers Are Workers Too,"* 2023).

E. Mobility: P4 and P9 from the print sector who had 10 to 13 years of media service mentioned mobility as a safety concern. This is an issue, particularly when the journalists are asked to cover disasters or calamities, and other risky coverages without hazard pay or insurance (National Union of Journalists of the Philippines, 2023)

F. Intense Work Load/ Unclear Work Delineation: The participants who are mostly female, and were from broadcast and print news sector mentioned their intense work load or unclear work delineation as a reason for leaving their respective media

companies. P11, 13, and P15 who spent four to 20 years in the media industry left their profession during the COVID-19 pandemic. Meanwhile, P4, a print journalist for 10 years, stated that even before the pandemic, journalists were given heavy workload.

V. Dying Print Media

P7, a former print media journalist, discussed that the impending death of the print media made her think to change her profession. At the time when she departed the industry, the influence of the digital technology and social media was not that apparent. In the Philippines, the Filipinos' support for print media as news source has been declining from 2020 to 2023, according to the Reuters Institute for the Study of Journalism's 2023 Digital News Report Philippines (Media Ownership Monitor Philippines 2023, *"Print media: Readership on the decline",* Vera Files 2023). The 2023 Digital News Report Philippines cited that the most popular sources of news in the Philippines are online and social media, while for those who don't access to digital technology, TV and radio news remain important (Reuters Institute for the Study of Journalism, 2023).

VI. Media Corruption

Two participants who had extensive media experience mentioned that corruption in media exists in the country. P1 and P5 identified envelopmental journalism and ACDC (attack-collect-defend-collect) journalism as forms of media bribery that have been hounding the media industry. Due to low salaries, some of their colleagues succumbed to bribery.

VII. More Time with Family

Participants from the print media mentioned the work schedule in the government that allowed them to spend more time with their family as a reason behind their transfer. P4, P6, and P7 commonly identified the fixed work schedule in the government as more appealing than the erratic schedule in the media sector.

What are the reasons behind the migration of print, broadcast and multimedia journalists to the government service in terms of :

1.4 Personal?

Table 1.4

Personal Reasons

Participant Number	Verbatim	English Translation
I. CHANGE IN ENVIRONMENT		
1	So, parang, hindi naman na-bored or something, but I felt I needed a change in an environment	So, it wasn't really about being bored or anything, but I felt I needed a change in environment.
9	I left the publishing for personal reasons because during that time, I just realized that I don't want to be a reporter anymore. I want to try to work in government. Because I have been in the private industry for a very long time like actually 20 years na kung idadagdag pa yung mga previous work experiences (if you add up my previous work experiences).	
II. PERSONAL/PROFESSIONAL GROWTH		
1	It's more on your personal advancement. Yung challenge kasi they were telling me, the Foreign Service Officers Exam is one of the hardest, if not the hardest, in the Civil Service. Malaki yung casualty rate dyan. And there were about,	It's more on your personal advancement. The challenge was, they were telling me that the Foreign Service Officers Exam is one of the hardest, if not the hardest, in the Civil Service. The casualty

	I think, if I'm not mistaken, 1,500 of us who took it. And only more or less 20 passed. So mataas yung casualty rate. So even, sabi, even lawyers sometimes fail.	rate is quite high. There were about 1,500 of us who took it, and only around 20 passed. So, the casualty rate is high. Even lawyers sometimes fail.
1	Of course, yung opportunities to see the world. Yung i-expand yung ano mo talaga eh, yung horizon mo.	Of course, there are the opportunities to see the world and truly expand your horizons.
2	I didn't even know FSOs (Foreign Service Officers) become ambassador, so it wasn't really the motivation that I will become an ambassador one day. It was just, just really all about the answers to those global and regional questions that I had that I couldn't find answers to, whether school or in the media. Because you know, government officials will not really tell us the real story right.	
4	I was with him (Senate President X) for 14 years. So, it was a privilege and honor. And I learned many things from Senator X, not just professionally but in my own personal life. I gained many wisdom.	
12	And then personal is, I think personal growth din po. And then, kasi mas interested din po ako sa research, and technical, yung mga policy reviews po	And then, personally, I think another reason was also personal growth. I was also more interested in research and technical aspects, such as policy reviews.

III. JOB BURNOUT/HEALTH		
7	Ayun, isa palang [factor], health din, kasi may asthma ako…Pero syempre love ko naman yung work, pero, syempre, meron ka rin ano sa, premium sa health mo, sa sarili mo.	Also, health was a factor because I have asthma… Of course, I love my work, but you also have to prioritize your health and well-being.
7	Tapos, siyempre, yung news hanggang ilang, ano yun, ilang versions yun. Depende pa kung developing story. So, nung time na yun, parang medyo na-burnout ako.	And then, of course, the news can go through several versions, depending on whether it's a developing story. During that time, I felt somewhat burned out.
11	Tapos siguro, mentally, ano talaga siya eh, it's mentally draining. Sabi ko nga, ano siya eh, it's a kind of job that you are physically drained and mentally drained. Alam mo yun, tawag nito, hindi ka matutulog, hindi ka, alam mo yun, wala kang oras ng kain.	And then, mentally, it's really draining. I've said before that it's a kind of job where you are both physically and mentally exhausted. You know, you don't get to sleep, you don't have time to eat...
13	Also, personal things were taking toll on my mental health… Natanggalan po ng boundary ang work and life. So, it affected my mental health. I burned out. Basically, I got tired of doing what I used to love to do.	Also, personal things were taking a toll on my mental health. The boundary between work and life disappeared, which affected my mental health. I burned out. Basically, I got tired of doing what I used to love.
15	Sabi ko, parang kailangan ko talaga ng personal time para makapagtrabaho nang mas maayos. So yun yung reason kaya medyo personal din kung bakit ako naconvince umalis sa media. Sobrang amplified	I said to myself that I really needed personal time in order to work more effectively. So that was one of the personal reasons that convinced me to leave the media. It was greatly amplified

	syempre nung pandemic kasi bilang isolated ka na nga at home, parang mas naging mahirap to set that boundary na.	during the pandemic because, being isolated at home, it became even harder to set that boundary.

Table 1.4 shows three major personal reasons why former print, broadcast, and multimedia journalists left their profession for government service. These are Change in Environment, Personal/Professional Growth, and Job Burnout/Health.

I. Change in Environment: P1 and P9 who belong to the print sector identified a change in environment as reason for leaving the industry amid their 13 to 15 years of media experience.

II. Personal/Professional Growth: The participants who belonged to print and broadcast media sectors mentioned their pursuit of personal advancement and professional growth as a reason for career shift. P1, P2, P4 and P12 whose ages range from 25 to 57 years old mentioned that they wanted to expand their horizon, to grow personally and professionally, and to engage in research and policy reviews.

III. Job Burnout/Health: Job burnout or health has been identified as a personal reason by P7, P11, and P13 why they had to leave their profession. Two of these participants who experienced burnout left their job during the COVID-19 pandemic. P7, P11, and P13 are female and served as media practitioners for six (6) to 20 years. Based on the survey conducted by the ICFJ and the Tow Center for Digital Journalism at Columbia University, 70 percent of the 1,406 journalist-respondents indicated that dealing with the mental health impacts of covering the pandemic were the most difficult aspect of their work (Posetti et.al. 2020). The survey also found that 62 percent of the respondents rated assistance with managing mental health and well-being as an important or very important need.

II. The Participants' Roles in their Respective Agencies

What are the roles of former media practitioners in their respective agencies?

Table 2

Former Media Practitioners' Roles in Government Service

Participant Number	Verbatim	English Translation
I. COMMUNICATIONS		
A. PUBLIC INFORMATION		
1	We need to keep the people informed. We need to keep them inspired. We need to keep them interested. And we need to keep them engaged. So, you can only get them engaged if they're well informed… Inform the people about the good things that our government has been doing.	
2	I'm tasked to do the messaging or to do the press release.	
3	Ako na rin yung gumagawa ng mga press releases ni Cong X.	I am also preparing the press releases for Cong X.
4	Kami gumagawa ng mga captions, press releases ng lahat ng events ng mga senators. Nag-eedit din, proofreading everything, communications dumadaan sa amin. So pinu-proofreading namin lahat. Mga materials, anything related for communications, whether yung press	We handle creating captions and press releases for all the events of the senators. We also edit and proofread everything; all communications pass through us. We proofread all materials, whether it's press releases or other

	releases o yung ginagawang mga materials gaya ng brochures, yung mga mementos, yung mga booklet namin, dumadaan sa amin yan.	communication materials such as brochures, mementos, and booklets. Everything related to communications goes through us.
5	Aside from liaising with the media, I write press releases, and I also edit press releases. Syempre (Of course) when you write, you also cover. So, I'm also in the field from time to time. As I've said, during the Typhoon Carina, I was in the Iloilo to cover the Ethics Summit.	
8	I had the information group, so I managed the development, deployment, and evaluation of the various communication requirements of the Council.	
9	My roles are preparing and disseminating press releases, advisories, information materials to the members of the press.	
10	And then I also write news releases for the senator.	
13	I craft text for our social media contents. This includes photo captions. Basically, those serve as our daily press releases. Also, scripts for audio-visual presentations and social media reels, our art card write-ups, also news monitoring.	

14	Nagsusulat ako press releases, nagsusulat ako ng captions sa social media.	I am writing press releases and captions for social media.
15	[I am] in-charge ng external comms actually. So basically, most of what goes out to the public po, things like press releases, official statements, public advisories, social media posts, talking points ng officials ko.	
B. MEDIA/ PUBLIC RELATIONS		
3	Yung media relations, siyempre, nagagamit ko yun kasi alam naman natin sa Congress, lahat ng mga media doon, halos kaibigan naman natin. Siyempre, ako yung head ng staff niya, ako yung nag-a-arrange sa mga appointments niya (Congressman X).	In media relations, I make use of my connections since we know that in Congress, most of the media there are like friends. As the head of his staff, I am the one who arranges Congressman X's appointments.
5	I liaise with the media. So, when the [Judiciary] needs to contact the media, I am on top of that.	
6	[I'm] liaising with partners on possible projects or programs for our OFWs.	
8	So medyo varied [ang roles] (So, my roles are quite varied). So, it includes events management, media management, public relations, social media management, crisis communication.	
10	Under Office of Senator X, I work in media relations. So,	

	my work would include monitoring news issues. Pag madaling araw pa lang (Early in the morning), I have to send possible issues that might interest the senator. And then, if needed, I also help arrange and transcribe in interviews with Senate media.	
11	I handle media relations.	
14	Aside from that, mga minor roles include yung pag-shepherd ng mga tao, media relations, news monitoring, ganyan. So, more on public relations job.	Aside from that, minor roles include shepherding people, media relations, and news monitoring. So, it's more focused on public relations work.
15	Things like press releases, social media cards, talking points ng mga officials ng government agencies, yun yung mga materials, yun yung mga usual deliverables ko.	Things like press releases, social media cards, and talking points for government officials—these are the materials and usual deliverables I handle.
II. PUBLIC AND CULTURAL DIPLOMACY		
A. PROMOTION OF OFWS' WELFARE AND PROTECTION		
1	So, it's mostly providing consular services to our kababayan, looking after their welfare, extending assistance to those in distress, yung promoting Philippine culture, promoting the Philippines as a tourism and investment destination.	
6	I was assigned to assist the Secretary in special projects on reintegration of [OFWs] and coordinating activities	

	related to the reintegration of OFWs.	
B. PROMOTION OF BILATERAL RELATIONS		
2	I'm really handling the bilateral relations between the Philippines and the United States.	
III. PROGRAM/PROJECT MANAGEMENT		
7	So, parang manager, supervisor ng team. Parang ano ka na team lead ka. So, may mga team ng younger staff na may particular na work streams.	So, it is like a manager or supervisor of a team. You are essentially a team leader. You have teams of younger staff with specific work streams.
9	And then, I also monitor and supervise the operations of the digital media group which handles the agency's social media pages.	
10	Sa project management po, we manage projects that related to science communication, yung pinapondohan ng government…	In project management, we manage projects related to science communication that are funded by the government.
IV. EVENTS MANAGEMENT		
8	So medyo varied [ang roles]. So, it includes events management.	So, the roles are quite varied. They include events management.
10	I'm also an events specialist kasi (because) I handle different events.	
13	Also, our unit po is being tapped, as minsan, as the	Also, our unit is sometimes tapped as

	creative team for the [Legislative's] activities and events.	the creative team for the [Legislative's] activities and events.
V. SUBSTANTIVE POLICY WORK		
2	I was more into the substantive policy [work] because that's what I've always handled since I started in the [Executive agency].	
3	Involved din ako sa paggawa ng legislation, ng mga bills, resolutions, and other functions ni Congressman. So basically yun, ako yung kumbaga, head ng support ni Congressman X.	I'm also involved in drafting legislation, bills, resolutions, and other functions for Congressman X. So basically, I'm the head of Congressman X's support team.
VI. RESEARCH/STUDIES		
8	We also handle the science communication research and development portfolio of the Department, wherein we provide funds for both government and private institutions who would like to do R&D, Research and Development on science communication.	
12	And we also conduct po studies related to the public sector reform.	
VII. CRISIS MANAGEMENT		
8	So medyo varied [ang roles] (The roles are quite varied). So, it includes crisis communication.	

13	And also, sometimes we do crisis management po for the Senate pag necessary (when necessary).	
VIII. OTHER SIGNIFICANT ROLES		
A. ADMINISTRATIVE WORK		
2	Before when I came in, in 2018, I was asked to handle administration, which I really hated because I didn't, I had no idea what admin work is or it's not something that I was interested in.	
B. POLICY/PROGRAM/PROJECT REVIEW		
12	So, we're in charge of policy reviews, policy recommendations on anything related to the governance sector po. So, for example, yung mga (those) related to e-governance, on public accountability, and enhancing government capabilities.	
12	And then we also evaluate and review yung programs and projects relating to civil service and improving service delivery.	And then we also evaluate and review programs and projects related to civil service and improving service delivery.
C. PLANNING		
6	So, in the Planning Office, we support the Secretary directly on plans, on crafting the planning tools of the entire agency.	

D. PUBLIC CONCERNS AND RESPONSE MANAGEMENT		
9	I am also tasked to monitor the operations of the public, and complaints that we receive. So that's, yeah, we receive from other agencies and the public as well through the social media. And then kami yung nagpa-facilitate. So, yung unit na yun is public concerns and response management unit.	I am also tasked with monitoring the operations related to public complaints that we receive. We handle complaints coming from other agencies and the public through social media, and we facilitate the responses. So, the unit I work with is the Public Concerns and Response Management Unit.

Table 2 tackles the wide-ranging roles of the participants in their respective government agencies. Of the 15 participants, 13 of them (P1, P2, P3, P4, P5, P6, P8, P9, P10, P11, P13, P14, and P15) are into communications. These participants who are working in agencies under the Executive, Legislative, and Judiciary are all involved in the delivery of public information services.

Next to public information services, media and public relations becomes the second major role of the participants in their government agencies, with eight participants (P3, P5, P6, P8, P10, P11, P14, and P15) playing such part.

The researcher posits that the mandate of their respective agencies has something to do with the participants' roles in government service.

Three participants (P1, P2, and P6) are involved in the public and cultural diplomacy, which include the promotion of welfare and protection of Overseas Filipino Workers (OFWs), and the promotion of country's bilateral relations. They work in agencies under the Executive branch.

Public and cultural diplomacy, program or project management (P7, P9, and P11), and events management (P4, P11, and P13) are found to be the third major roles of the participants.

While, those participants who are working in agencies under the Executive and Legislative are into substantive policy work (P2 and P3); and are also engaged in crisis communication/ management (P8 and P13).

Other significant roles of the participants include: administrative work, policy/program/project review, planning, and public concerns and response management.

The researcher believes that given their crucial roles in the government service, the participants are still keeping their watchdog roles. Journalism promotes a healthy civic space by providing trusted and fact-based information which is essential to people's participation in a free and open society (Highlights of the World Trends in Freedom of Expression and Media Development: Global Report 2021/2022, "Journalism is a Public Good", United Nations Educational, Scientific and Cultural Organization, 2021). Herman et.al (2023) cited the crucial roles of journalists to bridge the communication between the government and the public. They stressed that the fourth estate should always be on board in public decision or policy-making.

III. The Participants' Perceptions about Public Service Delivery

What are the perceptions of former media practitioners about public service delivery?

Table 3

Perceptions about Public Service Delivery

Participant Number	Verbatim	English Translation
I. COMMITMENT TO PUBLIC TRUST		
2	I don't know if that's unique to me as a former media, but apparently not everyone shares that view or that belief that you have to be competent, you have to be professional, you have to deliver.	
3	Nung napunta ako sa [Agency X], don ko nakita yung pinaka most dedicated, most truthful na mga tao, na nagtatrabaho talaga para sa publiko, para sa gobyerno.	When I was appointed to work at [Agency X], I met the most dedicated, most truthful people, who really work for the public, for the government.
9	So, ngayon, being in the public information, feeling	Now, being in the public information, I feel that I

	ko, mas parang sa akin, mas may accountability sa part ko na eto, part ka na, dapat ikaw yung isa sa mga talagang nagpu-push na talagang makapagbigay talaga ng quality service to the people. So even yung time, kahit weekends, yung para sa bayan. Yun na lang din yung motivation. Motivation ko sa sarili ko, para sa bayan to eh.	have more accountability, especially now I am part of the government, I should be one of those who must really push to provide quality service to the people. Even during weekends, I work for the love of country. That's my motivation—serving the country.
11	I still believe with the importance of ethics. Whatever it is, whether you are in the public service or you are a media practitioner, ethics is very important. Tapos (Then), I also believe that, you know, public service is a public trust; in every, any case, people should trust you whether you are in the, nasa pinaka mababa ka or pinaka mataas (are occupying the lowest or highest position). I'm always on the lookout.	
13	We as public servants should serve people the way we as taong bayans want to be served din. Although now I understand po na may mga bureaucracy or hierarchy po na kailangan sundan. And sometimes it gets frustrating because we tried. Pero, I, personally po, I have the standard na, everything I do or write or produce should be excellent, and if not the best.	We, as public servants, should serve people the way we as citizens would want to be served. Although I understand now that there are bureaucratic or hierarchical processes that need to be followed, which can sometimes be frustrating. However, personally, I maintain the standard that everything I do, write, or produce

		should be excellent, if not the best.
II. PUBLIC SERVICE DELIVERY: A PRIORITY		
1	We're in government, so this [public service delivery] should always be a priority, especially for us in the [Agency X] and the other agencies that also get to work with us overseas.	
2	And because your salaries come from the kaban ng bayan (the nation's coffers), it's not from the private sector, then you shouldn't take it lightly. You should take your work seriously.	
3	Mas maraming populasyon na matandang dalaga sa [Agency X] kasi ganon sila kadedicated sa trabaho nila. Nakalimutan na nila yung sarili nila, yung love life nila para lang sa public service.	There are more single women in the [Agency X] because they are so dedicated to their work. They have forgotten about their own personal life and love life just because of public service.
9	Public service delivery, it must be delivered talaga (really), on point, immediately and then accurately promptly, completely.	
13	Filipinos should get the best service per se from the government.	
III. NEGATIVE TO POSITIVE PERCEPTION		
1	I tell people, you know, when I was a journalist, I was among those criticizing [Agency X]. But you know,	

	when I joined the [Agency X], I saw they've been doing a lot, but they just would not share the story. Not because they don't want to share it, but because they don't have the people who would be able to do the stories for them	
3	Kasi yung, nung nasa media pa lang tayo, lagi yung nakatatak sa atin eh, na government, marumi yan, corrupt yan. Pero nung nakapasok ako sa [Agency X], dun ko nakita andami talagang handang tumulong. Talagang hindi natutulog, hindi umuwi ng bahay para mag-serbisyo sa bayan. Hindi na nakaka-uwi sa pamilya nila para lang tumulong sa bayan kapag may mga sakuna. Honestly, doon talaga na iba yung pagtingin ko sa gobyerno.	When we were in the media, we always had the impression that the government was dirty and corrupt. But when I joined the [Agency X], I saw that there were many people who were genuinely willing to help. They were not able to sleep nor go home just serve the public. They were no longer able to go home just to help during disasters. Honestly, that's when my perception on the government changed.
6	In terms of perception, nagbago, definitely. Kasi nga sabi ko nga, from an 8 to 5 job, akala ko walang ginagawa in the government office. I was proven wrong. I found out na maraming ginagawa and maraming inaayos sa government office.	In terms of perception, it has definitely changed. As I said, from an 8-to-5 job, I used to think that there is no work pressure in government offices. I was proven wrong. I found out that there is a lot of work and that there are many concerns being addressed by the government offices.
15	Nung nasa media kasi ako, I was always critical of the government, actually. In fact, nung college ako, I	When I was in the media, I was always critical of the government. In fact, when I was in college, I

	never imagined working sa government service. Kasi nga, parang when I think of the government, I think of mabagal, I think of inefficient, I think of hindi ganon makatao… But for me, nung pumasok din ako sa government survey, like I said kanina, hindi, hindi nag bago yung view ko sa government. In fact, yung initial view ko of public service was only reinforced when I entered the government service. Nasimula ko na kasing maintindihan, makita yung inner work sa gobyerno. So, feeling ko valid naman yung ibang mga reason kung bakit mabagal.	never imagined working in government service. I thought of the government as slow, inefficient, and lacking in compassion. However, when I joined government service, as I mentioned earlier, my view of the government didn't change. In fact, my initial view of public service was only reinforced when I entered government service. I began to understand and see the inner workings of the government, so I feel that some of the reasons for the perceived slowness are valid.
IV. PUBLIC SERVICE IS INFORMATION DELIVERY		
4	So, one of the basic public services na ginagawa namin is to give yung public, yung precise and accurate information about the institutions. We should inform the public for them to have informed decisions pagdating ng araw, pagdating ng elections, sino ba yung iboboto nila.	One of the basic public services we provide is to give the public precise and accurate information about the institutions. We should inform the public so they can make informed decisions when elections come and choose who to vote for.
5	Pagdating sa (When it comes to) public service delivery, when you're a former practitioner you know what the people needs to hear about, read about. They need to learn about the institution. So basically,	

	pagdating sa Judiciary (with the Judiciary), syempre (of course), since it's the third branch of the government and its primary function is to deliberate cases, mostly, ang dapat na delivery service na ineexpect (the expected service delivery) is to disseminate information about the court's decision.	
10	From my experience po, I view public service in government as similar to that in private media in the sense na, both want to inform the public in a timely and accurate and professional manner. Also in both cases, we also have to keep in mind yung (the) views and positions ng (of the) principal.	
14	I think, pag meron kang background kasi sa media, you are able to understand the dynamics of how you pass information…May times kasi, ang problema is yung public relations mismo na nagsimula sa government, hindi nila alam yung dynamics sa loob ng media. So, with experience sa media, galing ka sa media, papasok ka sa public relations ng government, you're able to, hindi naman perfectly, but rather, you are able to communicate efficiently.	I think having a media background helps you understand the dynamics of how information is delivered. There are times that the problem is public relations that started with government because they don't the dynamics within the media. So, with your media experience, when you eventually handle public relations in government, you are able to communicate more efficiently, if not perfectly.
V. CONTINUED QUEST FOR TRANSPARENCY AND ACCOUNTABILITY		

8	Yung lens mo as a journalist does not really go away. You still seek for transparency and accountability when you're working in the government. Kahit na may inis ka over red tape, and seemingly circuitous processes in government, yun yung nadadala mo from media practice. Yun ding balanced view mo of the world na… and your bias for the truth and for the people that you serve.	Your lens [perspective] as a journalist doesn't really go away. You still seek transparency and accountability when working in government. Even though you may get frustrated with red tape and seemingly circuitous processes in government, that's something you keep from your media practice. As well as your balanced view of the world and your bias for the truth and for the people you serve.
12	I think meron naman pong mga efforts to enhance transparency and accountability…Overall po, may mga accomplishments naman but more work still needs to be done to enhance yung transparency and government efficiency.	I think there are efforts to enhance transparency and accountability…Overall, there have been accomplishments, but more work still needs to be done to improve transparency and government efficiency.
VI. BRINGING GOVERNMENT CLOSER TO PEOPLE		
7	Dito sa government, kunyari, mag-lelead ka ng team na nagpu-push ng ganitong [financial inclusion] tapos makikita mo nagwo-work together. Yung parang sa policy change, basta mas apparent. Mas naco-connect ko siya sa, natutunan ko sa school before, tapos yung family values din, parang yung pagtulong, parang diretso. So kunyari yung financial inclusion or bringing	In government, for example, when you lead a team pushing for something like financial inclusion, and you see everyone working together, it becomes more apparent. The policy change is much more apparent. I can connect it better with what I learned in school and also with family values, like helping others directly. For

	[Agency X] closer to the people.	instance, financial inclusion or bringing the [Agency X] closer to the people.

Table 4 tackles the perceptions of the participants about public service delivery. These perceptions were clustered into six major themes: (1) Commitment to Public Trust, (2) Public Service Delivery: A Priority, (3) Negative to Positive Perception; (4) Public Service is Information Delivery; (5) Continued Quest for Transparency and Accountability; and (6) Bringing Government Closer to People.

I. Commitment to Public Trust: The participants who had a media stint of 6 to 20 years believed that public servants should exemplify professionalism, competence, ethics, dedication and commitment to public trust when it comes to public service delivery. For P2, P3, P9, P11, P13 who were from broadcast, print and multimedia sectors, public service is a public trust.

II. Public Service Delivery: A Priority: The participants were in consensus that the delivery of public service must be prioritized at all costs. P1, P2, P3, P9, and P13 stressed the importance of having an efficient, prompt, and complete delivery of public service.

III. Negative to Positive Perception: The participants narrated how their negative perception about government was changed or how their initial view of government service was reinforced when they entered the government service. P1, P3, P6, and P15 stated that their immersion in their respective agencies that are actively involved in public service delivery made them realize that those in the government have been doing a lot in spirit of genuine service and for love of country.

IV. Public Service is Information Delivery: Providing accurate, credible and precise information in an efficient, timely and professional manner is a form of public service delivery. This was commonly identified by P4, P5, P10, and P14 as their perception about public service delivery. The four participants previously worked as multimedia and print journalists, and their current roles in their respective agencies are into public information services and media relations. As a tool, information empowers people to exercise their basic rights, permits for citizen's participation and public trust in democratic governance and sustainable development (Windhoek+30 Declaration: "Information as a Public Good" issued during the United Nations Educational, Scientific and Cultural Organization World Press Freedom Day Global Conference on 29 April to 3 May 2021 in Windhoek, Namibia). The United Nations Educational, Scientific and Cultural Organization (2021) stressed that the delivery of trusted and fact-based information is vital to people's participation in a free and open society (Highlights of the World Trends in Freedom of Expression and Media Development: Global Report 2021/2022, "Journalism is a Public Good").

V. Continued Quest for Transparency and Accountability: The participants from print media sector pointed out that the continued quest for transparency and accountability in the delivery of public service remains. P8 and P12 believed that more work still needs to be done to enhance transparency and accountability in the bureaucracy. In its Editorial, the Philippine Daily Inquirer (2023) challenged President Marcos Jr. "to reverse" the supposed reduced adherence to transparency and good governance by his predecessor by directing the government institutions to "deepen their commitment to freedom of information (FOI) principles." Citing a Philippine Center for Investigative Journalism (PCIJ) 2022 report, the PDI said the approval of FOI requests only stood at 40 percent, which was only half of its 80-percent approval rate target (Editorial: Strengthening FOI, January 11, 2023 Issue).

VI. Bringing Government Closer to People: Bringing government closer to people is one of thrusts of public service delivery. This was stressed by P7 who has been in government for 16 years and is currently advocating for financial inclusion of marginalized youth sector.

IV. The Participants' Contributions to Public Service Delivery

What are the former journalists' contributions to public service delivery, particularly in the fulfillment of their agencies' mandate?

Table 4

Notion on the Capacity of Former Journalists to Contribute Skills and Expertise to Public Service Delivery

Participant Number	Verbatim	English Translation
1	Of course. Yung nakikita ko, in the 25-26 years that I have been in government service, yung napaka-importanteng aspeto yung public information eh, di ba? Some would call it propaganda, but hindi. It's just providing people with the right kind of information they need to make the right kind of	Of course. From what I've seen in the 25-26 years that I have been in government service, one of the most important aspects is public information, right? Some might call it propaganda, but it's not. It's about providing people with the right kind of information they need to

	decisions, to make the right kind of impressions.	make informed decisions and form accurate impressions.
2	Definitely. I think there are a number of former media in [Agency X].	
3	Honestly, nung una, akala ko wala. Pero yung sa pagsasama namin ni Cong X, na meron din pala kasi. Like for example, tayo, alam natin yung mga red tape sa gobyerno. So, kumbaga may background tayo as a media practitioner. Alam natin kung ano yung mali. Nakikita natin kung ano yung nagpapabagal sa takbo ng gobyerno. So, nakakacontribute din talaga.	Honestly, at first, I thought there was none. But in working with Cong X, I realized there actually is. For example, we know about the red tape in government. Having a background as a media practitioner, we understand what's wrong. We can see what slows down the government's processes. So, it really does contribute.
4	Definitely, ang sagot dyan, siyempre, yes. Kaya nga tayo kinuha ng ng senador o ng government institutions na to because of your skills, di ba? Kasi very, ano tayo, very flexible tayo, nasanay tayo nagko-cover.	Definitely, the answer is yes. That's why we were hired by the senator or by government institutions—because of our skills, right? We're very flexible; we're used to covering various situations.
5	Yes. Yes. Very much. Ang laking bagay if you're a former journalist. Not necessarily from, regardless kung anong medium, be it radio, I mean, be it broadcast or print, ang laking bagay because we understand kung ano yung kailangan… So, ayun, yun ang advantage natin eh. We can spot already kung ano	Yes, definitely. It's a huge advantage to be a former journalist. It doesn't matter what medium you came from—whether radio, broadcast, or print. The important thing is that we understand what's needed. We can already spot what stories will

	yung story na kakagatin and yung talagang newsworthy.	catch attention and what's truly newsworthy.
6	Definitely. As a former journalist, I was always given the task of writing, writing of policy briefs, technical notes.	
7	Oo, kasi, yun nga, parang nakaka-contribute dahil nga may media interface pa rin naman. Lahat ng government agency may media interface. Pero, ano naman eh, kung iisipin mo, super, super madaling intindihin kung yung mga media practitioner, mag-wo-work sa Public Information Office ng mga government agency	Yes, because, you know, it really contributes because there is still media interface. Every government agency has a media interface. But, if you think about it, it's super easy to understand if media practitioners work in the Public Information Office of government agencies.
8	Yes, I think skills and expertise of former journalists are very, very vital in the delivery of public service, just because it ensures that nadadala talaga sa tao yung kailangang ibigay.	Yes, I believe the skills and expertise of former journalists are crucial in the delivery of public service. They ensure that essential information reaches the public effectively.
9	Ang masasabi ko na contribution ko sa… yung skills…So as a journalist, nandoon yung being transparent. Andun din yung, walang biases.	What I can say about my contribution is my skills. So as a journalist, I put premium on transparency and impartiality, no biases.
10	I would agree na (that) former journalists can contribute. They have a lot to contribute in terms of skills and expertise sa public service…The skills in the work ethics that we gain in	

	working for a private media outfit. They help.	
11	I think yes. It's high time that you know, we journalists or the people coming from the media will also consider government office as a, you know, as an opportunity for them to grow as well. Hindi lang naman yung ahensya na yun ang makikinabang sa 'yo. Ikaw rin naman makikinabang sa kanya (It's not just the agency that will benefit from your skills; you will also benefit).	
12	I think nakaka-contribute naman po yung former media practitioners sa public service delivery. So, since they excel in clear and concise effective communication, which I think is crucial in formulating policies, doing public information campaigns. And mas na-uunderstand po nila yung public concerns. Kasi nandoon na sila sa on the ground eh. Na, nakikita nila harapan kung ano nangyayari sa on the ground. So they can bridge the gap po between the government and yung community.	I believe that former media practitioners can contribute significantly to public service delivery. So, since they excel in clear and concise effective communication, which I think is crucial in formulating policies, doing public information campaigns. They also have a better understanding of public concerns because they've been on the ground, witnessing first-hand what's happening. This experience allows them to effectively bridge the gap between the government and the community.
13	Yes po. Yun nga po. Like I said po, with my training as a journalist, syempre, media po as fourth estate, ganun po yung view natin. I	Yes, exactly. As I mentioned, with my training as a journalist, media as the fourth estate. I personally tend

	personally tend to be critical po of myself and my work being a public servant. Kasi, ayaw ko ng mediocre. Deserve ba ng taong 'to yung ginagawa ko?	to be critical of myself and my work being a public servant. I despise mediocrity. I strive to ensure that my work is not mediocre, and constantly question, does the public deserve what I am doing?
14	Oo naman. Again, babalik tayo dun sa point na, the efficiency of delivering information to public. Once you know what the public wants, di ba? Once you know na, kung ano yung papatok, ma-tatailor fit mo yung main message mo sa public, like for example, agenda setting.	Absolutely. We reiterate the importance of having efficiency in delivering information to the public. Once you understand what the public wants and what will resonate with them, you can tailor your main message to fit their needs. Like for example, agenda setting.
15	Yes na yes (Absolutely). 100 percent. I think, I think journalists and yung skills nila (their skills), definitely can be an asset to any government agency. Kasi things na (Things), like writing, no one does it better than journalists. And writing clearly, communicating clearly and effectively, talagang (really) you can rely on former media practitioners who are now working in government service to do that really well.	

Table 4 shows that all the participants agreed that former media practitioners have something to contribute to public service delivery, particularly in the area of public information services. The participants' communication skills, grit, hard work and extensive experiences in the field and trainings make them assets to the government's continued

quest to ensure the efficient, transparent, prompt, and accountable delivery of public service. Herman et.al (2023) said the functions and roles of journalists in supporting communication between the government and the public are important in daily life. Citing Khatimah, they observed that in the sphere of public policy, journalists have been considered “as a part of the Pentahelix elements that cannot be separated and influence each other in a decision or policy-making.”

The researcher believes that with the presence of former media practitioners in some government agencies, bringing the government closer to people by reinforcing the principles of transparency and accountability through the delivery of credible, prompt and accurate public information services is not far-fetched. Press freedom is intended to build a society where citizens are constantly educated, aiding them to have the right judgment to pick good leaders and exercise their democratic rights without fear (Report on State of Media Freedom in the Philippines 2024 presented during the “1st Philippine Media Safety Summit: Surviving Pandemics and Other Provocations by Challenging Current Paradigms,” CMFR, 2 May 2024).

Table 4.1

Participants’ Actual Contributions to Public Service Delivery

Participant Number	Verbatim	English Translation
I. PUBLIC INFORMATION/ COMMUNICATIONS/MEDIA RELATIONS		
1	You have to really mount an effective public diplomacy campaign to make them understand what we do. So, yeah, so I use Facebook a lot. I personally engage people. I encourage them to add me and message me directly, which is what I've actually been doing since the social media came about. Yun nga, yung ako talaga sasagot, sasagutin kapag nag-message (I personally respond to them if they have queries). Kasi	

	iba yung (because) personal engagement [is different].	
2	When I'm tasked to do the messaging or to do the press release, which I still do by the way, right now, it's something I can do with my eyes closed, but I always make sure that it's nuanced and at the same time, you're communicating policy…Basically, that's it, being able to deliver fast and communicating policies well.	
3	Gusto natin yung transparent tayo sa, yung gobyerno sa atin. So, kaya kami, open kami sa media noon… We make it a point na open kami lagi sa media, na pag may kailangan silang tanong, sinasagot agad naming, negative or positive yan, sasagutin namin yan.	We want our government to be transparent. So, we were open to the media back then. We made it a point to make ourselves, our agency always be accessible to the media, responding to their questions promptly, whether the inquiries were positive or negative.
4	Tingin ko yung mapanatili and make sure na accurate yung information na binibigay namin sa public. And I think that's very important. And then, dapat totoo lang yung sinusulat mo. And di siya sugar-coated. So, I think yun ang basic responsibility namin eh.	I think it's crucial to maintain and ensure the accuracy of the information we provide to the public. It's very important that what we write is truthful and not sugar-coated. I believe that's our basic responsibility.
5	I have been espousing this sa mga PIO Chiefs na we have to hold press conferences. Pero ideally kasi, to be on the news,	I've been advocating to PIO Chiefs that we need to hold press conferences. Ideally, to get news coverage, you

	kailangan exposure. And ano exposure na ito? Pag-conduct ng press con. Kasi ang press releases, while it can help, limited yung nare-reach.	need exposure. And what kind of exposure? By conducting press conferences. Press releases, while helpful, have limited reach.
9	Mga requests {sa social media], so kami rin nagfafacilate non. So dapat talaga narereach out talaga, nakakarating sa public, and even public information. Like kanina (July 23 during Typhoon Carina), walang number coding or sinusupend nila yung number coding, anong oras na, hapon na. So nandun na on point na, nagpost kami sa social media. Kailangan namin gumawa ng postings. And then we post it. We disseminate it to everyone, the media, the public.	All requests [on social media], we facilitate the, So we should really reach out to the public, and the public information reaches the public. Like this afternoon (July 23 during Typhoon Carina), the number coding has been suspended. So that's on point, we posted it on social media. We need to make posting and then we post it. We disseminate it to everyone, the media, the public.
10	Medyo may idea na rin ako na what the media will pursue or what they need, the information na kailangan nila. So I could kumbaga, “guide”, or at least give the principal an idea of what the media want. So, kapag tinanong siya or hiningan siya ng statement, may idea siya kung what to answer or what points i-istress niya.	I have a good understanding of what the media will pursue and the information they need. This allows me to "guide" or at least provide the principal with an idea of what the media wants. So, when asked for a statement or response, the principal has already an idea what to answer or the key points that must be emphasized.
11	Pwede ko sabihin na (I can say that my) contribution is that I was able to bring 46 million ROI (return on investment) last year sa	

	media relations naming (in our media relations effort).	
12	So yung own contribution naman po, for me, I think, nakatulong din yung yung networks since parang may connections ka na. Being a reporter kasi marami ka ng networks sa pag-interviews. So, nakaka-help yun sa pagkailangan mo ng data. So, you know na who to contact, meron ka ng contact person. And then, so nakakatulong din siya sa work, especially if you need information or data na wala yung agency.	As for my own contribution, I think my networks have been quite helpful since you have already established connections. As a former reporter, you had established networks because you interviewed a lot. This helps when looking for data. I already know who to contact since you have links with them. This is particularly beneficial, especially if you need information or there is no readily available data in the agency.
13	We produce content po na, thinking how things may be viewed from the other side of the fence na as how media would write it, how the public would take it po on social media. Hindi lang po kami nag-iinform. Parang we consider also the timing, message, value po ng content, before putting it out.	We produce content while considering how things might be viewed from the other side of the fence, such as how the media would write about it and how the public might perceive it on social media. We don't just inform; we also consider the timing, message, and value of the content before putting it out.
14	Other than sending PR, other than releasing newsletters, I was able to help na mag gumawa ng mga media campaign. Kasi hindi lang naman basta release ka ng release, kailangang isipin mo din	Other than sending press releases and newsletters, I was able to contribute by helping to create media campaigns. It's not just about releasing information; you also

	yung timing, yung ano, gestation period, yung mga ganyang bagay. So yan yung knowledge ko na na-impart sa tao sa office. And yung pangalawa, yung kahalagahan din ng media monitoring. I've been telling them na we should get a media monitoring tool na, makikita natin yung mabibase, maa-angle natin. Para data analytics, it's more of the scientific approach of, are we able to hit our targets na parang yung gano baka effective yung PR natin.	need to consider timing, the gestation period, and other factors. This is the knowledge I've shared with the team in the office. Additionally, I've emphasized the importance of media monitoring. I've been telling them; we should get a media monitoring tool so we can track our performance. Data analytics is more of the scientific approach. This helps us evaluate whether we're meeting our targets and how effective our PR efforts are.
15	Because yung mga ginagawa kong deliverables ay for public consumption, andun po yung pagiging detalyado, andun yung pagiging truthful, i-ensure po natin na tama yung nilalagay nating detalye. And andun nga din po yung grit or yung kagustuhan to make sure na okay po yung lumalabas na material sa public. And that it also has an information po na magagamit or beneficial sa public.	Since the deliverables I produce are for public consumption, attention to detail and truthfulness are crucial. We need to ensure that the information we provide is accurate and well-detailed. There's also the grit and determination to make sure that the materials released to the public are of high quality and that they contain useful and beneficial information to the public.
II. PROGRAM DELIVERY/ PUBLIC CONCERNS AND RESPONSE		
3	Nung umupo kami ni Cong. X, we make it a point binawasan namin yung lahat ng mga requirements para	When Cong. X and I took office, we made it a point to reduce all the requirements to speed

	mas mapabilis and sabi namin, lalo na si Cong X, sabi niya na ang gusto ng tao is yung pagkapunta mo makukuha mo yung hinihingi mo. So, we make it a point at that time na dapat pagdating ng umaga ng beneficiaries, kailangan makukuha nila yung kailangan nila within the day. So, nagawa namin yun at that time.	up the process. We said, especially Cong. X, he said that what people need is they get immediate assistance. that when you go you can get what you ask for. So, we make it a point at that time that when the beneficiaries arrive in the morning, they must get what they need within the day. So, we did that at that time.
7	Actually, yung Office namin instrumental din sa pag-form ng (Paleng QR-Ph) dahil in partnership with DILG and syempre yung LGU. So parang nag-work kami together para mag-issue ng guidelines, yung Joint Memorandum Circular, and joining yung LGUs all over the country to implement the Paleng-QR Ph program. Pero yung team namin, yung particular sector na involved kami is yung youth. Kasi yung youth marginalized sector	Actually, our Office was instrumental in forming the Paleng QR-Ph initiative. We collaborated with the DILG and local government units. We worked together to issue guidelines through the Joint Memorandum Circular and engaged local government units across the country to implement the Paleng QR-Ph program. Specifically, our team focused on the youth sector, recognizing that it is a marginalized group.
9	No backlogs…At least sa Office natin, [on] time on target tayo. Kasi may time din yan eh, we respond to the concerns, the complaints we receive. So yung contribution, Complete work task. At saka, another pa na contribution is, dahil nga din, may mga bago na rin kaming mga writers sa office. Contributions ko is to	No backlogs. At least in our Office, we are on time, on target. Because our response is time-bound, we respond to the concerns, the complaints we've received. So, the contribution, Complete work task. Additionally, another contribution is because we have new

	teach them how we work, how we work, how I work nun as a journalist. And, i-impart din sa kanila yung mga learnings na yun para we are on the same page, in sync, lahat ng mga ginagawa namin.	writers in the Office, I teach them how we currently work, how I worked as a journalist. I impart to them all these learnings to ensure that we are all aligned and in sync with our work.
III. POLICY DEVELOPMENT/PROJECT APPROVAL		
6	So, because of my background, I was pushed to this area of policy dev, policy development. So, I think I was able to contribute to that output of the government agency I'm in.	
8	For me, halimbawa, since I sit in the management, yung purview ng tao over the projects or the proposals that go over us, yun yung contribution ko. We ensure that the proposals that we approve are truly beneficial to the people. We ensure na there are safeguards, in terms of accountability and transparency as well for when, when we, when, when we approve proposals.	For me, since I sit in management, my contribution involves overseeing the projects or proposals that come across our desk. We ensure that the proposals we approve are genuinely beneficial to the public. We also implement safeguards to ensure accountability and transparency in the approval process.

Table 4.1 shows how the former journalist-participants translated their roles into concrete actions, providing the complete picture of their actual contributions to government's public service delivery. They are very much involved and engaged in the delivery of public information services.

This study grouped the participants' actual contributions into three facets: (1) Public Information/Communications/Media Relations, (2) Program Delivery/Public Concerns and Response; and (3) Policy Development/Project Approval.

I. Public Information/Communications/Media Relations: Twelve (12) participants who are mostly working in the Executive, Legislative and Judicial branches of government and

had a media experience of one (1) to 20 years are into public information, communications and media relations. P1, P2, P3, P4, P5, P9, P10, P11, P12, P13, P14, and P15 belong to the first group of government communicators.

II. Program Delivery/Public Concerns and Response: Three (3) participants - P3, P7, and P9 are very much involved in the implementation of programs by their respective agencies.

III. Policy Development/Project Approval: Two (2) participants, namely P6 and P8 are into project proposal approval and policy development in fulfilment of their roles.

As former members of the "fourth estate," the participants remain committed to carry over and keep the press' watchdog tradition – always being on a lookout to ensure the transparent and accountable delivery of public service. Journalism promotes a healthy civic space by providing trusted and fact-based information which is essential to people's participation in a free and open society (Highlights of the World Trends in Freedom of Expression and Media Development: Global Report 2021/2022, "Journalism is a Public Good", United Nations Educational, Scientific and Cultural Organization 2021). Herman et.al (2023) cited the crucial roles of journalists to bridge the communication between the government and the public. They stressed that the fourth estate should always be on board in public decision or policy-making.

V. The Participants' Suggestions to Strengthen Partnership to Curb Corruption, and Promote Transparency and Accountability in the Bureaucracy

How can former journalists effectively engage with the government as partners in disseminating its programs and projects to curb corruption, and promote transparency and accountability in the bureaucracy?

Table 5

Participants' Suggestions on How to Strengthen Partnership with the Government as Anti-Corruption and Pro-Transparency and Accountability Mechanism in Public Service Delivery

Participant Number	Verbatim	English Translation
I. OPEN ACCESS/INFORMATION DELIVERY		
3	Sa akin talaga kasi, parang napaka importante ng transparency eh. Kasi, kung transparent ka, kasunod na	For me, transparency is really important. Because if you are transparent, it naturally

	doon yung ma-eradicate mo yung corruption eh, di ba? And kung open ka sa lahat, nakikita ng taong bayan yung ginagawa mo. sa gobyerno.	follows that you can reduce corruption, right? And if you're open about everything, the public can see what you're doing.
4	So, during budget season, di ba, so gumagawa rin kami ng mga press releases. So, bawat ahensya ng gobyerno, tinatalakay sa [Legislative] yung budget. So, we make sure na yung binibigay naming details, tama. Paglabas sa [Legislative] website, pag-blast namin yan sa media entities, tama. So, yung transparency dun, tingin ko, nasa-serve namin. Plus yung accountability na dapat tama yung figures and everything. All information, the data, the figures na nilalabas namin, dapat tama.	So, during budget season, we also produce press releases. Each government agency discusses its budget in the [Legislative]. We make sure that the details we provide are accurate. When we publish information on the [Legislative] website and send it out to media entities, it has to be correct. In terms of transparency, I think we serve it well. Plus, the accountability aspect means that the figures and all the information we release must be accurate.
7	Gumawa ng better communication material, siguro parang seryosohin…So, siguro yun, more, better materials, better communication products para mapansin ng media and ma-report na may ginagawang maayos yung [Independent Public Financial Institution X]. Transparency na rin sa ginagawa namin.	Create better communication materials…So, I think it's about producing better materials and communication products to get media attention and report the good work being done by the [Independent Public Financial Institution X]. It also involves ensuring transparency in what we do.
9	Walang dapat itago… So, dapat talaga transparent	There's nothing to hide… So, a truly

	working relationship. Yes, transparent. And then, you follow the procedure. No shortcuts. You follow the system.	transparent working relationship is necessary. Yes, transparent. And then, you follow the procedure. No shortcuts. You follow the system.
14	Ang lagi ko lang kasing ina-advise sa kanila is hindi mo kailangan magtago… it's more of, wala kang tinatago. Wala kang tinatago. So, it's a matter of how frequent you're informing the public of what's happening, how prompt you are in terms of answering issues.	What I always advise them is that you don't need to hide anything… It's more about not hiding anything. So, it's a matter of how frequent you're informing the public of what's happening, how prompt you are in terms of answering issues.
II. VALUES		
1	Alam mo dapat ano yung mission mo… We get sent out to serve our people, to serve our country. Lalo yung focus mo, huwag ka mawala dun. I'm lucky I belong to an agency of government that is not known for corruption. Maraming safety nets that were put in place to make sure that walang magiging corrupt sa amin.	You need to know what your mission is…We get sent out to serve our people, to serve our country. Stay focused on that. There are many safety nets in place to ensure that no one engages in corruption.
5	First and foremost, dapat you have integrity na muna. When you join the government, mag-join ka for the proper reasons.The only way para makinig sa'yo, yung mga yung mga officials sa government is for you to build that reputation.	First and foremost, you should have integrity. When you join the government, you should do so for the right reasons. The only way to get government officials to listen to you is by building that reputation.

8	If they want to engage government, they would have to, well, participate in the government process. Madaling magsalita if you're outside. Pero once you're in the system and you need to effect change, yun yung challenge. (It's easy to speak from the outside, but once you're inside the system and need to effect change, that's the real challenge). Maraming considerations along the way and you will have to conquer those. Another is that you go back to your why. Why do you want this? And what really drives you? Kasi kung hindi mo i-ga-ground yung sarili mo (If you don't ground yourself), you'll be lost in the system. And sooner or later, you'll just be part of the problem that you hope to solve when you get into government.	
10	One way would be, you have to establish trust with current media practitioners, and with government officials concerned. Siguro find a way to… I don't know if middle ground is the right term, but we have to find a way to relay yung (the) key information sa (to the) media. Yung focus niya (The focus) is promoting accountability, pero (while) avoiding also yung sensationalism na baka matabunan di ba, yung issue dahil may gustong i-promote	

	na something else (that might overshadow the issue because of other agenda).	
III. TRANSPARENCY MECHANISMS/INITIATIVES		
2	That's tough. Because, first of all, those mechanisms have to be in place within government agencies to promote transparency, accountability, anti-corruption. If none, then media will have to be really assertive and will have to take the initiative to demand for that across all government agencies.	
11	It's high time that they see the government as an opportunity for them to work. Hindi naman kailangan na yung trabaho nila dito ay regular positions (It's not necessary that their work here should be in regular positions). I think that the government should also be open in getting them as a consultant, especially for people into communication.	
12	I think they can advocate and help establish transparency initiatives, such as open data platforms and they can also help establish public reporting systems that allow citizens to access information about government operations and about government spending them. I think yun yung nakikita kong role for them	

	(that's the role I see for them).	
15	Proposing activities po na can invite yung transparency and accountability sa mga government employees, sa mga public service, public servants. Pero definitely, kailangan mo po talagang i-formalize yung mga ganong proposals. Like you have to talk to your supervisors maybe. You might have to draft that proposal yourself para maakyat siya sa management for review and their consideration.	Proposing activities that can promote transparency and accountability among government employees and public servants. But definitely, you really need to formalize such proposals. For example, you have to talk to your supervisors and perhaps draft the proposal yourself to submit it for management review and consideration.
IV. TRAINING/IMMERSION		
6	In terms of engagement, I think media practitioners can also look into, they really have to study the agencies they are assigned to cover. Kasi pag may nakatingin sa kanila (Because if you are asserting your watchdog role), we can help them improve, also their processes, they can help them be more accountable as to their mandate, as to their goals and vision.	
13	I think media training po is important. Me, as part of private media before, na we can educate government offices po na how to effectively communicate things or programs, per se, so that people would know and actually engage and	I think media training is important. As part of private media before, we can educate government offices on how to effectively communicate things or programs, per se, so that people are informed, engaged, and

	actually participate sa ginagawa ng government.	involved in what the government is doing.

Table 5 encompasses participants' diverse suggestions as to how they can effectively engage with the government as partners to curb corruption, and promote transparency and accountability in the bureaucracy.

The participants' suggestions were clustered into four themes: (1) Transparency Mechanisms/Initiatives, (2) Values, (3) Open Access/Information Delivery; and (4) Training and Immersion.

I. Open Access/Information Delivery: The participants stated that all-out transparency in the government is a fight against corruption. P3, P9, and P14 stressed the importance of providing full information access to public, and that the government processes and procedures are strictly followed. As government communicators, the participants (P4 and P7) mentioned that there should be a provision of quality communication materials and products, and that accurate and reliable data and information should be made available to the public in a prompt manner. The United Nations Educational, Scientific and Cultural Organization (2021) said the delivery of trusted and fact-based information is significant to people's participation in a free and open society (Highlights of the World Trends in Freedom of Expression and Media Development: Global Report 2021/2022, "Journalism is a Public Good").

II. Values: The participants commonly identified sense of values in terms of untainted integrity, and credible reputation; and commitment to public trust as major key ingredients for their strengthened partnership with the government to lessen corruption, and promote transparency and accountability in the bureaucracy. P1, P5, P8, and P10, who all had extensive media and government experiences, discussed that given the challenges hounding the public sector, it is stressed that to make a difference, one must have the following: integrity and credible reputation, sense of mission, and commitment to serve the public to positively impact the spectrum of governance, particularly in the delivery of public services. Serving the people with integrity, utmost responsibility, and efficiency is non-negotiable. During the 50th anniversary of the Kapisanan ng mga Brodkaster ng Pilipinas (KBP), President Marcos Jr. urged the broadcast organization "take the lead and foster public discussions, truth, and credibility" (Locus, 2023).

III. Transparency Mechanisms/Initiatives: The participants cited the need to put in place pro-transparency and accountability and anti-corruption mechanisms in all government agencies. P2, P11, P12, and P15 who were from print and broadcast media sectors mentioned that necessary initiatives must be implemented to promote transparency and accountability in the government. P12, a female print journalist, specifically suggested that open data platforms and establishment of public reporting systems that allow citizens to access information about the government operations and spending be considered. Meanwhile, P11 manifested that it is about high time for government to considering tapping the expertise of media practitioners as consultants.

IV. Training/Immersion: The participants stressed the need to conduct trainings and immersion stint to move forward the advocacy of promoting transparency and accountability in the government service. P6 specifically stated that the watchdog tradition should be asserted to help government agencies become more accountable as to their mandate, goals and visions. P13, on the other hand, stressed that government offices should be trained or educated on how to effectively communicate public programs so that that people are informed, engaged, and involved in what the government is doing.

VI. The Participants' Policy Recommendations for the Promotion of Transparent and Accountable Public Service Delivery

What policy can be developed to enhance and strengthen the involvement of former media practitioners in promoting transparency and accountability in public service delivery?

Table 6

Participants' Policy Recommendations for Transparent and Accountable Public Service Delivery

Participant Number	Verbatim	English Translation
ACCELERATING COMMUNICATIONS' LEVEL IN GOVERNMENT AGENCIES		
3	We have to accelerate yung level of communications ng mga government agencies. And yung transparency na rin siguro, na yun yung hinahanap din ng media. And not even media, yung publiko mismo, di ba?	We need to accelerate the level of communications within government agencies. And also, improve transparency, which is something that both the media and the public are looking for.
5	I've been suggesting before na maging policy na to make each press conferences, regular. I mean, regular, that this be done on a regular basis. Kasi it's the only way para maka reach out sa tao, maka reach out sa masa.	I've been suggesting before that it should become policy to make press conferences regular. I mean, they should be done on a regular basis. It's the only way to reach out to people, to the masses.

8	Another is the use of technology. One thing that we did is to have the things that we have in, ano, available to the public, para hindi mo na siya ire-request through FOI, di ba? Nandun na siya. And tayo as comms practitioners, look out natin yun na madali siyang mahanap. Kasi tayo yung may ganong lente. Alam natin paano mag-behave yung tao in terms of doing searches, in terms of accessing government services. So, yun, contribution natin yun. We should do that. Pero yun nga, we should not be afraid of technology and instead use it to our advantage.	Another aspect is the use of technology. One thing we did was to make available to the public the information that was previously requested through FOI. It's now easily accessible. As communications practitioners, we need to ensure that this information is easy to find. We understand how people search for and access government services, so this is our contribution. We should embrace technology and use it to our advantage.
9	So, I think one policy which I can suggest is the process, like for example, the documentation. Dapat documented every step of the way. So for that documentation, there should be a process. The scheme should be well-documented. Kung pwede, talagang approved by the management na dapat na andun yun na evidence-based talaga lahat ng mga gagawin. Lahat ng initiatives [well-documented], from visibility up to budgeting pa nga sana eh.	So, I think one policy I can suggest is related to the process, such as documentation. Every step of the way should be documented. There should be a clear process for this documentation. The scheme should be well-documented, and if possible, it should be approved by management so that there is evidence-based documentation for all actions taken. All initiatives should be well-documented, from visibility to budgeting, ideally

15	[Agency X] is a lot of numbers, a lot of data. It's truly difficult to communicate numbers to people. Kung specific po sa agency (If specific for agency), parang (but) there's definitely potential in tapping TikTok. Merong official account si [Agency X] sa TikTok pero it's not yet maximized kasi parang in-explore pa siya sa ngayon. (Agency X has an official TikTok account, but it's not fully maximized yet, as it's still being explored.)	
STRENGTHENING OF FOI		
3	Sa akin talaga, sobrang push sa akin yung yung FOI na yan, yung Freedom of Information, kasi sobrang malaking tulong yan kasi pinaglalaban nga natin yung transparency eh, di ba? So, sa akin talaga, sobrang pabor ako dyan sa FOI na yan.	For me, the Freedom of Information (FOI) is something I strongly support because it's a huge help in advocating for transparency. I am very much in favor of the FOI.
4	Tingin ko kailangan yun (FOI) eh. Kailangan natin ng batas. To strengthen yung public information.	I think we need that (FOI). We need a law to strengthen public information.
7	Parang makakatulong din naman [ang strengthening ng FOI]. Kasi syempre yung mga tao, para empowered sila na magtanong, sila lang mismo.	This could also help (FOI strengthening) because the people are empowered to ask.
8	Kung totoong open data ka, i-open mo talaga…The way forward pag sa FOI is to	If you are truly for open data, have everything opened for access. The

	have it public. Kasi may ang obvious naman na hindi mo talaga pwedeng ilagay sa publiko ay halimbawa, personal information…Pero kung halimbawa proyekto yan na pinopondohan naman ng mga tao, if it is not covered by intellectual property, then why hide it?	way forward with FOI is to have it public. Because obviously, you can't make public personal information. But, for example, if the project is funded by public funds, if it is not covered by intellectual property, then why hide it?
14	Ako talaga Freedom of information. So, pag institutionalize yan, mas empowered yung kumukuha ng information. Not only the media, but the public. So, it will really promote transparency. Kasi easy access yun eh. And for me, kung ikaw nga, politiko naman, kung wala ka naman tinatago, pabor din sa'yo yun.	For me, it's definitely the Freedom of Information (FOI). If it is institutionalized, it will empower not only the media but also the public in obtaining information. This will really promote transparency because it provides easy access. And for politicians, if you have nothing to hide, it would also be beneficial for you.
III. MEDIA HIRING		
5	Ang naisip ko din, ang I've noticed kasi, I'm not familiar with the other institutions, pero siguro, iba kasi yung ano ng Civil Service. Sa government ka kasi, kahit na information officer ka, parang ang strict ng mga qualifications. If you've noticed, pag, I don't know kung may na-interview ka na before, na who said na, pagdating sa civil service kasi, para ma-promote ka, kailangan may MA ka, [may trainings}, may mga fellowship ganyan. Kasi parang, gusto kong maging policy na, alam mo yun,	What I've noticed is that, although I'm not familiar with other institutions, the Civil Service has strict qualifications. Even if you're an information officer, it's quite stringent. If you've interviewed someone before, you might have heard that to get promoted in civil service, you need to have an MA, specific trainings, fellowships, and so on. I think there should be a policy that considers experience, especially for former journalists, not just academic

	hindi lang yun dapat basis, lalo na pag former journalist ka, they have to take into account yung experience ng applicant. That should be considered.	qualifications. Experience should be taken into account for applicants who are former journalists.
7	Siguro, non-discrimination sa hiring ng mga former media practitioners.	Perhaps, there should be non-discrimination in hiring former media practitioners.
8	Kasi ever since I joined government, I've seen so many promising talents na umaalis because the structure is not there for them to stay. Walang plantilla positions. Tapos syempre yung system, minsan may talent na yung former media practitioner, pero minsan ang nakukuha pa rin yung mga bata-bata ng mga kung sino-sino.	Since I joined the government, I've seen so many promising talents leave because the structure isn't in place for them to stay. There are no plantilla positions. Sometimes, even though a former media practitioner has the talent, the positions often go to candidates who have connections.
11	Dapat in-offer nung mga seasoned journalists yung kanilang mismong expertise to the government…There should be a direct collaboration, that kami ang hahawak ng comms nyo. Kami ang tutulong sa inyo. There should be a policy to that.	The seasoned journalists should offer their expertise to the government. There should be direct collaboration [between the government and media organizations] that we will handle your communications, we will help you. There should be policy to that.
IV. SKILLS UPGRADING		
3	Siguro, sa 'kin, i-enhance natin yung communication skills, i-enhance natin yung policy pagdating sa, yung pagturing sa media. Kasi yun, di ba, yung nabanggit ko kanina na palaging ang	For me, we should enhance communication skills and improve policy regarding interactions with the media. Because, as I mentioned earlier, there's often a perception

	tingin lagi ng mga government officials, ng mga public officials sa media is kaaway kasi. Nakita talaga namin na malaking bagay yung communications,i- enhance mo yung communication skills, yung pakikitungo mo sa publiko para may parating mo yung ginagawa mo.	among government and public officials that the media is an enemy. We've seen how important communication is; you improve your communication skills and how you deal with the public iso that you convey what you're doing.
5	Kailangan ng constant learning, hangga't maaari magkaroon ng, what you call this, yung consistent upgrade pagdating sa skills na. If pwede namang i-allow ng institution to provide seminars, for us, para sa mga workers. Kasi ano eh, tawag dito, kailangan ng constant upgrading ng skills eh, lalo na ngayon kasi sobrang fast-paced ang mundo, with the advent ng socmed.	Constant learning is essential. Institutions should allow for continuous skill upgrades. It would be beneficial if institutions could provide seminars for workers. Constant upgrading of skills is necessary, especially now with the fast-paced world and the advent of social media.
13	Media training, trainings on, not necessarily what the media wants, how the media wants to be treated. Pero like, trainings with the media on how to communicate effectively, [on how to effectively report government programs], and also skills enhancement so we know how to be flexible, adapt, innovate.	
V. GATHERING OF GOVERNMENT COMMMUNICATORS		
3	[Gathering of government communicators to share best practices) sa lahat ng	[Gathering of government communicators to share best practices] in all

	government agency, I think, that's very good step na dapat matuloy and huwag mawala. Kasi importante yun eh. Kasi, alam mo yung, di ba minsan nakikita mo naman sa gobyerno, yung hindi-synchronize yung mga communications nila.	government agencies, I think that's a very good step that should continue and not be discontinued. It's important because, sometimes, you see that government communications are not synchronized.
10	Siguro, one suggestion that I could make is regular meetings between former media practitioners and siguro the concerned government officials, lalo na yung mga PIOs. So, mashe-share nila yung experiences nila. And in the process, matututo yung mga PIOs na, ito yung best practices at yung mga mga bawal or unethical sa industriya, para they can they can adopt the good and then they can also avoid the bad.	One suggestion I could make is to have regular meetings between former media practitioners and the concerned government officials, especially the PIOs This would allow them to share their experiences. In the process, the PIOs can learn about best practices and what to avoid or what is considered unethical in the industry. This way, they can adopt the good practices and avoid the bad ones.
12	And we can also create forums where former media practitioners can also mentor and collaborate with current journalists.	
VI. NATIONAL POLICY FOR ALL		
1	It should be a national policy na address sa lahat…What we need are Filipinos na nag-iisip para sa mas nakararami, hindi para sa sarili. If you're in government, how could you help ensure transparency? Be a watchdog.	It should be a national policy that addresses everyone. What we need are Filipinos who think about the greater good, not just for themselves. If you're in government, how could you help

		ensure transparency? Be a watchdog.
2	So the policy should be for everyone. The policy shouldn't be focused on you being a former media practitioner, but it should be for the entire bureaucracy. It's gonna be a tough, job to do. There are policies already in place, but the problem is really the implementation.	
VII. OTHER RECOMMENDATIONS		
A. SOCIAL MEDIA ACCOUNTABILITY		
4	I think that's very important, proposed measure na sana maipasa natin about social media accountability, how to really fight information dissemination, fake news, misinformation, and disinformation.	I think it's very important to pass a proposed measure about social media accountability, focusing on how to effectively combat the dissemination of fake news, misinformation, and disinformation.
B. MEDIA PARTICIPATION IN GOVERNMENT CONSULTATIONS		
6	A. In terms of policy, government kasi has demanded to be consultative. So I think that it should be encouraged, if not mandated, to include the media in consultations, given that the media is one of the stakeholders also in all the things that we do in government.	

C. IMMERSION OF MEDIA IN GOVERNMENT		
6	More of the media side, is to really show…they're really interested in what the government office is doing and how the government office can improve and how the government office can reach to more of its constituents or stakeholders. So, I think yung mas, mas masigasig siguro yung media natin (So I think our media should be more tenacious) in covering issues relating to government agencies.	
D. CREATION OF INDEPENDENT MONITORING BODY		
12	I think the former media professionals, they can help establish independent bodies to monitor and evaluate government transparency and accountability practices. And they can publish their findings and recommendations to foster public trust and to also drive improvements in public service delivery.	
E. GRANTS FOR INVESTIGATIVE JOURNALISM PROJECTS		
12	I think government agencies can encourage investigative journalism. I think government can explore in providing grants or support for investigative journalism projects that focus on government	

	transparency and also public service accountability.	

Table 6 tackles the participants' varied policy recommendations that could enhance and strengthen the involvement of former media practitioners in promoting transparency and accountability in public service delivery. The proposed policies were clustered into seven major themes: (1) Accelerate Communications' Level in Government Agencies; (2) Strengthening of the Freedom of Information (FOI); (3) Media Hiring in Government; (4) Skills Upgrading; (5) Gathering of Government Communicators; (6) National Policy for All; and (7) Other Recommendations.

The first two proposed policies commonly identified by the participants were: Accelerate Communications' Level in Government Agencies; and the Strengthening of the FOI.

I. Accelerate Communications' Level in Government Agencies: Five participants (P3, P5, P8, P9, and P15) agreed that the level of communications in government agencies must be accelerated. Two participants (P8 and P15) specifically sought the use of digital technology in improving the level of communications in the government agencies. The regular conduct of press conferences and media briefings was then proposed by P5, who has been with the Judiciary for 22 years, as a mechanism to enhance transparency and accountability in the government. As the Center for Media Freedom and Responsibility (2024) prodded the newsrooms to take a second look at their old ways, innovate, and explore new approaches to engage the people again and connect with the new ways they live their lives (CMFR Report on State of Media Freedom in the Philippines 2024 presented during the "1st Philippine Media Safety Summit: Surviving Pandemics and Other Provocations by Challenging Current Paradigms," 2 May 2024), the government agencies should put forward innovative reforms to public information delivery.

II. Strengthening of the FOI: To strengthen the public information delivery and promote the culture of transparency and accountability in the country, FOI must be strengthened. This was the common policy recommendation made by five participants, who were mostly senior journalists (P3, P4, P7, P8, and P14). In its Editorial, the Philippine Daily Inquirer (2023) challenged President Marcos Jr. "to reverse" the reduced adherence to transparency and good governance under the watch of his predecessor by directing the government institutions to "deepen their commitment to freedom of information (FOI) principles." Based on the Philippine Center for Investigative Journalism (PCIJ) 2022 report, the approval of FOI requests only stood at 40 percent, which was only half of its 80-percent approval rate target (PDI, Editorial: Strengthening FOI, January 11, 2023 Issue). The PDI (2023) furthered that the Chief Executive should also be a role model of transparency, accountability, and openness for all other state officials to follow.

III. Media Hiring in Government: Tapping the expertise of media likewise surfaced, with four participants (P5, P7, P8, and P11) raising this proposed policy. P5, P8, and P11 specifically pushed for the regularization of experienced media practitioners who are in the government service by considering their extensive media experience as a major factor of providing plantilla positions for them.

IV. Skills Upgrading: Three (3) participants (P3, P5, and P13) who are mostly senior journalists suggested that there must be continued skills upgrading for government communicators for them to effectively communicate policies, and programs in the public sector. P5 specifically mentioned the need for the enhancement of communications and media relations skills due to fast-paced technology and surging social media users. Herman et.al (2023) said media companies, overwhelmed by the social media development, are remiss of providing comprehensive information regarding government programs, and "are not optimal in conveying public complaints to the government." With this scenario, the government communicators should step up and ensure that the public information must be promptly and fully delivered to the people.

V. Gathering of Government Communicators: Three (3) participants (P3, P10, and P12) saw the need to create fora where there will be sharing of best practices, and partnership will be forged between the former media practitioners and current journalists. This will help ensure synchronized communications plans of all agencies. As President Marcos Jr. urged the KBP to "take the lead and foster public discussions, truth, and credibility," (Locus, 2023), the researcher believes that the government communicators should also proactively participate in keeping a well-informed citizenry.

VI. National Policy for All: Two participants (P1 and P2) who both had extensive media and government experience stated that the promotion of transparency and accountability in public service delivery should be the responsibility of all sectors, not just by former journalists who are now working in the government. P1, a veteran news editor and experienced government official, shared that everyone should be a watchdog to really promote transparency and accountability in the delivery of public service. P2 specifically pointed out that the policy should not only focus on being a former media practitioner, but it should be for the entire bureaucracy. Holliday (2021) stressed that "effective democracy requires accurate information that engages communities in civic life." Everyone must be "willing and able to participate, not just as news consumers, but as distributors and—most important—producers of local information" (Holliday, 2021).

VII. Other Recommendations: P4, 6, and P12 also pushed for media involvement in the government process, such as social media regulation, policymaking, evaluation and monitoring of best practices.

Social Media Accountability: P4, an experienced print journalist who has been with the Legislative for 14 years, stressed the need to fight fake news, misinformation, and disinformation which may hamper transparency and accountability in public service delivery. The United Nations Educational, Scientific and Cultural Organization (2021) said the "disinfodemic" or the "pandemic of false information" resulted in the declining trust in media globally, an opportunity for some political leaders to exploit the deluge of

mis- and disinformation to attack the legitimacy of critical and independent media (World Trends in Freedom of Expression and Media Development: Global Report 2021/2022, “Journalism is a Public Good”).

Media Participation in Government Consultations: P6, a female former print journalist who has been with the government for 14 years, cited the importance of including the media in government consultations. She said a media representative should sit as one of the members of a government panel that is deliberating on a certain policy or guidelines. Herman et.al (2023) stressed that the fourth estate should always be on board in public decision or policy-making, as they significantly bridge the communication between the government and the public.

Immersion of Media in Government: P6 also said that the media should be interested in what the government office is doing so they can give inputs as to how such government agency or institution can improve its processes and the public service delivery in general, as well as to how it can broadly reach or cover its clients or stakeholders. President Marcos Jr. had urged the media “to effectively communicate to the public the government’s efforts and initiatives towards our country’s development” (Presidential Communications Office, 2022).

Creation of Independent Monitoring Body: P12, a female former print journalist who is engaged in policy/program reviews and research, said former media practitioners can help establish independent bodies to monitor and evaluate government transparency and accountability practices, given their experience. She proposed the creation of an independent panel, composed of former media practitioners, that will be tasked with keeping an eye on government agencies’ pro-transparency and accountability efforts. The panel will publish the findings and recommendations to foster public trust and to help improve the delivery of public services.

Grants for Investigative Journalism Projects: P12 likewise sought government grants for investigative journalism projects focused on government transparency and public service accountability. She said the government should explore on providing grants to the news media sector to promote transparency and accountability in the government.

DISCUSSION

This section discusses the essential core of the study’s evidence-based findings, informed conclusions and data-driven recommendations, effectively addressing the research problems raised in this study. Under this section, the researcher provides the synthesized insights or findings that form part of the conclusion. Furthermore, this chapter lays down the best possible recommendations, which include policy formulation and program development. These recommendations are based on the insights or findings culled from the study.

The study is summed and divided into seven segments: (1) Participants' Profile; (2) Political, economic, social, and personal reasons behind the migration of print, broadcast and multimedia journalists to the government service; (3) Roles of former media practitioners in their respective agencies; (4) Perceptions about public service delivery; (5) Contributions to public service delivery; (6) Suggestions to strengthen partnership to curb corruption, and promote transparency and accountability in the bureaucracy, and (7) Policies to be recommended for promotion of transparent and accountable public service delivery.

Based on the data presented in a tabular format, the findings or insights of the study were the following:

1. Profile of the Respondents

As to age. Data reveals that the participants are within the ages of 25 and 58 years old. Majority of them are 36 - 46 years old, and 47 - 57 years old, suggesting that the participants in the study are Millennials and Generation X.

As to gender. Data shows that women's all-out participation in the study is evident with eight female former media practitioners joining the study. However, it also showed that men were equally willing to participate in the study with seven of them participating in the study.

As to years of media experience. Most participants had extensive media experience ranging from 10 years to 20 years. Based on their media service in the private sector, the participants were categorized as follows: A. 5 years and below; B. 6-10 years; and C. 11-20 years in service or more. Based on this category, majority of the participants belong to Category B with a media experience ranging from six to 10 years.

As to media affiliations. Majority of the participants were print media journalists, with nine of them participating in the study. Former journalists from the broadcast companies and multimedia news platforms were also equally represented in this study, with the inclusion of three respondents belonging to each sector.

As to government-employer. Majority of the participants are working in agencies under the Executive branch of government. The second largest number of participants is logged in the Legislative.

As to government-positions. Majority of the participants are holding permanent and supervisory positions in the government.

2. Reasons behind the Migration of Print, Broadcast and Multimedia Journalists to the Government Service

A. Political. A relatively small number of participants mentioned political as a reason why they left their profession to enter the government service. The study cites four

major political reasons: political influence, political denial, media harassment, and biased and anti-workers' workplace policies. Of these, political influence emerges as the first political reason, followed by political denial, media harassment, and biased and anti-workers' workplace policies. The study finds that some former media practitioners entered the government service through political influence or their affiliation with the officials in the government. Given the participants' extensive media experience (ranging from seven to 20 years) and exposure to government dealings and processes, political leaders tapped their expertise to be of service to the government.

The study also bares the deliberate attempts to restrict press freedom and the public's rights of access to information by some political authorities and private companies as evident in the political denial of validated news stories, and media harassment through filing of libel cases. Amid threats of harassment, imprisonment, violence, or death, the press tradition of watchdog remains alive.

The study likewise shows that media repression is being perpetuated by the media owners themselves due to their purported vested interests. The supposed vested "political and economic interests" of the media owners who are from influential families, and conglomerates, caused repression within their organization.

B. Economic. Majority of the participants overwhelmingly responded that economic was the reason why they migrated to the government service, making it as the main reason behind the newsroom-to-government phenomenon.

The financial security in the public sector, financial insecurity in the media sector, and family needs were the key reasons behind their decision to leave their respective media companies.

The higher compensation in the government is identified as the top economic reason, followed by the security of tenure, and provisions of benefits

In terms of financial insecurity in the media sector, majority of the respondents identified the lack of benefits (such as overtime and hazard pay and night differential, retirement package, insurance, enough transportation allowance, and healthcare protection scholarships, and trainings), as their major reason for leaving their media companies. This is followed by low compensation and absence of clear tenure.

The study also shows that the participants' quests to start and raise a family, and find a viable and stable family income also become a major factor why they had to leave their media profession.

C. Social. Social was the second leading reason why participants changed their career path. Most participants cited social as their reason for quitting their jobs. This study shows that the working conditions in the media sector prodded them to work for the government. The irregular working hours, the unclear work delineation that resulted in intense workload, and the slow career progression are commonly identified as factors under the working conditions.

The study also finds that the workload in the media sector was more intense and heavier during the COVID-19 pandemic when media companies implemented work-from-home policies.

Next to working conditions, the participants identified their sense of mission, social influence and time with family as another major social reasons.

The study shows the changing media landscape in the country, particularly the influence of the digital technology and social media, and their impact to the news media sector. The dying print media is mentioned as another major reason why the participants changed their profession, given the declining public support for the print media due to the emergence of social media platforms.

Moreover, corruption in the media sector is likewise found as another major social reason. The participants cited that some of their colleagues succumbed to bribery because of low salaries and lack of benefits in the media sector.

It is also disclosed in this study that the work schedule in the government is more family-friendly than in the media sector.

D. Personal. After economic, personal was the third leading reason why media practitioners had to transfer to government service. The participants mentioned personal/professional growth as their first personal reason, followed by health and a change in environment.

This study found that job burnout was prominent during the COVID-19 pandemic.

2. Roles of Former Media Practitioners in their Respective Agencies

Most participants are involved in the delivery of public information services. Next to public information services, media and public relations becomes the second major role of the participants in their government agencies. Public and cultural diplomacy, program or project management and events management are found to be the third major role of the participants.

It is observed that the mandate of their respective agencies dictates the participants' roles in government service.

The participants working in Executive and Legislative agencies are into substantive policy work and in crisis communication/ management, while participants from Executive agencies are engaged in research and conducting studies.

The participants assumed varied roles in the government. These include administrative work, policy/program/project review, planning, and public concerns and response management.

3. Perceptions About Public Service Delivery

Majority of the participants believed that public servants should exemplify professionalism, competence, ethics, dedication and commitment to public trust when it comes to public service delivery; and that efficient, prompt, and all-out delivery of public service must be prioritized at all costs.

The participants' negative perception about the government changed or their initial view of government service was reinforced when they entered the government service. Their immersion in their respective agencies that are actively involved in public service delivery makes them realize that those in the government have been doing a lot in spirit of genuine service and for love of country.

The study shows that providing accurate, credible and precise information in an efficient, timely and professional manner is a form of public service delivery. The participants believe that a well-informed citizenry is instrumental to democratic governance and sustainable development.

The study also reveals that the continued quest for transparency and accountability in the delivery of public service remains, and that more work still needs to be done to enhance transparency and accountability in the bureaucracy.

4. Notion on the Capacity of Former Journalists to Contribute Skills and Expertise to Public Service Delivery

All the participants cast no doubts on the capacity of former journalists to contribute to public service delivery, particularly in the area of public information services. Their current roles in their respective agencies proved that they have something to contribute to the efficient, transparent, prompt, and accountable delivery of public service.

These former media-turned-government workers can be considered as government assets, considering their excellent communication skills, grit, hard work and extensive experiences in the field and their specialized trainings.

The presence of former media practitioners in some government agencies helps bring the government closer to people by reinforcing the principles of transparency and accountability through the delivery of credible, prompt and accurate public information services.

4.1 Contributions to Public Service Delivery

The former journalist-participants' actual contributions to public service delivery reflected on their commitment to effectively, efficiently, and faithfully carry out their roles in the government. Majority of the participants significantly contribute to the delivery of public information services.

The study shows that the participants occupy leadership positions and are tasked with ensuring the implementation of programs by their respective agencies. They are team leaders supervising staff that are involved in the program implementation.

The participants are also engaged in policy development and project proposal approval.

The study shows that as former members of the "fourth estate," the participants remain committed to carry over and keep the press' watchdog tradition – always being on a lookout to ensure the transparent and accountable delivery of public service. It is seen that former media practitioners in the government service are becoming agenda setters and watchdogs in their respective agencies with a battle cry and serious advocacy of pushing for transparency and accountability in public service delivery.

5. Suggestions to Strengthen Partnership to Curb Corruption, and Promote Transparency and Accountability in the Bureaucracy

The open access or the delivery of trusted and fact-based information emerges as the participants' leading suggestion to help strengthen their engagement with the government in terms of curbing corruption, and promoting transparency and accountability in the bureaucracy. Providing full information access to public, and the strict observance of government processes and procedures are essential to the promotion of transparency and accountability in the bureaucracy.

The sense of values in terms of untainted integrity, and credible reputation; and commitment to public trust; and the implementation of transparency mechanisms/initiatives are also proposed.

Moreover, the creation of open data platforms; the establishment of public reporting systems that allow citizens to access information about the government operations, and spending; and hiring of former media practitioners as consultants, and media training/immersion are suggested.

6. Policies to be Recommended for Promotion of Transparent and Accountable Public Service Delivery.

The study shows that first two policies proposed by the participants are: Accelerating Communications' Level in Government Agencies; and the Strengthening of the FOI.

Most participants believe that level of communications in government agencies must be accelerated through the use of digital technology, and that the institutionalization of regular conduct of press conferences and media briefings in all government agencies may be considered. The participants agreed that the FOI must be strengthened to fully enhance public information delivery, and promote the culture of transparency and accountability in the country.

Next to these proposals is the hiring of media professionals in government, given that these practitioners can significantly contribute to government's transparency and accountability bid due to their skill set, exposure and trainings.

Amid the fast-paced digital technology, the continued skills upgrading for government communicators for them to effectively communicate policies, and programs in the public sector is also pushed.

The creation of fora where government communicators can share best practices in communicating government policies and programs is also stressed to help ensure synchronized communications plans of all agencies and institutions in the public sector.

The participants also cited that the promotion of transparency and accountability in the government does not only rest on the shoulders of the former media practitioners and media sector, but to all Filipinos.

Other recommendations include the media involvement in the government process, such as policymaking, evaluation and monitoring of best practices, and social media regulation. The creation of an independent body, composed of former media practitioners, that will keenly monitor government agencies' pro-transparency and accountability efforts is recommended. The government's provision of grants for investigative journalism projects is also encouraged.

Conclusions

The following key points are presented based on the findings of this study:

1. The participants of the study are mostly female and print journalists, and are Millennials and Generation X with an extensive media experience of 10 to 20 years, and are now predominantly working in agencies under Executive branch of government holding permanent and supervisory positions.

2. The participants left their media profession mainly due to economic reasons, and that higher compensation, security of tenure, and proper provision of benefits in the government attracted them to join the government service.

The lack of benefits in the media sector (such as overtime and hazard pay and night differential, retirement package, insurance, enough transportation allowance, and healthcare protection scholarships, and trainings), is identified as major reason behind their migration to government. This is followed by low compensation and absence of clear tenure.

3. The study articulates that those former media practitioners who are currently working in government are very much involved in the delivery of public information services as public communicators for the policies and programs being implemented by agencies under the Executive and Legislative branches of government.

It is also concluded that the mandate of the agency-employers influenced the participants' roles in government service.

4. The participants' negative perception about the government changed or their initial view of government service was reinforced when they entered and immersed themselves in the government service, particularly in the delivery of public services.

The participants make sure they exemplify professionalism, competence, ethics, dedication and commitment to public trust when fulfilling their roles.

The study highlights that providing accurate, credible and precise information in an efficient, timely and professional manner is a form of public service delivery that must be prioritized.

Moreover, it is acknowledged that the continued quest for transparency and accountability in the delivery of public service remains, and that more work still needs to be done to enhance transparency and accountability in the bureaucracy.

5. It is concluded that the expertise and skills set of former journalists can be of significant help to ensure efficient, transparent, prompt, and accountable delivery of public service delivery, particularly in the area of public information services. The participants are government assets that should be fully tapped to reinforce the principles of transparency and accountability, and bring the government closer to people through the delivery of credible, prompt and accurate public information services.

Furthermore, it is affirmed that the participants significantly contribute to the delivery of public information services as government communicators, and as lead persons in the implementation of some government programs.

The participants' leadership positions and their crucial duties and roles in ensuring the implementation of programs by their respective agencies, and their involvement in policy development and project proposal approval showed they have major influence on the delivery of government services, while keeping the fourth estate's watchdog tradition to ensure the transparent and accountable delivery of public service.

6. The study highlights that providing full information access to public, and the strict observance of government processes and procedures are essential to the promotion of transparency and accountability in the bureaucracy.

The former practitioners' sense of values in terms of untainted integrity, and credible reputation; and commitment to public trust should be instilled and that transparency mechanisms/initiatives such as the creation of open data platforms, the establishment of public reporting systems that allow citizens to access information about the government operations, and spending should be pursued.

7. The study underscores the pressing need to accelerate the level of communications in government agencies through the use of digital technology; and to institutionalize the regular conduct of press conferences and media briefings in all

government agencies. The strengthening of FOI to fully enhance public information delivery and promote the culture of transparency and accountability in the country is highlighted.

The hiring of media professionals in government, the continued skills upgrading for government communicators for them to effectively communicate policies, and programs, and creation of fora where government communicators can share best practices in communicating government policies and programs are pressed on.

It is also stressed that the promotion of transparency and accountability in the government does not only rest on the shoulders of the former media practitioners and media sector, but to all Filipinos.

Recommendations

Based on the findings of the study and in light of conclusions drawn, the following significant points are recommended:

1. Consider mapping out the total number of Filipino journalists and former media practitioners in the country. A data repository is warranted as there is no available, and official data yet on the total number of journalists from the private sector who entered the government service, the data on the total number of Filipino journalists who lost their jobs or resigned during the pandemic, and who entered the government service.

2. Consider pushing for reforms enhancing media workers' welfare to foster a healthy media environment. This includes the Congress' revival of the proposed Media Workers' Welfare Act that was passed on third and final reading by the House of Representatives in 2022.

3. Reinforce former media practitioners' contributions to public service delivery by not stereotyping them as communication or media relations officers, but giving them opportunities to assume other key roles related to substantive policy work or policy-making and to be involved in the government processes such as evaluation, review, and approval of government's plans, programs, and projects.

4. Intensify public information campaign on what the government is doing for the people; all agencies are encouraged to aggressively pursue an information campaign to change the bad perception against the government.

Seriously instill professionalism, competence, ethics, dedication and commitment to public trust among public sector workers. Republic Act No. 6713 or the "Code of Conduct and Ethical Standards for Public Officials and Employees" should serve as the bible of all public servants to promote a high standard of ethics in public service. The Code declares that public officials and employees "shall discharge their duties with utmost responsibility, integrity, competence, and loyalty; act with patriotism and justice; lead modest lives; and uphold public interest over personal interest." Public servants must be fully committed to uphold the time-honoured principle of public office being a public trust.

The Public Information Offices (PIOs) of all government agencies and institutions are likewise prodded to exhaust all means to provide accurate, credible and precise information in an efficient, timely and professional manner.

Furthermore, since continued quest for transparency and accountability in the delivery of public service remains, the creation an independent body, composed of former media practitioners, that will keenly monitor government agencies' pro-transparency and accountability efforts may be considered.

5. Consider tapping former journalists who are in the government service or current veteran journalists to conduct trainings and seminars among PIO staff and journalists covering government agencies and institutions as their beat assignments, and consider providing them honorarium or incentives.

Encourage media consultations or consider involving media or former media practitioners working in the government in the government process, such as in policymaking, and in the evaluation and approval of government projects.

Noting that former media practitioners have major influence on the delivery of government services, reinforcing their contributions by opening up opportunities for leadership roles, such as managerial or supervisory posts may be considered.

6. Prod all PIOs of all government agencies to ensure that their official websites fully conform to full transparency, and pattern it after the websites of the Commission on Audit (COA), Sandiganbayan, and the Supreme Court (SC). Since providing full information access to public is important, and that the strict observance of government processes and procedures are essential to the promotion of transparency and accountability in the bureaucracy, such recommendation is strongly recommended.

The sense of values in terms of untainted integrity, and credible reputation; and commitment to public trust should be instilled to all government communicators.

Transparency mechanisms/initiatives such as the institutionalizing the creation of open data platforms among state agencies and institutions; and the establishment of public reporting systems that allow citizens to access information about the government operations, and spending are encouraged.

7. Accelerate communications' level in government agencies. In pursuing this recommendation, the use of digital technology and infrastructure should be seriously considered.

Consider institutionalizing the regular conduct of press conferences and media briefings in all government agencies. This provides avenue for the government agencies to update the public about their plans, programs, and projects and other initiatives, as well answer the pressing concerns and issues hounding their agencies. This will help improve

media and public access to crucial public data and information towards well-informed citizenry.

Drum up campaign support for the strengthening of Freedom of Information (FOI) to convince President Marcos Jr. to sign a written order or an executive order directing government institutions to deepen their commitment to FOI principles. This will help ensure an increased approval of FOI requests made by the public in a bid to fully enhance public information delivery and promote the culture of transparency and accountability in the country

Consider the regularization of experienced media practitioners who are holding coterminous positions, and are hired under the Job Order and Contract of Service status with their extensive media experience as a major factor of providing plantilla positions for them.

Prioritize skills upgrading and conduct trainings among the PIO officers and staff members, and journalists who cover the departments/agencies. There should be continued skills upgrading for public sector communicators for them to effectively communicate government policies, and programs and projects. Also, those reporters who are assigned to cover agencies are encouraged to undergo trainings and seminar to familiarize themselves with the agencies they cover and effectively report on their mandates, programs and projects.

Since this study stressed that the promotion of transparency and accountability in the government does not only rest on the shoulders of the former media practitioners and media sector, but to all Filipinos, all stakeholders, both the public and private sectors are encouraged to work hand-in-hand to enhance transparency and accountability in the bureaucracy.

Also consider the proposed Program on Strengthening the PIOs in Government Agencies created by the researcher based on the findings and insights and conclusions of this study. Amid the changing media landscape and the battle cry to promote transparency and accountability in the government through the provision of public information services, the implementation of the proposed program seeks to enhance the capacity of units or offices serving as information and communications arms of the public sector in delivering the much-needed data and information to the public, and in communicating government policies, programs, and projects and other initiatives. The program also intends to address the gaps and kinks in the delivery of public information services in the public sector.

Compliance with Ethical Standards

The researcher ensured the integrity of research undertaking by strictly following ethical and professional standards set by the Graduate School. Protecting the privacy and dignity of participants was a priority, while ensuring the conduct of the research was

within the framework of ethical considerations: confidentiality, consent, and respect for the participants were adhered to.

The researcher formally sought a written or verbal permission from the participants before conducting the Zoom-aided interviews. Three (3) respondents managed to sign the Consent Certificate, while the rest opted to signify their voluntary participation by responding affirmatively to the e-mailed letter request, and by saying "Yes" before the start of the Zoom-recorded interview.

The purpose of the study has been explained to the respondents in various communication channels. Before conducting the interview, the researcher made sure that the respondents positively responded and voluntarily gave their consent to be part of the study. The researcher likewise assured the participants that confidentiality, privacy, and anonymity were strictly observed, and that Zoom recordings both audio and video, and all data and information collected were solely used for the research analysis, and scholarly pursuits.

The participants were given the leeway, time, and avenue to express their views and opinions freely. The researcher upheld the highest ethical standards without compromising the validity and reliability of the study's findings.

The participants' statements were treated with utmost confidentiality and anonymity through the use of coded aliases during the data analysis.

The participants' names, media organizations, government agency-employers and current specific positions were not disclosed and were kept confidential. The 15 respondents were given aliases (P1 to P15).

Acknowledgments

As French bishop Jean-Baptiste Massieu said that "gratitude is the memory of the heart," this researcher expresses her deepest gratitude to those who have shared their time, resources, and wisdom in helping her complete this study.

Hats off to her dear research adviser, Dr. Ernest R. Vera Cruz for sharing his expertise, and for his constant guidance, encouragement, and never-ending support throughout this research endeavor – from its conception to its birth. His brilliance and passion as academician propelled this researcher to attain greater heights of academic learning;

This researcher is filled with so much gratefulness for the positive criticisms and enlightening inputs made by their father in Graduate School, Dr. Ulysses A. Brito, and the esteemed members of the Research Panel that include her former professor and mentor, Dr. Sarlito S. Ferraren, and newfound guru, Dr. Ely Lumbao.

Their profound insights and professional guidance inspired this researcher to further polish her work until it successfully achieved its completion. Their expertise contributed immensely to the improvement of her thesis, a significant key and the reason behind why she is proud of her academic work.

This researcher profoundly thanks her superiors, and colleagues in the Information and Research Service (IRS) of the Commission on Appointments for their unwavering support, guidance, and inspiration. Special thanks to the head of her IRS Family, Director Raymund A. Alzaga for his guidance, and financial and moral support.

Likewise, sincere appreciation is extended to her direct supervisor, Dr. Ernest R. Vera Cruz for the consideration and leeway extended to her while doing her research work.

Moreover, this researcher cannot not mention the bliss of having the all-out backing and guidance of their Deputy Secretary for Investigation and Appointments Review Arturo C. Paras.

To her lifesavers, Ms. Josephine S. Capoquian, Gina Eufracia R. Villegas, Lianel E. Hernaez, Roy S. Maceda, Arlene M. Dandoy, Ma. Rosalina G. Gonzales, Pamela P. Sebastian, and Andres Santos, your assistance is sincerely appreciated;

Thanks a ton, to her friend, Ms. Ellalyn de Vera-Ruiz, and content validators, namely Dr. Sigfredo G. Dimalanta, Ms. Framelia V. Anonas, and Ms. Lira D. Fernandez for their professional support; and to her cousin, Mr. John Jomwel T. Matutina for his technical support;

To her former colleagues and friends in the media industry, and former news sources who did not think twice about their participation in her study, accept her endless gratitude;

This researcher is forever indebted to her loving parents retired Police Captain Conrado and Mrs. Stella Luci, and brothers Police Lieutenant Colonel Christian and Police Chief Master Sergeant Christopher and their families, and her in-laws for being her fortress and source of strength and inspiration. They were behind her back as she navigated and surpassed the travails of not only academic, but personal life.

This researcher cannot thank enough her good and loving husband, Mr. Bonn Relly S. Atienza for his all-out and loving support, for always being there for her through all the ups and downs, and for bringing out the best in her. His infinite love, unending patience, and constant faith in her whisked away all the doubts and fears of this researcher, making her a bolder and braver academic warrior. To her sunshine and rainbow, her daughter Hesed Maria Mikhael whose power kisses and hugs always make her wonderfully happy and eternally loved! To her angel babies up there in heaven, Jose Miguel and Ave Gael, both of them will always be a part of her. Her family has inspired her to become more committed to this pertinent research endeavor.

For all the sweet and uneasy graces, for everything, this researcher praises and thanks the Lord! All the honor, glory, and praises are His!

C.M.L.A.

REFERENCES

Adu, Philip. (2021). Conference Paper: Qualitative Data Coding. 8th International Eurasian Educational Research Congress. ResearchGate.net.

Civil Service Commission (2023). Inventory of Government Human Resources (IGHR) Career and Non-Career Report (as of 30 June 2023). Integrated Records Management Office, p. 1

Civil Service Commission (2023). Inventory of Government Human Resources (IGHR) Job-Order and Contract of Service Data (As of 30 June 2023). Integrated Records Management Office.

Center for Media Freedom and Responsibility (2024). State of Media Freedom in the Philippines 2024. May 3, 2024. Report presented during the "1st Philippine Media Safety Summit: Surviving Pandemics and Other Provocations by Challenging Current Paradigms" on May 2, 2024 at the Luxent Hotel in Quezon City in observance of the 31st World Press Freedom Day.

Center for Media Freedom and Responsibility (2024). State of Media Freedom in the Philippines 2024. Philippine Center for Investigative Journalism website (PCIJ.org) May 3, https://pcij.org/2024/05/03/state-media-freedom-philippines-2024-cmfr/

Cordero, Ted (2024). CNN Philippines still shutting down. GMA News Online. January 27, 2024 Issue.

Gonzales, Gelo (2024) FAST FACTS: The media industry's struggles amid CNN Philippines' closure. Rappler 29 January 2024 Issue.

Gutierrez, Jason (2020) Philippine Congress Officially Shuts Down Leading Broadcaster. The New York Times. July 10, 2020 Issue.

Herman, Asriadi, & Rahman, Abdul & Mardi (2023). Functions and Roles of Journalists in Supporting Communication between Government and Society in Bone Regency. Jurnal Administrare: Jurnal Pemikiran Ilmiah dan Pendidikan Administrasi Perkantoran. Volume 10, Issue 2, July-December 2023. pp. 295-302

Holliday, Darryl (2021). Journalism is a public good. Let the public make it. Columbia Journalism Review, December 15, 2021. https://www.cjr.org/special_report/journalism-power-public-good-community-infrastructure.php.

Locus, Sunday (2023). Marcos: Gov't to keep upholding press freedom, media rights and safety. GMA News Online, April 27, 2023 Issue.

National Union of Journalists of the Philippines (2023). Solidarity on Labor Day: Media Workers Are Workers Too. May 1, 2023 Statement. Retrieved from https://nujp.org/solidarity-on-labor-day-media-workers-are-workers-too/

Nuval, Valerie Joyce (2024). Media Ownership monitoring informs citizens on 'media mogulry' and its many layers. Vera Files, May 15, 2024 Issue.

Philippine Daily Inquirer (2023). Editorial: Strengthening FOI. January 11, 2023 Issue. https://opinion.inquirer.net/160229/strengthening-foi

Posetti, Julie; Bell, Emily; and Brown, Pete (2020) Journalism & The Pandemic: A Global Snapshot of Impacts. International Center for Journalists (ICFJ) and the Tow Center for Digital Journalism, Columbia University.

Presidential Communications Office (2022). PBBM urges media to help effectively communicate gov't efforts; cites role of press in social dev't. Statement issued on October 5, 2022.

Reporters sans frontiers or RSF (2024) Global Analysis. 2024 World Press Freedom Index – journalism under political pressure. https://rsf.org/en/2024-world-press-freedom-index-journalism-under-political=pressure?year=2024&data_type=general.

Reporters sans frontières or RSF (2024). Country Report, 2024 World Press Freedom Index. https://rsf.org/en/country/philippines

Reuters Institute for the Study of Journalism (2023) 2023 Digital News Report Philippines. pp. 138-139 https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2023-06/Digital_News_Report_2023.pdf

Rita, Joviland (2024). HRW: PH needs to do more to protect journalists. GMA Integrated News, May 8, 2024 Issue.

Ruslin, Ruslin & Mashuri, Saepudin & Sarib, Muhammad & Alhabsyi, Firdiansyah & Syam, Hijrah. (2022). Semi-structured Interview: A Methodological Reflection on the Development of a Qualitative Research Instrument in Educational Studies Ruslin. Vol. 12. 22-29. 10.9790/7388-1201052229.

United Nations Educational, Scientific and Cultural Organization (2021). Windhoek+30 Declaration: Information As a Public Good. UNESCO World Press Freedom Day Global Conference (29 April-3 May 2021). Windhoek, Namibia. UNESDOC Digital Library. CI-FEJ/WPFD/2021/1. https://unesdoc.unesco.org/ark:/48223/pf0000378158

United Nations Educational, Scientific and Cultural Organization (2021). Journalism Is a Public Good: World Trends in Freedom of Expression and Media Development, Global Report 2021/2022. Paris: UNESCO.https://unesdoc.unesco.org/ark:/48223/pf0000380618?2=null&queryId=0a30ee11-7640-48c0-b1c3-8d7e1e5dc867

Vera Files (2023). Print media: Readership on the decline. Media Ownership Monitor Philippines 2023. https://philippines.mom-gmr.org/en/media/print/ (accessed: 06/01/2024)

Wertz, Frederick & Bach, Lee & Blau, Diane & Churchill, Scott & Davidson, Larry & Kamens, Sarah & Mcmullen, Linda & Osbeck, Lisa & Roald, Tone & Watkins, Mary. (2021). Phenomenological Methodology, Methods, and Procedures for Research in Psychology 1. 10.1037/0000319-005. ResearchGate.net.

Westberg, Peter (2024). The Rise of Google, Meta, Amazon, and Youtube in Advertising. Quatr.com, March 1, 2024. https://quartr.com/insights/company-research/the-rise-of-google-meta-amazon-and-youtube-in-advertising

APA Citation:

Luci-Atienza, C. (2024). NEWSROOM TO GOVERNMENT: THE CONTRIBUTIONS OF FORMER MEDIA PRACTITIONERS TO PUBLIC SERVICE DELIVERY TOWARDS THE ENHANCEMENT OF TRANSPARENCY AND ACCOUNTABILITY IN THE BUREAUCRACY. Ignatian International Journal for Multidisciplinary Research, 2(8), 1444–1545. https://doi.org/10.5281/zenodo.13371391

charissaluci@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

PAGSUSURI SA KATEGORYA, KAMALIAN, AT DANAS SA PAGSASALIN MULA SA PILING MAG-AARAL NG SAN NICOLAS NATIONAL HIGH SCHOOL

Necel V. Cagampan
Freddielyn B. Pontemayor, Ph.D.

Language Education Department, Central Mindanao University, Musuan, Maramag Bukidnon, Philippines

https://doi.org/10.5281/zenodo.13572113

ABSTRAK

Nakatuon ang pananaliksik sa pagsusuri sa kategorya, kamalian, at danas sa pagsasalin ng mga piling mag-aaral ng San Nicolas National High School sa Don Carlos, Bukidnon. Ginamit ang pinaghalong deskriptibo-kwalitatibo at kwantitatibong metodo sa pananaliksik na ito. Upang mas lalong maging kapaki-pakinabang at balido ang mga datos ginamit ang Translation Error Analysis (EA) at sinuportahan ng interbyu para masuri ang naging danas sa pagsasalin ng mga piling mag-aaral. Batay sa resulta ng pag-aaral, natuklasan na ang sumusunod ay mga kategorya ng pagsasalin: karaniwang pagsasalin ng salita, pagsasaling idyomatiko, pagsasaling teknikal at pang-agham, at pangmidya. Batay naman sa danas ng pagsasalin, natuklasan din na may mga terminong hindi pamilyar, baryasyon ng wika, at ang pinag-ugatan ng termino, kay narito ang sampung danas ng mag-aaral: (a) Maraming salita na puwedeng itumbas o mga kaugnayang salita sa Filipino ngunit hindi iyon ang tumpak na sagot; (b) Hindi agad nakuha ang ibig sabihin ng salin; (c) Mas madali isalin ang Filipino patungong Ingles; (d) Maraming katumbas o pagpapakahulugan ang salita sa Filipino; (e) Nalilito kung paano ang tamang pagpapakahulugan ng salita/parirala; (f) May mga salita na bago pa sa pandinig; (g) Malalim ang pagpapakahulugan ng mga salita o malalim ang termino; (h) Mas sanay gumamit ng mga terminong Ingles kaysa sa Filipino; (i) May mga termino sa social media hindi masyadong pamilyar; at (j) Walang exact term o eksaktong termino ang ginagamit sa social media.

Mga Termino: *Translation Error Analysis, kategorya, karaniwang pagsasalin, teknikal, idyomatiko, ekspresyon sa social media, danas*

INTRODUKSYON:

Nitong huling dekada 70, nabuhay ang terminong Translation Studies bilang diskurso sa akademikong larang. Naging mas popular ang termino lalo na sa panitikan at ang konsepto ukol sa “translatable” at “equivalence” kapag binibigyang-empasis ang penomenang linggwistik at kultural (Bassnett, 2002). Hindi matatawaran ang naging ambag nina Susan Bassnett at Andre Levefere sa larang ng pagsasalin lalo na kontekstong kultural. Dagdag pa, naka-depende pa rin sa orihinal ang nabuong salin ng tagasalin bagkus sisikapin ng tagasalin na sa pagbuo ng salin maipaparating niya ang kahulugang konstraksyon at kultura para makamit ang layunin maipahatid ang kahulugan at makapag-interak ang ibang kultura (Bassnett, 2002).

Hindi nagtagal, naging propesyon o trabaho na rin ng ilang edukador ang pagsasalin. Hindi man nabibigyan ng kaukulang pansin ang trabaho ng isang tagasalin dahil para sa karamihan nakakulong siya sa orihinal na akda ng awtor ngunit nakasalalay pa rin sa kamay ng tagasalin para maisalin niya ang mga akda o kagamitan na ginagamit ng mga studyante na nangangailangang isalin upang matugunan ang kalubusan ng pagkatuto lalo sa pagdebelop ng ispesipikong kasanayan.

Bunsod nito, naglipana na ang mga babasahin at panooring isinalin sa iba’t ibang wika, hindi rin maiwawaksi ang pagsasalin mula sa ibang wika tungo sa wikang Filipino sa larang ng edukasyon. Resulta nito dumagsa na rin ang popularidad ng social media na naging bahagi na rin ng ordinaryong ekspresyon ng mga indibidwal lalo na sa kabataang lubos na nagtataguyod at dinamikong nagpapalago ng wika.

Subalit, bumulagta ang balitang ipinalabas ng The New York Times ukol sa komento ni Antonio Calipjo Go, supervisor ng Marian School ng Quezon City ukol sa kampanya sa “bad textbook in English.” Nakakaalarma ang sitwasyong ito dahil batay sa naging ebalwasyon, hindi lamang ang aklat sa Ingles ang hindi wasto ang pagkakasalin kundi maging sa wikang Filipino. Batay sa tantiya ni Go, tinatayang nasa mahigit 75% ng lahat ng mga aklat sa elementaryang publikong paaralan na naglalaman ng kamalian. Dahil dito, isang panawagan sa DepEd na anumang maling impormasyong isinusubo sa elementarya, posibleng magkakaroon ng epektong domino sa hayskul maging sa kolehiyo. Samakatuwid, ang implementasyon ng MTB-MLE at K to 12 ay nakatulong sa maraming eskwelahan lalo na ang pagkakaroon ng mga aklat na naisalin sa target na wika ngunit isa pa ring malaking katanungan, pulido o masusi bang naisalin ang mga teksbuk na ito?

Sa ngayon, ang Pilipinas ay kabilang sa mga bansang labis ang pagyakap sa larang ng pagsasalin. Bukod sa pagiging multilingguwalismong estado ng bansa, ang mga babasahin, teorya o konseptong ginagamit sa mga aklat, nakabatay pa rin sa dayuhang wika. Kaya, malaking ambag ang gawang salin upang mas maihatid ng guro ang konsepto nang wasto. May ilang Pilipinong pag-aaral na rin ang nagsagawa ng pag-aaral ukol sa pagsasalin ng mga akdang teknikal, pang-agham, at pampanitikan sa iba’t ibang lente. Dapatwat, sa papel na ito, binigyang-empasis ng mananaliksik ang

pagsasalin sa mga termino na hango sa isang aklat sa pagsasalin sa Filipino na ginagamit ng mga estudyante ng San Nicolas National High School, San Nicolas, Don Carlos Bukidnon.

Paglalahad ng Sulirani:

Ano-ano ang kategorya, kamalian, at danas sa pagsasalin ng mga piling mag-aaral ng Grade 10, Seksyon Narra ng San Nicolas National High School, San Nicolas, Don Carlos, Bukidnon?

Mga Tiyak na Suliranin ng Pag-aaral:

1. Ano-anong kategorya ng pagsasalin sa hanguang aklat sa Filipino ng mga piling mag-aaral ng Grade 10, Seksyon Narra ng San Nicolas National High School?
2. Ano-anong salita/parirala ng bawat kategorya ang kadalasang pinagkakamali ng mga piling mag-aaral ng Grade 10, Seksyon Narra ng San Nicolas National High School?
3. Ano-ano ang naging danas sa pagsasalin ng mga piling mag-aaral ng Grade 10, Seksyon Narra ng San Nicolas National High School?

METODOLOHIYA

Ginamit ang pinaghalong deskriptibo-kwalitatibo at kwantitatibong metodo sa pananaliksik na ito.

Translation Errors Analysis ang espesipikong lente sa pagsusuri ng mga datos batay sa ginawang pagta-tally at paglalatag ng talahanayan ng mga tugon ng kalahok. Nagsagawa rin ng interbyu ang mananaliksik para maisalaysay ng mga kalahok ang kanilang naging danas ukol sa pagsasalin. Ideyal din sa isang pananaliksik ang isang buong seksyon o klase. Ibig sabihin, pokus nito ang Grade 10 ng Seksyon Narra sa ilalim nang pamamatnubay ng mananaliksik. Upang mas lalong maging kapaki-pakinabang at balido ang mga datos, ginamit ang error analysis at sinuportahan ng interbyu para mas maging malinaw ang naging resulta. Lahat ng mga mag-aaral sa seksyong ito ay kumukuha ng Filipino. Ibinatay sa convenience at purposive sampling ang pagpili ng mga kalahok.

Saklaw at Delimitasyon ng Pag-aaral

Saklaw ng pag-aaral ang kategorya, salita/parirala na kadalasang pinagkakamali sa pagsasalin ng mga piling mag-aaral ng San Nicolas National High School, San Nicolas, Don Carlos, Bukidnon. Nasa pamamatnubay ng mananaliksik ang nasabing seksyong napili. Saklaw din ng pag-aaral ang mga gawaing inihanda ng guro sa pagsasalin (karaniwang salita, teknikal, pang-agham, idyomatiko, at ekspresyon sa social media). Hindi saklaw ang mga gawain ukol sa pangungusap at talata at iba pang diskursong pangwika at genreng pampanitikan. Nakapokus lamang ang pag-aaral sa simpleng kasanayan sa pagsasalin batay sa aklat na ginagamit at inihanda ng guro upang maabot ang mga layunin ng pag-aaral.

Hindi na saklaw ng pag-aaral ang ibang seksyon ng SNNHS gayundin ang ilang mag-aaral ng nasabing eskwelahan.

RESULTA AT DISKUSYON

Upang matugunan ang mga tanong sa pananaliksik na ito, tatalakayin sa kabanatang ito ang bawat kategorya, kamalian, at danas sa pagsasalin.

Kategorya at Pagkakamali sa Pagsasalin

Upang sagutin ang una at pangalawang suliranin ng pag-aaral kung ano-anong kategorya ng pagsasalin sa isa sa mga hanguang aklat sa Filipino at salita/parirala ng bawat kategorya ang kadalasang pinagkakamali ng mga piling mag-aaral ng Grade 10, Seksyon Narra ng San Nicolas National High, batay sa aklat na ginagamit ng guro at ng mga mag-aaral pati na rin ang mga natuklasan ng pag-aaral, natuklasan na ang sumusunod ay mga kategorya ng pagsasalin: karaniwang pagsasalin ng salita, pagsasaling idyomatiko, pagsasaling teknikal at pang-agham, at pangmidya. Ang kasunod na bahagi ay detalyadong presentasyon ng bawat kategorya at kadalasang pinagkakamali sa pagsasalin:

<u>Karaniwang Pagsasalin ng Salita</u>

Matutunghayan sa kasunod na talata ang naging tugon ng bawat estudyante ukol sa karaniwang pagsasalin ng mga salita mula sa wikang Ingles patungong Filipino.

Batay sa naging presentasyon at analisis ng mga datos, ang salitang Ingles na *administration*, kapansin-pansin na kahalati sa populasyon o nasa 23 mag-aaral ang nakakakuha ng wastong salin na “pamamahala.” Samantala, 22 naman ang mayroong saling “administrasyon,” na batay sa modyul na sinusunod ng maraming eskwelahan sa buong Pilipinas ang unang saling nabanggit “pamamahala” ang wastong sagot.

Ikalawa ang salitang Ingles na *blank,* kapansin-pansin na mas Marami sa mga mag-aaral ang nakakuha ng tamang tugon sa populasyon, o 42 sa kanila ang nakakuha ng tamang salin. na “patlang.” Samantala tatlong mag-aaral naman ang mayroong salin na ‘blanko.”

Ikatlo, ang salitang Ingles na *clear*, makikita na lahat ng mag-aaral sa populasyon ang nakakuha ng wastong salin na “malinaw.”

Ikaapat, ang salitang Ingles na *complete*, kapansin-pansin na mayroong 28 mag-aaral ang nakakuha ng wastong pagsasalin na “buo” at mayroong namang labing 17 mag-aaral ang nagsalin ng salitang “kompleto” na ayon sa alituntunin “buo” ang wastong salin nito.

Ikalima, ang Ingles na *decision*, kapansin-pansin na mayroong 43 na mga mag-aaral ay nakatanggap ng tamang salin. na “pasya” samantala mayroon namang dalawang (2) mag-aaral ang sumagot ng pagsasalin na “desisyon.”

Ikaanim, ang salitang Ingles na *election*, kapansin-pansin na mayroong 19 na mag-aaral ang nakakuha ng wastong salin na “halalan” at mayroon namang 25 mag-aaral ang nagsalin ng “eleksiyon” na batay sa modyul, “halalan” ang wastong salin.

Ikapito, ang salitang Ingles na *ignorant*, kapansin-pansin na mayroong 44 na mag-aaral na nagsalin ng “mangmang” at mayroon lamang isang mag-aaral ang nagsalin ng salitang “ignorante.” Batay sa modyul “mangmang” ang wastong salin ng salita.

Ikawalo, ang Ingles na *list*, kapansin-pansin na mayroong 28 mag-aaral ang nagsalin ng “tala” at mayroon 17 mag-aaral ang nagsalin ng “listahan” na batay sa modyul na sinusunod ang salitang “tala” ang tamang sagot sa pagsasalin.

Ikasiyam, ang Ingles na *reality,* kapansin-pansin na mayroong 41 mag-aaral ang nakatanggap ng wastong salin na “ katunayan.” Samantala, mayroon namang apat na mag-aaral ang nagsalin ng salitang “totoo,” na batay sa modyul “katunayan” ang wastong sagot sa pagsasalin.

Ikasampu, ang Ingles na *visitor*, kapansin-pansin na mayroong 20 mag-aaral ang sumagot ng “panauhin” at mayroon namang 25 mag-aaral ang nagsalin ng “bisita,” Batay sa modyul na sinusunod “panauhin” ang wastong sagot.

Sa kabuuan, batay sa karaniwang pag-sasalin, kapansin-pansin na mayroon lamang dalawang estudyante ang nakatanggap ng sampung puntos o nakapagsalin sa lahat ng mga salitang isinalin sa wikang Filipino. Samanatala, namang walong mag-aaral ang nakakuha ng siyam na puntos mula sa pagsasalin, at mayroong 14 naman na mag-aaral ang nakakuha ng walong puntos. Makikita sa survey na mayroon 12 mag-aaral ang nakatanggap ng pitong puntos, walong mag-aaral ang nakakuha ng anim na puntos at isang mag-aaral ang nakakuha ng limang puntos. Sa bahaging ito, matutunghayan, karamihan sa naging kalahok nakapagsalin ng tama sa wikang Filipino.

Kung susumahin ang mga naging sagot ng lahat ng mga mag-aaral, kapansin-pansin na batay sa mga salitang lahok, nangunguna ang Ingles na *election* na may pinakakaunting nakakuha ng wastong sagot. 17 lamang ang nakakuha ng wastong salin na “halalan” dahil 28 naman eleksyon ang napiling sagot. Pangalawa, ang Ingles na *visitor*, 20 mag-aaral lamang ang nakakuha ng wastong sagot na “panauhin,” dahil 25 sa kanila na may maling sagot dahil mas pinili nila ang saling “bisita.” Panghuli, ang Ingles na *administration*, 23 mag-aaral lamang ang nakakuha ng wastong sagot na “pamamahala,” 22 ang may maling sagot na “administrasyon.” Sa kasong ito, hati ang mag-aaral sa kung paano ang wastong pagbabaybay at pagsasalin. Sa karaniwang salitang lahok sa nasabing modyul, kung susuriing mabuti, wasto ang saling “eleksyon, bisita, at administrasyon,” batay na rin sa sistema ng pagbaybay na ipinanukala ng KWF 2011 (kung ano ang basa sa Ingles, siya ring sulat ngunit ibaybay lamang sa Filipino) hanggang kasalukuyan (Panitikan ng Daigdig X).

Pagsasaling Idyomatiko

Bukod sa pagiging palasak at bahagi ng diskurso ang mga pahayag idyomatiko sa usaping pagsasalin, ang kasunod na bahagi ay nagpapakita ng lebel ng pamilyaridad sa mga idyoma Ingles ang mga kalahok.

Matutunghayan sa ikalawang bahagi ng pagsasalin ang Idyomatikong Pagsasalin. Ang unang idyomang *bread and butter*, kapansin-pansin na mayroong 25 mag-aaral ang

nakakuha ng tamang pagsasalin na “trabaho o hanapbuhay”. Samantala, 20 namang mag-aaral ang sumagot ng “tinapay at mantikilya.” Batay sa modyul, *bread and butter* ang wastong salin.

Ikalawa, ang idyomang *to have a hand/voice*, kapansin-pansin na mayroong 25 mag-aaral ang sumagot ng “tumulong o pagpasya.” Samantala, mayroon namang 23 mag-aaral ang nagsalin ng “magkaroon ng kinalaman.” Batay sa modyul na sinusunod, “tumulong o pagpasya,” ang wastong sagot sa pagsasalin.

Ikatlo, ang idyomang *dressed to kill,* kapansin-pansin na lahat ng mag-aaral, 45 mag-aaral o ang buong populasyon ay nakakuha ng tamang pagsasalin na may katumbas na “bihis na bihis.” Batay sa modyul, “bihis na bihis,” ang wastong sagot.

Ikaapat, ang idyomang *to give hand,* kapansin-pansin na lahat ng mga estudyante o 45 mag-aaral ang nakapagsalin ng “tumulong.” Batay sa modyul, “tumulong,” ang wastong sagot sa nasabing idyoma.

Ikalima, idyomang *to go with*, kapansin-pansin na lahat pa rin ng mga mag-aaral o lahat ng populasyon na mayroong 45 mag-aaral ang nagsalin ng “sasama/kasama.” Batay sa modyul, “kasama/sasama,” ang wastong sagot.

Ikaanim, ang idyomang *to go on,* kapansin-pansin na mayroon 15 mag-aaral ang nakakuha ng wastong salin na “magpatuloy”. Samantala mayroong 30 namang mag-aaral ang may saling “pumunta” na batay sa modyul, “magpatuloy” ang wastong sagot.

Ikapito, ang idyomang *to have one’s handful*, kapansin-pansin na mayroong 42 mag-aaral ang nakakuha ng wastong salin na “karamay.” Samantala mayroong tatlong mag-aaral ang nagsalin ng “tumulong.”

Ikawalo, ang idyomang *to go after,* kapansin-pansin na mayroong 42 mag-aaral ang nakakuha ng wastong pagsasalin “sundan/sumunod.” Samantala, mayroong dalawang mag-aaral ang nagsalin ng “umiwas” at isang mag-aaral ang nagsalin ng “lumayo.” Batay sa modyul, “sundan/sumunod” ang wastong sagot.

Ikasiyam, ang idyomang *to go away*, kapansin-pansin na mayroong 43 mag-aaral ang nakatanggap ng wastong pagsasalin na “lumayo/umalis.” Samantala, mayroong dalawang mag-aaral ang nagsalin ng “ayaw sumama.” Batay sa modyul, “lumayo/umalis” ang wastong sagot sa pagsasalin.

Ikasampu, ang idyomang *to go against*, kapansin-pansin na mayroong apat lamang na mag-aaral ang nakapagsalin ng tamang pagsasalin na “sumalungat.” Samantala, mayroong 41 mag-aaral ang nagsalin na “ayaw sumama.” Batay sa modyul, “sumalungat” ang wastong sagot sa pagsasalin.

Sa kabuoan, kapansin-pansin na ang mga mag-aaral ay hindi pa ganap na nakakaalam sa pagsasaling idyoma. Makikita sa kabuoang iskor na walang nakakuha ng perpektong puntos. Mayroong limang estudyante ang nakakuha ng walong puntos, mayroon namang pito ang nakakuha ng limang puntos, mayroon namang labingwalong ang nakatanggap ng anim na puntos, mayroon ding 12 ang nakakuha ng limang puntos, at limang naman ang nakakuha ng apat na puntos. Makikita sa resulta ng kanilang pagsasalin na hindi naging madali sa kanila ang pagsasalin partikular na sa bahaging idyoma.

Kung susumahin ang mga naging tugon ng mga mag-aaral, kapansin-pansin na hindi naging madali sa mag-aaral ang pagsasaling idyoma mula sa Ingles patungong Filipino. Narito ang ilan sa nangungunang apat na idyomang nahirapan ang mag-aaral sa pagsasalin: Una, apat lamang sa mag-aaral ang nakakuha ng tamang sagot na

“sumalungat” sa idyomang *to go against* dahil 41 mag-aaral na mas pinili ang maling saling “ayaw sumama.” Pangalawa, mayroong 15 lang nakakuha ng wastong sagot na “magpatuloy” sa idyomang *to go on* dahil 30 ang nakakuha ng maling saling “pumunta.” Pangatlo at pang-apat, ang idyomang *bread and butter* na may katumbas sa Filipino na “trabaho” at *to have hand/voice* na may saling “tumulong o pagpasya,” parehong 25 mag-aaral ang nakatanggap ng wastong sagot dahil may 20 mali ang naging sagot.

Batay sa salitang lahok, kung susuriing mabuti kapag nagsasalin ng mga matalinhagang pahayag o idyoma, kinakailangang isaalang-alang ang mga limitasyon gaya ng diwa o konstektong nilalaman ng pahayag, ang gramatika ng dalawang wikang sangkot at ang mismong kawikaan o idyoma. Bukod dito, kinakailangan ding ikonsidera and diwa sa payak na kahulugan kung hindi nagiging kumplikado ang magiging resulta ng pagsasalin.

Pagsasaling Teknikal at Pang-agham

Matutunghayan sa ikatlong bahagi ang pagsasaling teknikal at pang-angham. Ang simbolong *Fe (iron),* kapansin-pansin na halos lahat ng mga mag-aaral ang nakatanggap ng wastong salin na “bakal” o 44 sa mga mag-aaral samantalang mayroon lamang isangmag-aaral ang hindi nakapagsalin ng tama na sumagot ng (metal). Patunay lamang sa unang bilang, kuhang kuha ng mga mag-aaral ang katumbas ng siyentipikong simbolong bakal.

Ang simbolong *H_2O (water),* kapansin-pansin na buong populasyon o 45 mga mag-aaral ang nakakuha ng tamang pagsasalin na “tubig.” Ibig sabihin nito, may malawak na kaalaman ang bawat mag-aaral sa halaga ng tubig at ang simbolong tinataglay nito.

Ang simbolong *HCL (muriatic acid),* kapansin-pansin na buong populasyon o45 mga mag-aaral ang nakakuha ng tamang pagsasalin na “muriatic acid.”

Ang Ingles na *drawing* naman*,* kapansin-pansin na buong populasyon o 45 mga estudyante ang nakakuha ng tamang pagsasalin na “guhit.”

Ang Ingles na *astronomy*, kapansin-pansin na buong populasyon o 45 mga mag-aaral ang nakakuha ng wastong pagsasalin na “astronomiya.”

Ang Ingles na *bulb*, kapansin-pansin na 42 sa populasyon ng mga mag-aaral ang nakakuha ng wastong pagsasalin sa Filipino na “bombilya.” Samantala, mayroon namang tatlong mag-aaral ang may salin na “ilaw” na batay sa modyul na sinusunod, saling “bombilya” ang wastong sagot.

Ang Ingles na *buzzer*, kapansin-pansin na buong populasyon ng mga mag-aaral o 45 mag-aaral ang nakakuha ng tamang pagsasalin na “buzzer.”

Ang Ingles na *battery*, kapansin-pansin din na buong populasyon o mayroong 45 mag-aaral ang nakakuha ng wastong pagsasalin na “baterya.”

Ang Ingles na *computer,* kapansin-pansin na mayroon lamang apat na mag-aaral sa populasyon ang nakakuha ng wastong salin na “kompyuter.” Samantala, 41 mag-aaral naman ang mayroong saling na “computer.” Patunay na lamang nagkaroon ng kalituhan sa panig ng mga mag-aaral kung pananatilihin ang salitang Ingles o hahanapan ng angkop na salin sa Filipino.

Ang Ingles na *sociology,* kapansin-pansin na buong populasyon ng mga mag-aaral o 45 mag-aaral ang nakakuha ng wastong salin na “sosyolohiya.”

Sa kabuuan ng pagsasaling teknikal at pang-agham, makikita na walang mag-aaral ang nakatanggap ng perpektong puntos, mayroon lamang isang estudyante ang nakakuha ng siyam na puntos, apat naman ang nakakuha ng walong puntos. May labing-apat na mag-aaral ang nakakuha ng pitong puntos, mayroong labing-anim na mag-aaral ang nakakuha ng anim na puntos, pitong mag-aaral ang nakakuha ng limang puntos, dalawang mag-aaral ang nakakuha ng apat na puntos at mayroong isang mag-aaral ang nakakuha ng tatlong tamang sagot lamang. Makikita na sa resulta sa bahaging ito, hindi naging madali sa ibang mag-aaral ang pagsasalin.

Kung susumahin ang mga tugon ng lahat ng mga mag-aaral, kapansin-pansin na sa buong populasyon ng mga mag-aaral ay walang nakakuha ng perpektong sagot ngunit wala ring mag-aaral nakakuha ng mababang iskor dahil buong populasyon nasa 40 pataas ang iskor na nakuha sa bawat aytem. Patunay lamang na kahit hindi perpektong pagsasalin ang natamo ng mga mag-aaral, nasanay sila sa mga simbolo at terminong nauugnay sa teknikal at agham. Sinusugan ang ideyang ito sa naging talakay ni Sison-Buban (2014) ng Pamantasang De La Salle, ang isang partikular na estilo o lengguwahe ng pagsasalin ay hindi makakatulong sa pagsasaling-teknikal dahil ang materyal ay maaaring baguhin upang matugunan ang mga pangangailangan ng mga target na mambabasa. Dagdag pa niya, hindi usapin ng tekstong teknikal ang pagsasaling-teknikal kundi usapin ito ng paggamit ng lengguwaheng teknikal.

Pagsasaling Pangmidya

Kung gaano kabilis ang pag-unlad ng wika at ng mundo, ganoon rin kabilis ang pag-unlad ng midya sa lipunan. Binigyang-halaga ni Dulles (1988) nabanggit sa Manabat (2012), ang media ay hindi lamang isang mapagkukunan ng kaalaman, karunungan, at komunikasyon, ngunit ito rin ay may malaking epekto sa buhay ng mga tao at nakakaapekto sa kanilang mga saloobin at pagpapahalaga sa kanilang kapaligiran. Ang radyo, telebisyon, at pahayagan ay ang mga paraan kung saan ang media ay maaaring makarating sa mga lugar na mahirap maabot. Bata man o matanda, may access sa midya.

Dagdag pa ni Worsnop (2006) na sa kasalukuyan, ang midya ay lumilitaw na nakatuon sa mga kabataan dahil sila ay madaling makipag-ugnayan at makagaya sa mga bagay na kanilang pinapanood at naririnig, na nagpapahintulot sa midya na makakuha ng lubos na pagsunod sa mga kabataan (nabanggit sa Manabat, 2012). Ibig sabihin nito, kabataan ang mas madaling makaadap sa kung ano ang uso at bago na sumasaklaw sa lahat ng erya – wika, kultura, politika, edukasyon, at iba pa.

Matutunghayan sa ikaapat na bahagi ang pagsasaling pangmidya ng mga salita sa wikang Ingles patungong Filipino. Ang terminong *selfie,* kapansin-pansin na buong populasyon o 45 mag-aaral ang nakatanggap ng wastong pagsasalin na “pagkuha ng larawan sa sarili.” Ibig sabihin, sa unang salitang pangmidya, bukod sa pagiging mulat sa kung ano ang popular, ito na rin ang nakaugaliang gawin ng mga mag-aaral bilang pampalipas-oras.

Salitang *trending,* kapansin-pansin na buong populasyon o 45 estudyante ang nakakuha ng tamang pagsasalin na “nauuso.”

Ang salitang *seenzone,* kapansin-pansin na buong populasyon o 45 mag-aaral ang nakatanggap ng wastong pagsasalin na “hindi tinutugunan ang mensahe o binaliwala, o hindi pinansin ang minsahe.”

Ang ekspresyong *pak ganern,* kapansin-pansin 40 mag-aaal na nagsalin na ito ay isang “expression” lamang ng maraming mga kabataan sa ngayon. Mayroon namang dalawang mag-aaral na nagsalin ng “lough out loud.” Mayroon namang dalawang mag-aaral ang nagsalin ng “sana all” at mayroong isang mag-aaral ang nagsalin ng “pak ganern” o walang pagbabago ang salita. Subalit, ang wastong salin sa Filipino nito *“tumpak, gayon yon, tama”* batay na rin sa pagkakagamit at pagpapakahulugan ng marami.

Ang daglat na *LOL,* kapansin-pansin na ang buong populasyon o 45 estudyante ang nakakuha ng tamang salin na “laugh out loud.”

Ang salitang *throwback”* kapansin-pansin na ang buong populasyon o 45 mag-aaral ang nakakuha ng wastong salin na “pag-alala sa nakalipas o binalikan ang nakalipas.”

Ang salitang *hashtag,* kapansin-pansin na buong populasyon ng mga mag-aaral o 45 mag-aaral ang nakakuha ng tamang salin na “karaniwang ginagamit sa mga social network.” Batay na rin sa personal na tugon ng mga kalahok, malay ang lahat ng kalahok kung kalian ginagamit ang salitang ito.

Ang salitang *mag-marites,* kapansin-pansin na ang buong populasyon ng mga mag-aaral ay alam na alam ang pagsasalin nito dahil nakuha nila ang wastong saling “pakikibalita o makikitsismis sa mga bagay.” Batay na rin sa personal na obserbasyon, hindi lamang ang mga mag-aaral ang mulat sa pag-usbong ng ekspresyong ito kundi laganap na sa buong kapuluan ang paggamit bilang panghalili sa pakikipagtsismisan.

Ang ekspresyong *forda go,* kapansin-pansin na mayroong 40 ang sumagot ng pareho lang sa salitang Ingles na “forda go” na ang wastong salin naman tumutukoy sa “isang ekspresyon ng isang komento o simpleng paboritong bagay o gawain”. Samantala mayroong dalawa ang sumagot ng “game na game,” mayroon namang dalawang mag-aaral ang sumagot ng nagsasabing pagbabalik sa nakaraan o nakalipas ang kanilang pagpapakahulugan.

Ang salitang *ferson,* kapansin-pansin na ang buong populasyon o 45 ang nakakuha ng tamang pagsasalin na “tao.” Alam na alam nila ang pagtutumbas dahil halos lahat ay gumagamit ng salitang ito sa kanilang pakikisalamuha sa social media.

Kung susumahin ang mga naging tugon ng lahat ng mga mag-aaral, kapansin-pansin na sa buong populasyon ng mga mag-aaral ay walang nakakuha ng perpektong sagot. Ang social media ay itinuturing na pinakamalakas na organisasyong sosyal dahil mayroon silang kakayahang magbago ng kasaysayan ng bansa.. Isang pagpapatunay lamang na ang pagsasalin ng midya ay may malaking kakayahang impluwensyahan ang paraan ng pagsasalita at pagsusulat dahil nagbibigay interes sa mga tao upang makakuha ng data. Sa kabuoang analisis ng bahaging pagsasaling pangmidya, walang mag-aaral ang nakakuha ng sampung puntos, mayroong limang mag-aaral ang nakakuha ng pitong puntos, 32 ang nakakuha ng anim na puntos at walongmag-aaral ang nakakuha ng limang puntos. Mapapansin din na may tanging ekspresyon na hindi natumbasan ng mga mag-aaral gaya ng *pak ganern*. Batay sa malawakang pagsisiyasayat, ang ekspresyong ito ay komon sa mga Tagalog ispiker.

Kung susumahin ang mga tugon ng lahat ng mga mag-aaral, kapansin-pansin na karamihan sa mga mag-aaral nahirapan nang bahagya sa pagsasalin. Ilan sa itinuturing na dahilan ang pamilyaridad ng at pagkakagamit ng mga salita. Sa kaso ng papel na ito, hindi rin naging madali para sa tagapagsalin ng pangungusap lalo na kapag may mga salitang hindi pamilyar o may kakulangan sa exposure ukol sa pagsasaling gaya nito.

Batay sa sampung salita at ekspresyong inilahad sa itaas, nagkaroon ng pagkalito ang mga mag-aaral. Ang nasabing pagkalito o pagkakamali batay na rin sa pabago-bagong sistemang ipinapatupad at maging sa epekto nito sa konsepto kung ano ang basa, siyang sulat ngunit ibabaybay lamang sa Filipino.

DANAS SA PAGSASALIN

Para sa pangatlo at huling suliranin ng pag-aaral na, “Ano-ano ang naging danas sa kamalian ng mga piling mag-aaral sa pagsasalin?” Sa puntong ito, tatalakayin ang naging tugon ng mga kalahok sa isinagawang panayam ukol sa naging danas ng mga mag-aaral sa pagsasalin. Matutunghayan sa talahanayan ang buod ang kanilang naging tugon

Batay sa naging salaysay ng bawat mag-aaral o kalahok ng pag-aaral narito ang sampung nangungunang dahilan ng kahirapan nila sa pagsasalin (mula sa pinakamarami hanggang sa pinakamadalang na tugon): (a) Maraming salita na puwedeng itumbas o mga kaugnayang salita sa Filipino ngunit hindi iyon ang tumpak na sagot; (b) Hindi agad nakuha ang ibig sabihin ng salin; (c) Mas madali isalin ang Filipino patungong Ingles; (d) Maraming katumbas o pagpapakahulugan ang salita sa Filipino; (e) Nalilito kung paano ang tamang pagpapakahulugan ng salita/parirala; (f) May mga salita na bago pa sa pandinig; (g) Malalim ang pagpapakahulugan ng mga salita o malalim ang termino; (h) Mas sanay gumamit ng mga salitang Ingles kaysa sa Filipino; (i) Mayroong mga termino sa social media hindi masyadong pamilyar; at (j) Walang exact term o eksaktong termino ang ginagamit sa social media.

Batay sa naging iskor, resulta, at panayam ng mga kalahok sa nasabing pag-aaral, marami ang nagsabi na nagkaroon ng kahirapan sa pagsasalin ang halos mag-aaral sa pagsasalin lalo na kapag ang salita o termino na sa kanilang pag-aakala iyon ang wastong salin dahil iyon ang halos naririnig at karaniwang ginagamit ng marami. Halimbawa sa naging tugon ng ilan sa mag-aaral saad ni M2 *“akala ko kasi iyon na ang sagot na napili ko, ‘yon kasi ang kalimitang naririnig ko na ginagamit ng marami, ‘yon na rin ang nakasanayang kong gamitin. Halimbawa ang election, halos kasi kahit sino, mariringig mo eleksyon ang naririnig ko kaya naman saling eleksyon ang pinili ko ngunit, halalan pala ang wasto batay na rin sa katumbas nito.”* Ganito naman ang pagsang-ayon na pahayag ni M8 *“mahirap talaga siya kasi, dahil komon ang salita, akala ko ‘yon din talaga ang sagot pero hindi. Kaya nga, nakakalito sa part naming mag-aaral kung ano nga ba ang susundin kasi kung isi-search mo sa google lalabas din naman ang ganung ispeling eh.”*

Karaniwan itong maituturing dahil ang salita gaya ng eleksyon at administrasyon na nagmula sa Ingles na *election* at *administration* na iyon na ang katumbas sa Filipino. Lingid sa kaalaman din ng maraming gumagamit ng mga nasabing termino na may

katumbas ito sa wikang Filipino batay sa unang Balarilang Filipino na halalan at pamamahala ang wastong salin nito.

Isa rin sa nakikitang dahilan ng mga suliraning inilahad sa itaas ng mga kalahok sa pag-aaral bukod sa kalituhan sa mga terminong hindi pamilyar, o kaya'y teknikal o kaya naman pinanatili kung ang baybay nag salita sa halip na bigyan ng katumbas, sa puntong ito papasok ang konsepto ng baryasyon ng wika. Nabanggit ni Narvaez (2018), nagkakaroon ng baryasyon sa wika na makikita sa baryasyon ng iba-ibang paraan ng pagsasalin sa iisang teksto o dokumento. Iba-iba ang trato sa bawat salita sa magkakaibang wika at ang pagpili ng pantumbas sa isang salita tungo sa isa pang wika ay naiimpluwensiyahan ng layunin ng pagpapakahulugan sa espesipikong sitwasyon at kontekstong kultural. Bilang patunay sa ideya ni Narvaez, malaking factor ang baryasyon ng wika ng mga mag-aaral na nakakaapekto sa resulta ng kanilang pagsasalin. Bawat mag-aaral bukod sa iba-iba ang oryentasyon ng pamilyang kinalakhan, halo-halo rin ang unang wikang natutuhan nila sa kanilang tahanan at higit sa lahat may malaking impluwensya rin sa pamilyaridad at kahusayan sa paggamit ng wika nila ang labas na institusyong panlipunan – eskwelahan at midya.

Konklusyon

Batay sa naging resulta ng pag-aaral, natuklasang may limitasyon sa panig ng mismong nagsasalin at ang nakikinabang ng salin gaya ng ng diwa o konstektong nilalaman ng pahayag, ang gramatika ng dalawang wikang sangkot, at kontekstong kultural. Nagkakaroon ng problema kapag iba ang kontekstong kultural ng orihinal na bumuo ng akda o ekspresyon at tunguhang wika.

Hindi naging suliranin sa mga mag-aaral ang pagsasaling teknikal at pang-agham bagkus, halos lahat ng mag-aaral matataas ang nakuhang iskor mula rito. Sa karaniwang pagsasalin ng mga salita at pagsasaling idyomatiko, nagkaroon ng kahirapan ang mga mag-aaral dahil mula sa sampung salita, tatlo rito ang hindi naisalin nang wasto ng mga mag-aaral. Sa pagsasaling teknikal at pang-agham at pangmidya, halos matataas ang nakuhang iskor ng mga mag-aaral, isang pagpapatunay na malay ang mga mag-aaral sa kung ano ang pinakatinututukan ngayon ng maraming eskwelahan at midya. Maliban lamang sa isang ekspresyon sa midya na hindi pamilyar sa maraming mag-aaral.

Kung susumahin ang mga tugon ng lahat ng mga mag-aaral, kapansin-pansin na karamihan sa mga mag-aaral nahirapan nang bahagya sa pagsasalin. Ilan sa itinuturing na dahilan ang pamilyaridad at pagkakagamit ng mga salita at kakulangan sa exposure ng mga mag-aaral sa gawaing ito.

Batay sa sampung salita at ekspresyong inilahad sa ganang itaas, nagkaroon ng pagkalito ang mga mag-aaral. Ang nasabing pagkalito o pagkakamali batay na rin sa pabago-bagong sistemang ipinapatupad at maging sa epekto nito sa konsepto kung ano ang basa, siyang sulat ngunit ibabaybay lamang sa Filipino.

Panghuli, natuklasan na ang teorya/lenteng Translation Error Analysis na ginamit sa pananaliksik, bukod sa kaangkupan sa instrumentong ginamit para suriin ang bawat parametrong saklaw ng pag-aaral, mabisang lente upang masuri ang kalakasan at kahinaan ng isang salin at materyal na ginagamit ng guro.

Rekomendasyon

Matapos ang masusing pag-aanalisa ng mga datos, nakabuo ang mananaliksik ng mga sumusunod na rekomendasyon:

Una, para sa mga mag-aaral, malaking tulong ang pagbabasa ng mga aklat sa buong proseso ng pagsasalin para magamit sa susunod pang gawain hindi lamang sa loob ng klase maging sa praktikal na layunin at upang magkaroon ng mas angkop na impormasyon at ideya hinggil sa pagsasalin.

Pangalawa, para sa mga magulang, mainam pa rin na magkaroon ng close monitoring sa performance ng mga mag-aaral lalo na sa mga asignaturang nahihirapan sila at matulungan sila sa lubos na pag-unawa ng aralin.

Pangatlo, para sa mga guro mas kinakailangang mabigyan ng mataas na panahon ang pag-aaral sa pagsasalin upang mas mapalawak pa ang kaalaman sa pagsasalin.

Pang-apat, ang naging resulta ng pag-aaral, makakatulong din sa pamunuan ng DepEd upang makapaghanda ng mga seminar ukol sa kasalukuyang trend kaugnay sa pagsasalin at mga bagong impormasyon sa wika.

Panlima, para sa mga mananaliksik, magagamit ang mga datos na ito sa kanilang mga panibagong pag-aaral gamit ang parehong lente ngunit sa ibang kategorya nakapokus.

Research and Health Protocol

Matapos matagumpayang maipasa ng mananaliksik ang panukalang depensa, ang mapagkumbabang paghingi ng research number at Institutional Ethics Review Committee (IERC) permit sa Central Mindanao University ay mga hakbang na ginawa ng mananaliksik bago niya naisagawa ang nasabing pag-aaral. Pangalawa, matapos mapagkalooban ng IERC permit ang mananaliksik, humingi ng permiso mula sa opisina ng tanggapan ng dibisyon dala na ang kanyang naisulat na liham-pahintulot. Kasunod nito, nagbigay ang mananaliksik ng isang kopya ng naaprubahang liham sa punong-guro kalakip na rito ang IERC permit para sa pangangasiwa ng instrumento. Kalakip rin ng liham-pahintulot ng mananaliksik (naglalaman ukol sa Data Privacy Act) para sa mismong pakikipanayam sa mga target na kalahok pinirmahan ng kapwa magulang at mag-aaral ang nasabing consent. Sa kaso ng pag-aaral na ito, hindi maseselan ang mga katanungang nabuo ng mananaliksik, nakabatay ito sa kamalian sa pagsasalin. Ngunit, pananatili pa rin ng mananaliksik na maging kompidensyal ang anomang nakalap na mga impormasyon. Kumuha rin ng sampol ang mananaliksik para maipresenta sa tagapangasiwa ng paaralan na legal at naaayon sa pamantayan ang isasagawang pananaliksik. Gumawa rin ng timetable ang mananaliksik para sa posibleng iskedyul ng bawat mag-aaral na iinterbyuhin. Matapos ang pagkuha ng mga tugon mula sa binuong mga tanong ng mananaliksik, transcribe at nag-encode rin ito ng mga datos na sinundad naman ng pagsusuri sa mga nakalap na impormasyon. Samantala, hindi na kailangan ang isang statistician sa pag-aaral na ito dahil bukod sa iilang mag-aaral lamang ang kinuhang sampol, ang mga katanungan ay nakapokus sa malalimang pag-aanalisa batay sa problema at layunin ng pag-aaral.

Mga Konsiderasyong Etikal

Nabanggit sa ganang itaas ang ilang pamantayan sa pagsasagawa ng pananaliksik na ito ngunit bilang pagtalima sa etika ng pananaliksik, ang paghingi ng permiso sa tanggapan ng dibisyon at punong-guro ng paaralan ay mahalagang kinokonsidera ng mananaliksik. Gayundin, ang paghingi ng *Institutional Ethics Review Committee (IERC)* Permit mula sa CMU bago isinagawa ang pag-aaral ay kinokonsidera rin. Isinagawa ang pangangalap ng datos o pagpapasagot ng talatanungan at panayam sa buwan ng Pebrero 2023.

Sa pagsasagawa ng pag-aaral/panayam, ipapaliwanag ng mananaliksik sa mga respondente ang kalikasan at layunin ng isinagawang pag-aaral at pinapanatiling kompidensyal ang anomang impormasyong nakuha mula sa kanila. May karapatang sagutin ng respondente ang anomang katanungan at may karapatan din siyang kumalas kapag sa tingin niya na ang mga katanungan ay labag o opensibo o kaya nama'y hindi siya komportable. Ibig sabihin din nito, boluntaryo ang pagsali ng respondente sa nasabing panayam.

Bilang bahagi ng tuntunin, ipiresenta sa paaralan ang resulta ng pag-aaral para sa balidasyon bago gawing pinal ang manuskrito.

Pasasalamat

Taos pusong pasasalamat sa ating poong Maykapal sa tibay ng loob, lakas malusog na pangngatawan at sa pagpapanatiling ligtas sa kabila ng mga napagdaanang pamdemya dulot ng COVID-19, sa pagpaparamdam sa Kanyang presensya sa bawat oras upang mapagtagumpayan ko ang gawaing ito.

Buong-puso din akong nagpapasalamat sa mga taong sumuporta sa akin upang mapagtagumpayan ko ang pananaliksik na ito. Una, sa aking buong pamilya lalong lalo na ang aking ina na si Wilma C. Villegas sa pagbibigay ng buhay sa akin at pagtulong pinansiyal. Sa aking mga kapatid na nagbibigay ng kusang loob na tumulong lalong lalo na sa panahong nangangailangan ako.At higit sa lahat ang aking pinaka mamahal na asawa na si Norman Roy A. Cagampan at dalawang anak na sina Nathaneal Hubert V. Cagampan at Nathaneal Homer V. Cagampan na naging inspirasyon ko upang tapusin ang aking pag-aaral.

Gayundin, buong-puso akong nagpapasalamat sa sumusunod:

Una kay G. Randy M. Magsalos na naging gamay ko upang mapadali ang aking mga gawain sa pag-aaral at nagbibigay ng motibasiyon para ipagtuloy ko, Kay Gng. Jocelyn M. Dayata na aking kaklasi at naging kaibigan na naging daan na nagbigay ng inspirasyon upang ako ay muling magpatuloy sa aking pag-aaral.

Pangalawa, sa aking prinsipal na sa G. Jemperly Y. Lorilla sa pagbibigay ng pahintulot na isagawa ko ang aking pananaliksik sa San Nicolas National High School. Sa mga mag-aaral na naging instrument upang maging makatotohanan ang pananaliksik na ito.

Nagpapasalamat din ako sa lahat ng mga naging guro ko sa Central Mindanao University lalong-lalo na kina Prof. Fe H. Mantong at Dr. Julie Ann Orobia na aking naging mga guro.

Walang hanggan at taos-pusong pasasalamat sa aking tagapayo na si Dr. Freddielyn B. Pontemayor sa walang pasubaling pagsuporta sa akin. Hindi ko magagawa ang lahat ng ito kung hindi dahil sa kanyang walang sawang pagtulong sa akin at pagbibigay ng inspirasyon sa tuwing nawawalan na ako ng lakas ng loob. Sa pagbibigay ng gabay sa lahat ng gawain at handing tumulong para mas mapadali ang aking pag-aaral.

Sa lahat ng mga taong nasa likod ng tagumpay na ito, maraming -maraming Salamat po.

Nagpapasalamat,

Necel V. Cagampan

SANGGUNIAN

Bassnet, S. (2002). *Translation Studies.* London: Routledge. https://www.academia.edu/21596357/Translation_Studies_3rd_Ed_Bassnett_Susan_Routledge_. Accessed 7 March 2023.

Buban, R. (2014). Ang Pagsasaling Teknikal:Pagsipat sa Praktikal at Pagpapahalaga?technical Translation:Revisiting the Practice and Essentials. *De La Salle University*, 117-127. https://www.researchgate.net/publication/316249602_Ang_Pagsasaling_Teknikal_Pagsipat_sa_Praktika_at_Pagpapahalaga_Technical_Translation_Revisiting_the_Practice_and_Essentials/citation/download. Accessed on 17 October 2022.

Coroza, M. (2016). Taksil daw ang Tagasalin?Isang Pag-unawa sa Pagsasalin. *Archium Ateneom Filipino Faculty Club Publications*, 1-11. https://archium.ateneo.edu/cgi/viewcontent.cgi?article=1009&context=filipino-faculty-pubs. Accessed 31 March 2023.

Dalumat ng Kasaysayan ng Pagsasaling Wika. (2015, July 19). https://pf508pagsasalingwika.wordpress.com/2015/07/19/dalumat-sa-kasaysayan-ng-pagsasaling-wika/:

Go, A. C. (October 12, 2004). Books in private schools also full of Error's. *Philstar Global*, 1. https://www.philstar.com/headlines/2004/10/12/265929/145books-private-schools-also-full-errors146

Jarabejo, W. (2021). Kabanata 2-Kasaysayan ng Pagsasaling-wika sa Pilipinas. Manila: Scribd. https://www.scribbr.com/apa-examples/website/ Accessed on 10 January 2019

Labor, K. (2020, August 16). Aklat ng Bayan:Why Read the Filipino Translation. *Manila Buletin*, p. L1. https://mb.com.ph/2020/08/16/aklat-ng-bayan-why-read-the-filipino-translations/. Accessed on 21 January 2023.

Manabat, G. (2012). "Kumikinang na Batubalani Sa Diwa ng Kayumanggi"Katuwang nga ba sa Pagtuturo ng Asignaturang Filipino? *The Summit*, 57-80. https://rpo.ua.edu.ph/wp-content/uploads/2020/06/3-maed-tf-girlie-manabat-September-21-2018.pdf. Accessed 28 February 2023.

Narvaez, E.(2018). Baryasyon sa Wika at Pagsasalin:Isang Aplikasyon sa " The Monkey and the Tortoise ni Dr. Jose Rizal.

Worsnop, C. M. (2006).Integrating Media into the Classroom. Ontario, Canada: Media Awareness Network.

Zhang, J. (2013). Language-rich discussions for English . *International Journal of Educational Research*, 44-60.

Zuniga, A. (2016, August 29). *https://www.linkedin.com/pulse/what-translation-error-ana-mar%C3%ADa-z%C3%BAniga/*. Retrieved from www.Linkedin.om: https://www.linkedin.com/pulse/what-translation-error-ana-mar%C3%ADa-z%C3%BAniga/

APA Citation:

Cagampan, N. V., & Pontemayor, F. B. (2024). PAGSUSURI SA KATEGORYA, KAMALIAN, AT DANAS SA PAGSASALIN MULA SA PILING MAG-AARAL NG SAN NICOLAS NATIONAL HIGH SCHOOL. Ignatian International Journal for Multidisciplinary Research, 2(8), 1605–1619. https://doi.org/10.5281/zenodo.13572113

Corresponding author: *necelvillegascagampan@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

PHYSICOCHEMICAL ANALYSIS OF CHARRU MUSSEL (*Mytella strigata*) POWDER AND ITS ACCEPTABILITY AS KROPEK

Mary Cris J. Gemoros, Junnafe D. Daleon, DTE, Nivea Louwah D. Sermona

Graduate School, University of Science and Technology of Southern Philippines, Cagayan de Oro, Philippines 9000

https://doi.org/10.5281/zenodo.13207966

ABSTRACT

The study aimed to utilize the abundant and invasive *Mytella strigata* found in the Panguil Bay area by incorporating their powder into a processed product, kropek. The physicochemical properties of the *Mytella strigata* powder were analyzed, revealing a pH of 6.32, a bulk density of 0.456 g/cm3, and a moisture content of 5.11%. An experimental research design with 30 respondents was employed to evaluate the sensory qualities of three formulations: (1) 20% *Mytella strigata* powder and 80% cassava flour, (2) 30% *Mytella strigata* powder and 70% cassava flour, and (3) 40% *Mytella strigata* and 60% Cassava powder. The results showed that Formulation 1 was significantly preferred in terms of appearance ($F=4.79$, $p<0.05$) and crispiness ($F=3.82$, $p<0.05$). While there were no significant differences in aroma, color, or taste, the overall acceptability was higher for Formulation 1. The study suggests that lowering the amount of *Mytella strigata* powder in the product could further improve its sensory qualities and that determining the shelf-life of the *Mytella strigata* powder would be necessary for commercial viability. The research study provides a potential solution to address the underutilization of the invasive *Mytella strigata* by incorporating their powder into a popular local snack, kropek. The findings highlight the feasibility of using *Mytella strigata* powder in food product development, with further optimization and commercialization opportunities.

Keywords: *Acceptability level, Kropek, Mytella strigata powder, Physicochemical analysis*

INTRODUCTION

The fishing community in Tangub City has faced significant challenges due to the proliferation of *Mytella strigata*, a species of mussel that has become a growing problem in the region. These mussels clog fish nets, reducing the oxygen available to farmed species such as oysters and milkfish, and hampering the efficiency of aquaculture operations. The dense accumulation of *Mytella strigata* also leads to additional costs for farmers, who must hire assistants to remove the mussels from their nets, highlighting the labor-intensive nature of dealing with this invasive species.

Despite its historical significance, *Mytella strigata* is traditionally consumed in local dishes such as "kinilaw" and "adobo." However, its relatively small size and suboptimal meat quality have limited its culinary appeal when compared to other mussel species. To address this limitation, the researcher explored the innovative application of *Mytella strigata* powder in the production of kropek, a popular snack food in Southeast and East Asia.

Kropek, traditionally a dried product made from ground rice, shrimp, or fish, has evolved into a snack food crafted from ground, flavored tapioca that was shaped and fried (Espejo & Hermes, 1998). This snack food holds cultural significance and is widely enjoyed by people of all ages (Estrella, 2022). In the Philippines, there has been a 13% increase in snacking between 2015 and 2017, indicating a growing demand for acceptable kropek with superior sensory attributes (Taewee, 2011; Adobo Magazine, 2017).

From a practical standpoint, consumers often seek ready-to-eat snacks, quick meals, and easy-to-cook items to optimize their limited cooking time, particularly in the workplace. However, consumers tend to overlook the nutritional content of these processed snacks, which can vary significantly depending on the methods of preparation and processing (Otunola et al., 2012).

On the other hand, the physicochemical properties of food powders, such as pH, bulk density, and moisture content, play crucial roles in determining their functionality and application in food processing. Foods in powder form are convenient to transport and store, and their extended shelf life reduces wastage and promotes sustainable development (Ueda et. al, 2023). The physicochemical properties of food powders, encompassing particle size, shape, and surface characteristics, significantly influence their functional and sensory properties and behavior during processing and storage (Roos & Drusch, 2015). Moisture content is a crucial factor influencing the stability and shelf-life of food powders, as excessive moisture can lead to microbial growth and spoilage (Barbosa-Cánovas et al., 2005).

By incorporating *Mytella strigata* powder into the production of kropek, this study aims to enhance the utility and acceptance of this underutilized species in processed food products, thereby making a substantial impact on the food industry and inspiring new possibilities for *Mytella strigata* utilization.

Research Questions

This study sought to determine the acceptability of the proposed innovative product from *Mytella strigata* powder.

1. What are the physicochemical properties of the powdered *Mytella strigata* in terms of:
   a. bulk density;
   b. pH;
   c. color evaluation; and
   d. moisture content?

2. What is the level of acceptability of the *Mytella strigata* kropek in terms of sensory evaluation (appearance, aroma, color, taste, and crispiness) and in terms of the following formulation:
   a. 20% *Mytella strigata* Powder; 80 % Cassava Flour;
   b. 30% *Mytella strigata* Powder; 70% Cassava Flour; and
   c. 40% *Mytella strigata* Powder; 60% Cassava Flour?

3. Is there a significant difference among treatments regarding appearance, aroma, color, taste, and crispiness?

METHODOLOGY

The study employed descriptive statistics, such as mean and standard deviation, to evaluate the acceptability of products incorporated with *Mytella strigata* powder across various formulations. Additionally, inferential statistics, specifically Analysis of Variance (ANOVA), were used to analyze differences in acceptability among the different formulations of the *Mytella strigata* powder as kropek.

The physicochemical analysis of the *Mytella strigata* powder was conducted in an accredited laboratory. The study utilized purposive sampling with thirty (30) semi-trained food individuals from the University of Science and Technology of Southern Philippines. This group consisted of fifteen (15) students and fifteen (15) teachers, all involved in food-related courses or research.

Before the commencement of the sensory evaluation, the researcher thoroughly and transparently explained the study's objectives and procedures. Participants were explicitly informed that their participation was entirely voluntary and that they could withdraw from the study without facing any adverse consequences. Random codes were systematically assigned to each treatment according to a master list to ensure impartiality and eliminate bias during the sensory evaluation. The respondents evaluated the samples' degree of liking using the 9-point hedonic scale, as developed by Peryam and Pilgrim (1957) as a well-established tool rigorously validated for sensory evaluation and acceptability assessment.

The respondents evaluated the acceptability of Kropek with varying formulations: 20% *Mytella strigata* powder and 80% cassava flour; 30% *Mytella strigata* powder and 70% cassava flour and 40% *Mytella strigata* powder and 60% cassava flour—based on five (5) key food attributes: appearance, aroma, color, taste, and crispiness. These attributes served as the parameters for determining overall preference for the formulated Kropek formulations.

Range of Score	Verbal Interpretation
8.12 - 9.00	Like Extremely
7.23 - 8.11	Like Very much
6.34 - 7.22	Like Moderately
5.45 - 6.33	Like slightly
4.56 - 5.44	Neither like nor Dislike
3.67 - 4.55	Dislike slightly
2.78 - 3.66	Dislike much
1.89 - 2.77	Dislike Very Much
1.00 - 1.88	Dislike Extremely

RESULTS AND DISCUSSION

Research Question 1. What are the physicochemical properties of the powdered *Mytella strigata* in terms of:

a. bulk density;
b. pH;
c. color evaluation; and
d. moisture content?

Table 1
Physicochemical properties of Mytella strigata Powder in terms of pH, Bulk density, and Moisture content

Parameters	Unit	Results	Test Method
ph	-	6.32 @25.6°C	Electrometry
Bulk Density	g/cm3	0.456	Modified Core Method
Moisture Content	%	5.11	Air Oven Drying

Table 1 shows the result that *Mytella strigata* powder has a recorded pH value of 6.32 @ 25.6 0C. It was tested using the electrometry test method. The bulk density was measured using modified core method which yield the result of 0.456 g/cm3.On the other hand, the moisture content of the *Mytella strigata* powder result was 5.11% using air oven

drying.

The pH of *Mytella strigata* powder is measured at 6.32 at 25.6°C using electrometry, indicating a slightly acidic nature. This is consistent with findings from other marine-derived powders, which also exhibit similar pH levels due to their unique biochemical compositions (Mohamadi et al., 2020). The bulk density is recorded at 0.456 g/cm³, determined by the modified core method, suggesting a moderate compactness of the powder. This property is crucial in food processing as it affects the texture and mixing behavior of the powder in formulations (Beuchat et al., 2013; Younes et al., 2016). The moisture content is 5.11%, obtained through air oven drying, reflecting the water retention capability of the powder. Such a moisture level is within the acceptable range for dry powders, ensuring stability and reducing the risk of microbial growth, which is vital for food products' shelf life and safety (Zambrano et al., 2019).

Table 2.
Physicochemical property of Mytella strigata Powder in terms of Color Evaluation.

Parameters	Trials	L*	a*	b*
Colorimeter	1	72.87	-7.47	30.34
	2	72.96	-7.46	30.25
	3	73.01	-7.51	30.35
	Average	72.95	-7.48	30.31

Note: *L** indicates the lightness ranging from 0-100, *a** value gives the degree of (redness-greenness) with a higher *a** value indicating redder, *b** value indicates the degree of (yellowness-blueness), with higher *b** value indicating more yellow.

Depicted in Table 2 are the result of the color evaluation using a Konica Minolta colorimeter. the result revealed that in trial 1, L* had a value of 72.87, a* showed a value of -7.47, and b* had a value of 30.34. On the other hand, in trial 2, the result shows that L* has a value of 72.96, in a*, -7.46, while b* had a value of 30.25; Furthermore, in trial 3, the result shows that L* had a value of 73.01, in a*, -7.51, while b* had a value of 30.35. The overall average value in all trials of L* is 72.95, -7.48 in a*, and 30.31 in b*.

The L* value averaged 72.95, indicating the sample's lightness. The a* value averaged -7.48, suggesting a greenish hue, and the b* value averaged 30.31, highlighting a yellowish tint. These findings align with the established characteristics of seafood powder, noted for its light color and green-yellow spectrum (Smith et al., 2021). The minimal variation in color measurements across trials, with L* values between 72.87 and 73.01, and a* and b* values within -7.51 to -7.46 and 30.25 to 30.35, underscores the reproducibility and stability of the sample's color attributes. This consistency is essential for consumer products, where color uniformity signifies quality and reliability (Jones & Martinez, 2020). The *Mytella strigata* powder sample's light, greenish, and yellowish appearance confirms the expected properties of the ingredients, offering valuable insights for food product development and quality control.

Research Question 2. What is the level of acceptability of the *Mytella strigata* as kropek in terms of sensory attributes (Appearance, Aroma, Taste, and crispiness) with the following different formulations:

a. 20% *Mytella strigata* Powder and 80 % Cassava Flour;
b. 30% *Mytella strigata* Powder, 70% Cassava Flour; and
c. 40% *Mytella strigata* Powder and 60% Cassava Flour?

Table 3
Acceptability of Kropek with Mytella Strigata Powder in Different Formulations

Attributes	Formulation 1			Formulation 2			Formulation 3		
	M	SD	Description	M	SD	Description	M	SD	Description
Appearance	7.87	1.14	Like Very Much	7.27	1.62	Like Very Much	6.67	1.69	Like Moderately
Aroma	7.47	1.61	Like Very Much	7.17	1.66	Like Moderately	6.77	1.74	Like Moderately
Color	7.43	1.46	Like Very Much	7.10	1.90	Like Very Much	6.40	1.77	Like Moderately
Taste	8.43	0.96	Like Extremely	7.97	1.10	Like Very Much	7.47	1.25	Like Very Much
Crispiness	8.43	0.68	Like Extremely	8.30	0.99	Like Extremely	7.77	1.22	Like Very Much
Overall Acceptability	7.85	1.17	Like Very Much	7.56	1.45	Like Very Much	7.02	1.53	Like Moderately

Table 3 shows the result of the acceptability level among the three formulations, which were evaluated based on appearance, aroma, color, taste, and crispiness using mean and standard deviation. Formulation 1 (M=7.87, SD=1.14) and Formulation 2 (M=7.27, SD=1.62) were rated as "like very much" for appearance, while Formulation 3 (M=6.67, SD=1.69) was rated as "like moderately." Formulation 1 also led in aroma (M=7.47, SD=1.61) and color (M=7.43, SD=1.46), followed by Formulation 2 and Sample 3. All Formulations were "liked very much" in taste, with Formulation 1 (M=8.03, SD=0.96) scoring highest. For crispiness, Samples 1 (M=8.43, SD=0.68) and 2 (M=8.30, SD=0.99) were "liked extremely," while Formulation 3 (M=7.77, SD=1.22) was "liked very much." Formulations 1 and 2 were highly acceptable, but Formulation 1 got the highest overall mean score.

In food consumption, the acceptance or rejection of a particular item is primarily dictated by how well it aligns with the consumer's needs, requirements, and expectations (Mosca, 2015). Formulation 1, which contained the least amount of *Mytella strigata* powder at only 20%, demonstrated the highest acceptability level in terms of appearance.

This is likely because cassava flour, which constituted 80% of Formulation 1, contains no pigments that might discolor the product. As a result, Formulation 1 likely exhibited a brighter, cleaner color and a smoother, thinner structure compared to formulations with higher *Mytella strigata* powder content. The absence of pigments in cassava flour and its favorable textural properties contributed to the visual appeal and overall acceptability of the product. The result also conforms with the study of Balaba and Diel (2024) were the treatment with the lowest percentage of *Mytella strigata* powder has the highest over-all acceptability compared to treatment with a higher concentration of Mytella strigata powder.

Research Question 3. Is there a significant difference among treatments regarding appearance, aroma, color, taste, and crispiness?

Table 4.
One-way ANOVA Results in Terms of Appearance

				Test of Homogeneity of Variances		
Formulation	**Mean**	**SD**	**Description**	**Levene's Statistics**	**F**	**Sig**
1	7.87	1.14	Like Very Much			
2	7.27	1.62	Like Very Much	1.585	4.79	.011
3	6.67	1.69	Like Moderately			

Group Differences				
Formulation	**Mean Differences**	**Sig**	**95% Confidence Interval (LL- UL)**	
1-2	.60	.27	-.29	1.49
1-3	1.20*	.01	.28	2.12
2-1	-.60	.274	-1.49	.29
2-3	.60	.41	-.45	1.65

*. The mean difference is significant at the 0.05 level.

Table 4 shows the result of a one-way ANOVA analysis that evaluated the appearance of three food Formulation formulated with varying proportions of *Mytella strigata* powder and cassava flour (Formulation 1: 20% *Mytella strigata* powder, 80% cassava flour; Formulation 2: 30% *Mytella strigata* powder, 70% cassava flour; Formulation 3: 40% *Mytella strigata* powder, 60% cassava flour). The results revealed significant differences in appearance among the formulations ($F=4.79$, $p<0.05$). Formulation 1 ($M=7.87$, $SD=1.14$) was significantly more acceptable in appearance compared to Formulation 2 ($M=7.27$, $SD=1.62$) and Formulation 3 ($M=6.67$, $SD=1.69$). The significant mean differences ($p<0.05$) indicate that Formulation 1 is the most visually appealing.

Table 5
One-way ANOVA Results in Terms of Aroma

Formulation	Mean	SD	Description	Test of Homogeneity of Variances		
				Levene's Statistics	F	Sig
1	7.47	1.61	Like Very Much			
2	7.17	1.66	Like Moderately	0.57	1.33	.27
3	6.77	1.74	Like Moderately			

The table shows the one-way ANOVA results for aroma indicate no significant differences among the three formulations: Formulation 1 (20% *Mytella strigata* powder, 80% cassava flour), Formulation 2 (30% *Mytella strigata* powder, 70% cassava flour), and Formulation 3 (40% *Mytella strigata* powder, 60% cassava flour). The analysis ($F = 1.33$, $p > 0.05$) revealed mean scores of 7.47 (SD = 1.61), 7.17 (SD = 1.66), and 6.77 (SD = 1.74) for Formulation 1, 2, and 3, respectively, with no significant differences at the 0.05 level. Thus, all formulations exhibit similar aroma acceptability, rated moderately by respondents.

Table 6
One-way ANOVA Results in Terms of Color

Formulation	Mean	SD	Description	Test of Homogeneity of Variances		
				Levene's Statistics	F	Sig
1	7.43	1.46	Like Very Much			
2	7.10	1.90	Like Moderately	.80	2.82	0.07
3	6.40	1.77	Like Moderately			

The one-way ANOVA results for color indicate no significant differences among the three formulations: Formulation 1 (20% *Mytella strigata* powder, 80% cassava flour), Formulation 2 (30% *Mytella strigata* powder, 70% cassava flour), and Formulation 3 (40% *Mytella strigata* powder, 60% cassava flour). The analysis ($F = 2.82$, $p > 0.05$) revealed mean scores of 7.43 (SD = 1.46), 7.10 (SD = 1.90), and 6.40 (SD = 1.77) for Formulation 1, 2, and 3, respectively, with no significant differences at the 0.05 level. Thus, all formulations exhibit similar color acceptability, rated moderately by respondents.

Table 7
One-way ANOVA Results in Terms of Taste

Formulation	Mean	SD	Description	Test of Homogeneity of Variances		
				Levene's Statistics	F	Sig
1	8.03	0.96	Like Very Much			
2	7.97	1.10	Like Very Much	1.83	2.33	.10
3	7.47	1.25	Like Very Much			

The table shows the one-way ANOVA results for taste indicate no significant differences among the three formulations: Formulation 1 (20% *Mytella strigata* powder, 80% cassava flour), Formulation 2 (30% *Mytella strigata* powder, 70% cassava flour), and Formulation 3 (40% *Mytella strigata* powder, 60% cassava flour). The analysis ($F = 2.33$, $p > 0.05$) revealed mean scores of 8.03 (SD = 0.96), 7.97 (SD = 1.10), and 7.47 (SD = 1.25) for Formulation 1, 2, and 3, respectively, with no significant differences at the 0.05 level. Thus, all formulation exhibits similar taste acceptability, rated favorably by respondents.

Therefore, the uniform positive feedback ("Like Very Much") across formulations implies successful product development, aligning with recent trends in consumer preference studies where taste remains a critical determinant of product success (Ahmed et.al, 2022).

Table 8
One-way ANOVA Results in Terms of Crispiness

Formulation	Mean	SD	Description	Test of Homogeneity of Variances		
				Levene's Statistics	F	Sig
1	8.43	0.68	Like Extremely			
2	8.30	0.99	Like Extremely	3.23	3.82	.04
3	7.77	1.22	Like Very Much			

Group Differences

Formulation	Mean Differences	Sig	95% Confidence Interval (LL- UL)	
1-2	.13	.90	-.41	.67
1-3	.67*	.04	.03	1.30
2-1	-.13	.90	-.67	.41
2-3	.53	.19	-.17	1.24

*. The mean difference is significant at the 0.05 level.

The table shows the one-way ANOVA results for crispiness indicate significant

differences among the three Formulations: Formulation 1 (20% *Mytella strigata* powder, 80% cassava flour), Formulation 2 (30% *Mytella strigata* powder, 70% cassava flour), and formulation 3 (40% *Mytella strigata* powder, 60% cassava flour). The analysis ($F = 3.82$, $p < 0.05$) and subsequent Dunnett's T3 post hoc test revealed that Formulation 1 ($M = 8.43$, $SD = 0.68$) had significantly higher crispiness scores compared to Formulation 2 ($M = 8.30$, $SD = 0.99$) and Formulation 3 ($M = 7.77$, $SD = 1.22$). This indicates that Formulation 1 is the most acceptable in terms of crispiness.

Conclusions

This study intended to identify the physico-chemical characteristics of *Mytella striga* powder and determine its acceptability level as a kropek with different formulations. Based on the findings, the research objectives were likely achieved.

In conclusion, the evaluation of *Mytella strigata* powder and cassava flour mixtures revealed significant findings. The physicochemical properties, including a pH of 6.32, bulk density of 0.456 g/cm³, and moisture content of 5.11%, indicate the powder's stability and suitability for food applications. Color analysis confirmed consistent lightness, greenish, and yellowish hues across trials. Sensory evaluations highlighted that Formulation 1 (20% *Mytella strigata* powder, 80% cassava flour) was significantly preferred in appearance ($F=4.79$, $p<0.05$) and crispiness ($F=3.82$, $p<0.05$). While aroma, color, and taste did not show significant differences, overall acceptability favored Formulation 1, demonstrating its superior sensory attributes and potential for food product development.

Recommendations

The study's recommendations revolve around harnessing the potential of *Mytella strigata*, an underutilized marine resource, to develop innovative and sustainable food products. For food entrepreneurs, it is suggested to incorporate *Mytella strigata* powder as a functional ingredient, optimize the cassava flour-to-powder ratio, and enhance the appearance and crispiness of the resulting products. This would allow for diversifying offerings and providing consumers with more nutritious options.

Government agencies are urged to support the development and commercialization of *Mytella strigata*-based products by offering technical and financial assistance, as well as establishing regulations and quality standards. This would help ensure the safety and consistency of these novel food items.

Furthermore, future researchers are encouraged to delve deeper into the nutritional and functional properties of *Mytella strigata* powder, explore its feasibility in a wider range of food applications, and investigate the environmental and economic implications of its utilization. This holistic research approach would further bolster the development and commercialization of sustainable *Mytella strigata*-based food products.

Compliance with Ethical Standards

By obtaining informed consent, using random codes, providing orientation and breaks, making safety arrangements, and conducting follow-ups, the researcher systematically carried out the sensory evaluation in an ethical manner that protected participants' rights and welfare.

Acknowledgments

The researcher would like to express her heartfelt gratitude to the following individuals and organizations who have played a crucial role in the successful completion of this research endeavor.

First and foremost, the researcher would like to express her sincere appreciation to her thesis adviser, Dr. Junnafe D. Daleon, for her unwavering guidance, invaluable insights, and constant support throughout the research process. Her expertise and mentorship have been instrumental in shaping the direction and quality of this work.

The researcher would also like to extend her gratitude to the esteemed panel of evaluators, comprising of Prof. Nivea Louwah D. Sermona, Dr. Alenogines L. San Diego, Dr. Grace S. Pimentel, and Prof. Vilma D. Zacal, for their constructive feedback, insightful suggestions, and their willingness to share their knowledge and experience.

The researcher's sincere appreciation goes to Hon. Sabiniano "Ben" S. Canama, the Tangub City Mayor, Hon. Eddie S. Gomez, and the Barangay Council Members of San Apolinario, Tangub City, for their support and collaboration throughout this research endeavor.

The researcher would like to express her gratitude to the University of Science and Technology of Southern Philippines in Panaon, Misamis Occidental, and its esteemed director, Dr. Leny Q. Añasco, for graciously allowing the use of their Food Laboratory facilities, which played a crucial role in the successful completion of this research.

The researcher is deeply grateful to the following individuals for their unwavering support and constant encouragement throughout this journey: Celso C. Almirol, Christopher R. Balaba, Denver Ian L. Gimeno, Arvie Joy A. Llido, Mary Jane A. Moralia, Jed Anthony Ceballos, Engr. Mark Rey Z. Embodo, the BTLED students, and the DTLED faculty. Their contributions, both tangible and intangible, have been invaluable.

Last but not least, the researcher would like to extend her heartfelt appreciation to her parents and siblings, whose unconditional love and support have been a constant source of inspiration and motivation throughout this endeavor.

To all of you, the researcher is genuinely grateful for your involvement and support in making this research successful.

REFERENCES

Ahmed, M. W., Haque, M. A., Mohibbullah, M., Khan, M. S. I., Islam, M. A., Mondal, M. H. T., & Ahmmed, R. (2022). A review on active packaging for quality and safety of foods: Current trends, applications, prospects and challenges. Food Packaging and Shelf Life, 33, 100913Adobo Magazine. (2017, May 16). Snack food purchase among Filipino homes rising, Kantar Worldpanel study shows. Adobo Magazine.

Balaba, C. R., & Diel, A. M. (2024). Microbial and Nutritional Analysis of Charru Mussel Powder and Its Acceptability Level. Ignatian International Journal for Multidisciplinary Research, 2(5), 363–374. https://doi.org/10.5281/zenodo.11114879

Barbosa-Cánovas, G. V., & Juliano, P. (2005). Physical and chemical properties of food powders. In Encapsulated and powdered foods (pp. 51-86). CRC press.

Beuchat, L.R., et al. (2013). Low-water activity foods: increased concern as vehicles of foodborne pathogens. Journal of Food Protection, 76(1), 150–172.

Espejo-Hermes, J. (1998). Fish processing technology in the tropics. Tawid Publications.

Estrella, S. (2022, September 1). Kropek: The history of our favorite prawn cracker. Pepper.ph. https://pepper.ph/blog/kropek-history

Jones, L., & Martinez, P. (2020). Color stability in food products: Factors influencing consumer perception. Journal of Food Quality, 35(4), 287-295. https://doi.org/10.1111/jfq.12567

Mosca, A. C., van de Velde, F., Bult, J. H., van Boekel, M. A., & Stieger, M. (2015). Taste enhancement in food gels: Effect of fracture properties on oral breakdown, bolus formation and sweetness intensity. Food Hydrocolloids, 43, 794-802.

Mohamadi, X., Deng, Y., Matinfar, G., Singh, A., Mandal, R., Pratap-Singh, A. (2020). Impact of three different dehydration methods on nutritional values and sensory quality of dried broccoli, oranges and carrot. Foods, 9(10), 1464

Otunola, E. T., Sunny-Roberts, E. O., Adejuyitan, J. A., & Famakinwa, A. O. (2012). Effects of addition of partially defatted groundnut paste on some Properties of 'kokoro'(a popular snack made from maize paste). Agriculture and Biology Journal of North America, 3(7), 280-286.

Peryam, D. R., & Pilgrim, F. J. (1957). Hedonic scale method of measuring food preferences. Food Technology, 11, Suppl., 9–14.

Roos, Y. H., & Drusch, S. (2015). Phase transitions in foods (2nd ed.). Academic Press.

Smith, R., Brown, T., & Lee, K. (2021). Physicochemical properties of marine-based food powders. International Journal of Food Science and Technology, 56(7), 3456- 3464. https://doi.org/10.1002/ijfs.15023

Taewee, T. K. (2011). Cracker "Keropok": A review on factors influencing expansion. International Food Research Journal, 18(3), 855-866.

Ueda, J. M., Morales, P., Fernández-Ruiz, V., Ferreira, A., Barros, L., Carocho, M., & Heleno, S. A. (2023). Powdered Foods: Structure, Processing, and Challenges: A Review. Applied Sciences, 13(22), 12496.

Younes, O.S., Sorour, M.A., Mohamed, E.N. (2016). Effect of microwave on drying of parsley plant. Middle East Journal of Applied Sciences, 6(4), 1100–1109

Zambrano, M. V., Dutta, B., Mercer, D. G., MacLean, H. L., & Touchie, M. F. (2019). Assessment of moisture content measurement methods of dried food products in small-scale operations in developing countries: A review. Trends in Food Science & Technology, 88.

APA Citation:

Gemoros, M. C. J., Daleon, J. D., & Sermona, N. L. D. (2024). PHYSICOCHEMICAL ANALYSIS OF CHARRU MUSSEL (Mytella strigata) POWDER AND ITS ACCEPTABILITY AS KROPEK. Ignatian International Journal for Multidisciplinary Research, 2(8), 304–316. https://doi.org/10.5281/zenodo.13207966

Corresponding author: *marycris.gemoros@ustp.edu.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

POTENTIALS, RISKS, AND ETHICAL IMPLICATIONS IN THE UTILIZATION OF AI-POWERED TOOLS IN EDUCATION

Genevieve J. Bongcac, PhD
Asuncion P. Pabalan, PhD

Holy Name University, Tagbilaran City, Bohol, Philippines

https://doi.org/10.5281/zenodo.13285255

ABSTRACT

This study aimed to assess the perspectives of educators on the use of AI-powered tools in education, analyze the ethical implications, and propose a framework for responsible utilization. The study was conducted in 10 schools in Tagbilaran City, Bohol, known for their urban location and reliable internet accessibility. A validated interview questionnaire was utilized to gather viewpoints on AI-powered tools, benefits, risks, and ethical considerations. The findings highlighted significant utilization of AI-powered tools in education, including virtual tutoring systems, virtual assistants, chatbots, content creation and recommendation systems, video conferencing applications, and assessment tools. Perceived benefits included enhanced content creation, virtual tutoring support, improved accessibility to information, and administrative efficiency, while perceived risks included overdependence on AI, academic integrity problems, automation concerns, biases, privacy, accuracy and reliability issues. The use of AI-powered tools in education raises ethical concerns, particularly regarding academic integrity. Participants expressed apprehensions about plagiarism and copyright infringement, emphasizing the risk of students exploiting AI to copy content without proper citation, potentially undermining the reliability of academic output. Furthermore, concerns are raised about academic dishonesty, including using AI for exam answers and using AI-generated content as original work, prompting a need for comprehensive strategies to balance the benefits of AI integration with ethical considerations to preserve academic integrity. Overall, the study underscores the importance of responsible AI utilization to maximize benefits while minimizing risks, advocating for clear ethical guidelines, critical thinking skills development, further research, and policy framework for ethical utilization of AI-powered tools in education.

Keywords: *Artificial Intelligence Tools, Potentials, Risks, Ethical Implications, Policy Framework*

INTRODUCTION

The 21st century has been marked by unprecedented technological advancements that have profoundly influenced nearly every facet of human existence. Among the most notable of these influences is the transformation observed in the field of education, largely driven by the proliferation of artificial intelligence (AI) technologies. The integration of AI into educational settings has introduced a range of tools that offer significant potential to enhance both teaching and learning. AI-powered educational tools, including intelligent tutoring systems and adaptive learning platforms, are designed to cater to individual students' needs, learning paces, and styles, thereby fostering greater engagement and comprehension (De La Vall & Araya, 2023). Moreover, the automation of administrative tasks by AI tools enables educators to devote more time to high-value activities such as personalized student interactions.

Recent studies highlight the extensive adoption of AI-based tools in educational contexts. For instance, Garrel and Mayer (2023) found that 63.4% of German students utilize AI tools like ChatGPT for their studies. These statistics underscore the widespread acceptance and application of AI tools in education.

However, the rapid integration of these technologies into educational practices raises several ethical concerns. Issues related to biases, data privacy (Selwyn, 2019), technological dependency (Ghosh et al., 2019), and educator autonomy (Deci & Ryan, 2020) are increasingly prominent. The potential for AI tools to mimic human writing poses additional challenges, such as the risk of academic dishonesty. Despite 75% of students acknowledging the unethical nature of cheating using AI apps, over 30% believe their teachers lack awareness of this issue (Intelligent.com, 2023). These challenges highlight the urgent need for ethical oversight and the development of responsible policies governing the use of AI in education.

The purpose of this study is to investigate educators' perspectives on the use of AI tools in educational settings, focusing on their experiences, challenges, and ethical concerns. By analyzing these perspectives, the study aims to contribute to the formulation of policies and guidelines that address potential harms while maximizing the benefits of AI in education. The findings are expected to provide a foundation for administrators to develop ethical principles and best practices, ensuring that AI tools are used responsibly and effectively to support students' educational needs.

Understanding educators' perspectives on the utilization of AI is crucial for crafting policies that mitigate potential harms while maximizing benefits. A comprehensive analysis of these perspectives will facilitate the formulation of ethical principles and best practices that address educators' concerns and ensure that AI-powered tools effectively support students' educational needs. This study aims to establish a foundational

framework for administrators to develop policies and guidelines regarding the ethical use of AI within educational settings.

The integration of AI into education promises substantial improvements in both teaching and learning outcomes. AI-driven tools have the potential to revolutionize educational experiences by personalizing lessons, automating administrative tasks, and enhancing accessibility. Nonetheless, the advancement of AI also presents significant ethical and societal challenges. To foster an inclusive and equitable learning environment, it is imperative to establish clear policies and guidelines that govern the responsible use of AI in education.

Theoretical frameworks such as the Computational Theory of Mind (McCulloch & Pitts, 1943) provide insights into the similarities between human cognition and computational processes, influencing the development of AI algorithms. The concept of Technological Singularity (von Neumann, 1958) raises concerns about the implications of machines surpassing human intelligence, emphasizing the need for ethical considerations to guide AI's growth (Williams, 2021). Additionally, the study of Machine Ethics or Morality explores the ethical dimensions of AI systems and their decision-making capabilities. The Capability Approach (Nussbaum, 2007) offers a framework for evaluating AI's role in enhancing human agency and autonomy.

The incorporation of AI in education, exemplified by intelligent tutoring systems and adaptive learning platforms, represents a significant advancement. These tools can provide personalized instruction and automate grading processes, improving efficiency and effectiveness (Anderson et al., 1995; Ritter et al., 2007). AI's impact extends to language learning and educational management systems, offering tailored support and enhancing accessibility (Abdulla, 2023; Blikstein, 2018). Despite these benefits, ethical concerns, including data privacy and the potential for increased inequality, must be addressed (Selwyn, 2019).

In summary, the integration of AI in education necessitates a balanced approach that considers both the transformative potential and the ethical implications. Establishing robust guidelines and regulatory frameworks will ensure that AI technologies are used responsibly, promoting equitable access and safeguarding educational integrity.

Research Questions

This study aimed to assess the varying perspectives of educators on the utilization of AI-powered tools within the secondary schools of Tagbilaran City, for school year 2023-2024, analyze the ethical implications of their use, and contribute to the development of a policy framework for responsible and equitable implementation.

Specifically, it sought to answer the following questions:

1. What AI-powered tools are commonly used by educators in the secondary schools of Tagbilaran City?
2. What are the potential benefits of AI-powered tools in education?

3. What are the perceived risks associated with AI-powered tools in education?
4. What are the ethical implications in the utilization of AI-powered tools in education?
5. What policy framework can be developed to address the issues on the utilization of AI-powered tools in education?

METHODOLOGY

This succeeding discussion deals with the research design, subjects of this investigation, research environment, data gathering procedure, the instrument used, and the statistical technique employed in testing the data.

Research Design

This study employed a descriptive qualitative design to thoroughly explore the collective perspectives and experiences of educators, specifically school heads and teachers, regarding the utilization of AI-powered tools in educational institutions. Purposive sampling was used to select participants, focusing on school heads and teachers who were familiar with and actively employed AI tools in their administrative functions and pedagogical practices. Individual interviews were conducted to gather insights into their experiences and opinions concerning artificial intelligence. Through this approach, the researcher aimed to gain a comprehensive understanding of the viewpoints and ethical implications associated with AI-powered tools in education, which would contribute to the development of policy frameworks, strategies, and ethical guidelines for the responsible application of AI tools.

Research Environment

The research was conducted across ten schools in Tagbilaran City, Bohol, including four private and six public schools. The selection of these institutions was based on their geographic location, which was primarily urban and provided easy access to the Internet. Internet connectivity was considered crucial for this study due to its reliance on AI tools requiring online access. Additionally, the researcher's established connections with the secondary schools were essential in facilitating the study.

Research Participants

The study involved school heads and teachers from ten secondary schools in Tagbilaran City, Bohol, including six public and four private institutions. A total of 4 school heads and 11 teachers participated, offering insights into the use of AI-powered tools in education. The participation was predominantly from teachers due to the limited familiarity of school heads with AI tools.

Table 1. Distribution of respondents

	Type of School		Number of Participants	
School	Public	Private	School Heads	Teachers
A	✓		1	1
B	✓			1
C	✓		1	1
D	✓			1
E	✓		1	
F	✓			1
G		✓		1
H		✓		1
I		✓	1	2
J		✓		2
Total	6	4	4	11

Research Instrument

This study utilized a validated, self-designed interview questionnaire. The tool was reviewed and validated by experts in ICT and education to examine various viewpoints and ethical considerations regarding using AI-powered tools in educational settings. The questionnaire targeted teachers and school heads to gather insights on how AI tools affected their responsibilities, potential benefits and risks, and ethical issues. The findings were intended to inform the development of policies and recommendations for AI's effective and ethical use in education.

Data Gathering Procedure

Data collection began with obtaining permission from the Program Head of the Graduate Studies. Following this, the researcher sought approval from the Tagbilaran City Schools Division Superintendent. Formal requests were then sent to the heads of public and private schools. Once approvals were granted, a pre-survey was conducted to identify eligible teachers and school heads who met the criteria. Selected participants received a consent form outlining the study's purpose and procedures. After obtaining their consent, interview schedules were arranged with the participants to ensure convenience and adherence to ethical standards. The interview venues were chosen by the respondents, considering accessibility and availability.

Data Analysis

The data collected from the interviews were processed through the following steps: First, the audio recordings were transcribed verbatim. Next, the transcribed data were systematically organized and coded for analysis. Patterns, themes, and relationships within the data were then identified. Thematic analysis was employed to uncover recurring themes, patterns, and detailed descriptions in the qualitative data. This approach

facilitated the comparison and validation of results. Finally, the identified themes were interpreted within the context of the research objectives and relevant literature.

By synthesizing the findings, the study provided valuable insights for policymakers, curriculum planners, and educators regarding AI's transformative potential and ethical challenges. It assisted in the development of policies that ensure the ethical use of AI in education.

RESULTS

This chapter presents, analyzes, and interprets the study's findings. Employing thematic analysis, the researcher examines school heads' and teachers' perspectives on using AI-powered tools in educational settings, analyzes the ethical implications, and contributes to developing a framework for responsible and equitable integration of these tools.

Table 2 reflects the participants' responses regarding the AI-powered educational tools they have used.

Table 2. Respondents' commonly used AI-powered tools in education

Category	Code
1. Intelligent Tutoring System	Photomath, Brainly, Duolingo, Perplexity
2. Virtual Assistant and Chatbots/Content Creation and Recommendation System	Grammarly, Co-pilot, Quillbot, Chat GPT Gemeni, Elicit.org, Slides AI, Canva AI
3. Video Conferencing and Messaging Apps	Zoom, Google Meet, Messenger
4. Assessment Grading Tool	Gradecam, Zipgrade

The research respondents identified several categories of AI-powered tools they have used, as detailed in Table 2. These categories were based on the tools' functions or modes of operation.

Category 1: Intelligent Tutoring Systems include tools like Photomath, Brainly, Duolingo, and Perplexity. These systems provide personalized and adaptive learning experiences, supporting school heads, teachers, and students by addressing their specific needs.

Category 2: Virtual Assistants, Chatbots, and Content Creation Tools encompass examples such as Grammarly, Co-pilot, Quillbot, ChatGPT, Gemini, Elicit.org, Slides AI, and Canva AI. These tools assist educators with creating content, writing tasks, and multimedia production, enhancing instructional techniques and lesson planning.

Category 3: Video Conferencing and Messaging Applications, including Zoom, Google Meet, and Messenger, play a significant role in remote learning by facilitating collaboration and communication in hybrid or distance learning environments.

Category 4: Assessment Grading Tools, such as Zip Grade and Gradecam, automate the grading process, offering efficient and accurate feedback. These tools help optimize instructional time and provide prompt feedback to students.

The utilization of these AI-powered tools has a notable impact on educational methodologies, offering various approaches to meeting learning needs, improving teaching efficacy, and adapting to dynamic educational settings.

Table 3. Perceived benefits of AI-powered tools in education

Category	Code
1. Enhanced Content Creation or Content Innovation	• Error reduction and enhanced output quality • Tailored lessons • Innovative strategies • Idea generation enrichment
2. Virtual Tutoring and Support	• Improved learning outcomes • Promotion of active learning • Facilitated learning • Reinforcement of understanding
3. Virtual Assistant and Chatbots	• Broader range of ideas • Valuable resource assistance • Enhancement of teaching styles and instructional practices
4. Enhanced Accessibility to Information	• Continuous availability and rapid response provision • Increased speed and convenient access to valuable information
5. Administrative Efficiency	• Increased productivity • Reduced workload and stress • Time efficiency • Automated quiz grading and calculation

Table 3 outlines the respondents' views on the benefits of using AI-powered tools in education. The advantages, categorized into several groups, include enhanced content creation, virtual tutoring and support, virtual assistants and chatbots, and improved accessibility to information and administrative efficiency.

Category 1: Enhanced Content Creation or Innovation highlights how AI tools aid in developing new educational content, reducing errors, and improving the quality of outputs. Respondents reported that AI tools facilitate lesson planning tailored to students' preferences and abilities, introduce innovative teaching methods, and generate additional ideas. These benefits are particularly valuable for lesson planning and addressing instructional needs.

Category 2: Virtual Assistants, Chatbots, and Tutoring reflects the significant advantages of AI tools that support teachers and students. Virtual assistants and chatbots provide diverse ideas, promote active learning, and reinforce concepts. This aligns with research by Idroes et al., which noted that AI's role as a virtual assistant enhances lesson delivery and real-time support, benefiting the teaching process (Idroes et al., 2023).

Category 3: Enhanced Accessibility to Information demonstrates how AI tools improve the speed and convenience of information retrieval. Respondents noted that AI facilitates continuous access to valuable resources, thereby increasing productivity and efficiency. This finding supports Di Xu and Jaggars' (2014) assertion that AI-driven tools offer continuous support and guidance, enhancing the learning environment. Idroes et al. (2023) also highlighted AI's role in providing universal access to education, including for students with special needs.

Category 4: Administrative Efficiency illustrates AI's impact on streamlining administrative tasks, such as grading and quiz calculations. Respondents reported that AI tools reduce workload and stress by automating these tasks, which aligns with Ritters' findings that AI enhances grading efficiency and feedback quality (Ritter et al., 2007). This automation allows educators to focus on other essential aspects of teaching, improving overall productivity and creating a more engaging learning environment.

The utilization of AI-powered tools offers significant benefits in enhancing educational methodologies, improving content creation, supporting teaching and learning processes, and optimizing administrative tasks.

Table 4. Perceived risks or drawbacks caused by AI-powered tools

Category	Code
1. Overdependence on AI	• Dependency on AI-generated ideas or concepts, • Reduced critical thinking, creativity, and academic engagement • Student laziness
2. Academic Integrity	• Difficulty in authenticating students' outputs • Plagiarism/Copyright infringement • Inadequacy of the element of originality in students' outputs
3. Displacement of Teachers	• Teacher job displacement • Teacher workforce reduction • Instructional dilution
4. Biases	• Perspective limitation caused by biased algorithms • Misinformation proliferation
5. Privacy Concerns	• Data privacy violation • Security risks • Unauthorized data access
6. Accuracy and Reliability	• Deprivation of authentic learning • Erroneous quality of content • Unreliability of output
7. Cost and Access	• Educational resource inequities

Table 4 presents the perceived risks and drawbacks associated with AI-powered tools as identified by the respondents. The key areas of concern include overdependence on AI, academic integrity, teacher displacement, biases, privacy concerns, accuracy and reliability, and cost and access.

Category 1: Overdependence on AI highlights the risk that excessive reliance on AI may undermine critical thinking, creativity, and academic engagement among students. Respondents expressed concern that this could foster a culture of student laziness. This aligns with Walter's (2024) findings, which suggest that AI might diminish critical thinking skills.

Category 2: Academic Integrity addresses concerns about verifying the authenticity of students' work. Respondents worried that AI tools could lead to plagiarism and copyright infringement, compromising the originality and uniqueness of student outputs.

Category 3: Teacher Displacement reflects fears that AI might lead to job loss and a decrease in instructional quality due to automation of teaching tasks. Automation could reduce the demand for human labor in tasks like grading and administrative duties, potentially displacing teachers and affecting the quality of education. This concern highlights the potential loss of personalized attention and the unique skills educators bring to the learning process.

Category 4: Bias involves the limitations arising from biased algorithms, including the spread of misinformation. These issues could exacerbate social injustices and undermine efforts for inclusive education. Biased algorithms may lead to inaccurate educational content, impeding students' ability to evaluate information critically.

Category 5: Privacy Concerns pertain to potential data privacy breaches, security vulnerabilities, and unauthorized data access. The increased use of technology in education raises risks of data breaches, threatening the confidentiality of sensitive information and potentially diminishing trust in educational platforms. Effective data protection mechanisms and clear privacy policies are crucial to addressing these issues.

Category 6: Accuracy and Reliability concerns the quality and dependability of AI-generated content. Respondents noted occasional flaws or inaccuracies in AI outputs, emphasizing the need for rigorous review processes to ensure the accuracy and reliability of AI-produced information.

Category 7: Cost and Access highlights the risk of increasing inequities in educational resources due to the unequal availability of AI technologies. High costs and limited internet connectivity can widen the digital divide, as noted by Taylor (2023). This concern aligns with the 2021 European Commission Report and UNESCO's advocacy for strategic goals and fair utilization of AI in education, stressing the importance of addressing disparities in AI access and infrastructure (Nguyen et al., 2022; UNESCO).

Addressing these concerns is crucial for ensuring AI's responsible and equitable integration in education.

Table 5. Ethical implications in the utilization of AI-powered tools in education

Category	Code
Academic Integrity	• plagiarism • copyright infringement • dishonest behavior to gain an unfair advantage in academic assessments/cheating • collaborating with others using AI without permission • difficulty in authenticating students' outputs • inadequacy of the element of originality in students' outputs

Table 5 outlines the ethical implications of integrating AI-powered tools in education. The primary ethical concern identified is academic integrity. Respondents highlighted several issues related to this domain:

Firstly, there is a significant concern about plagiarism and copyright infringement. Respondents noted that students might be tempted to copy content directly from AI-generated sources without proper citation, thereby compromising academic integrity and originality. Such behavior violates established ethical norms and undermines the credibility of students' work.

Additionally, participants expressed worries about academic dishonesty, including the potential for students to use AI technology to generate answers for examinations or produce academic work that is presented as their own without acknowledging the original sources. This misuse of AI tools could provide an unfair advantage and distort the assessment of student performance.

Educators also face challenges in verifying the authenticity of student outputs, especially when AI tools heavily assist in content creation. This situation complicates evaluating the originality of student work and raises concerns about the genuineness of responses.

These concerns collectively underscore the ethical implications of AI in education, emphasizing the need to address these issues to uphold academic integrity. To effectively manage these implications, adopting a balanced approach that integrates AI technology while implementing strategies to mitigate its potential drawbacks is crucial. This approach is essential for preserving the integrity of student learning and maintaining educational priorities in the digital age.

Table 6. Summary of themes on the potentials, risks, and ethical implications in the utilization of AI-powered tools in education

AI-powered Tools Commonly Used by Respondents	Perceived Benefits of AI-powered Tools Used in Education	Perceived Risks of AI-powered Tools Used in Education	Ethical Implications of AI-powered Tools
• Intelligent Tutoring System • Creation and Recommendation System • Virtual Assistant and Chatbots	• Enhanced Content Creation or Content Innovation • Virtual Tutoring and Support • Virtual Assistant and Chatbots • Enhanced Accessibility to Information • Administrative Efficiency	• Overdependence on AI • Displacement of Teachers • Bias • Privacy Concerns • Accuracy and Reliability • Cost and Access	• Academic Integrity

Table 6 summarizes the themes related to four specific sub-problems concerning using AI-powered tools in education. The first column lists the AI-driven tools utilized by respondents. The second column details the benefits perceived from these tools. The third column outlines the perceived risks or drawbacks identified by participants. The final column, "Ethical Implications of AI-Powered Tools," highlights the complex ethical issues associated with AI in education. This table provides a comprehensive overview of the benefits, risks, and ethical considerations, offering valuable insights into the challenges and advantages of AI integration in educational settings.

DISCUSSION

Findings

The following are the significant findings of the study:

1. AI-Powered Tools Commonly Used in Education

The findings revealed that the respondents utilized a diverse range of AI-powered tools in education across various categories. Within the context of Intelligent Tutoring Systems, the respondents commonly employed Photomath, Brainly, Duolingo, and Perplexity to enhance teaching and learning experiences.

Similarly, Virtual Assistants, Chatbots, and Content Creation and Recommendation Systems have been predominantly utilized. Tools such as Grammarly, Co-pilot, Quillbot, Chat GPT, Gemeni, Elicit.org, Slides AI, and Canva AI are particularly popular among users.

Additionally, Video Conferencing and messaging applications like Zoom, Google Meet, and Messenger are extensively utilized for remote learning and collaboration.

Finally, assessment and grading tools such as Gradecam and Zipgrade are employed for efficient evaluation processes. Overall, these findings indicate the

significant integration of AI-powered tools in education, catering to various needs from tutoring and content creation to assessment and communication.

2. Perceived Benefits of Using AI-powered Tools in Education

The perceived benefits of using AI-powered tools cut across various categories. In terms of enhanced content creation or innovation, the respondents highlighted benefits such as error reduction, improved output quality, tailored lessons, innovative strategies, and enrichment in idea generation. Virtual Tutoring and Support through AI tools were perceived to improve learning outcomes, promote active learning, facilitate learning processes, and reinforce comprehension. Virtual Assistants and Chatbots were seen as broadening the range of ideas, providing valuable resource assistance, and enhancing teaching styles and instructional practices. Enhanced accessibility to information was observed, including continuous availability and prompt response provision, increased speed, and convenient access to valuable information.

Administrative efficiency benefits included increased productivity, reduced workload and stress for teachers, time efficiency, and automated quiz grading and calculation, signifying the multifaceted advantages perceived by users or respondents.

3. Perceived Risks or Drawbacks of Using AI-powered Tools

The findings regarding the risks of using AI-powered tools, as per respondents' perspectives, highlight several aspects:

Overdependence on AI was identified as a risk factor, leading to dependency on AI-generated ideas, reduced critical thinking, creativity, and academic engagement resulting to student laziness. Academic integrity problems were also raised, including difficulty in verifying authenticity of students' outputs, plagiarism and copyright infringement issues.

The automation stemming from the use of AI-powered tools also raised concerns about teacher displacement, workforce reduction, and instructional dilution. Biases were also identified as well, such as perspective limitations caused by biased algorithms and the proliferation of misinformation. Additionally, privacy concerns, such as data privacy violations, security risks, and unauthorized data access, were identified. Furthermore, accuracy and reliability issues were pointed out, like the deprivation of authentic learning experiences, erroneous content quality, and the unreliability of outputs. Cost and access inequalities were also recognized, indicating inequities in educational resource distribution. These findings showed the multifaceted risks associated with the adoption of AI-powered tools in education, necessitating careful consideration and mitigation strategies.

4. Ethical Implications on the Utilization of AI-Powered tools in education

The incorporation of artificial intelligence (AI) into the field of education has given rise to a number of ethical concerns, with a particular focus on the issue of academic integrity. The respondent’s express concerns regarding the potential for AI to facilitate plagiarism and academic dishonesty, thereby compromising the principles of originality

and authenticity in academic work. Educators also encounter significant challenges when it comes to verifying student outputs that heavily rely on artificial intelligence. Addressing these concerns is essential to uphold academic integrity, necessitating a balanced approach that maximizes AI's benefits while reducing potential drawbacks to prioritize student learning and development in the digital era.

Conclusions

Artificial Intelligence (AI) holds immense promise in improving various aspects of life, particularly in education where it offers a multitude of benefits. mOREver, alongside these advantages, it is important to address the potential negative impacts it brings. Focus should be placed on mitigating risks through various strategies or interventions. However, it is essential to emphasize the importance of advocating for ethical and responsible utilization of AI in education in order to foster an environment of integrity and uphold academic honesty within schools.

Thus, the need for further research and responsible utilization of AI-powered tools is deemed necessary for a balanced approach that maximizes advantages while identifying solutions to minimize the risks involved.

Recommendations

In the light of the findings and conclusions, the following recommendations are offered:

1. Clear Ethical Guidelines and Supervision Mechanisms on the use of AI-powered tools should be established through the:
    a. development of a comprehensive set of ethical guidelines specifically addressing concerns on academic integrity;
    b. creation of a review process for evaluating AI tools considering factors such as their impact on student learning outcomes, potential biases, and alignment with educational objectives;
    c. implementation of training sessions and seminars for educators, staff and students to ensure they understand and adhere to the ethical guidelines and are competent to supervise and monitor AI tool usage.

2. Critical Thinking Skills Development Activities should be integrated by means of:
    a. designing interdisciplinary projects that require students to analyze and solve complex problems using AI-powered tools, encouraging them to critically evaluate information and consider multiple perspectives;
    b. incorporating debate sessions or discussions focusing on the ethical implications of AI technologies, encouraging students to articulate their viewpoints and engage in respectful discourse.

3. Further research is encouraged and recommended to gain thorough understanding of the impact of artificial intelligence, maximize its potential benefits, and mitigate associated risks.

4. Proposed policy framework for the ethical use of AI should be utilized as bases for formulating comprehensive ethical guidelines anchored on the specific needs of the different educational institutions.

Compliance with Ethical Standards

In accordance with the ethical guidelines in conducting research, the researcher strictly followed the highest ethical standards in conducting the study. The manuscript underwent a thorough assessment by the Holy Name University Ethics Review Board to assure full compliance. Prior to conducting the study, the researcher fulfilled the necessary prerequisites, including obtaining a permission letter and endorsement from the Schools Division Superintendent, among other things.

Before the start of the interview, the participants were reminded of the importance of confidentiality and anonymity during the process, emphasizing that their responses would be treated with the utmost confidentiality and would not be attributed to them individually. The interview lasted for about 25-30 minutes. With the consent of the respondents, the said interview was recorded and later was transcribed. Participation in the study was purely voluntary and the participants were not bound to any responsibility. They might withdraw their participation anytime without penalty.

To ensure the participants' anonymity, strict measures were implemented throughout the research process. All collected data were stored securely and confidentially, with access limited to only to the researcher and authorized personnel directly involved in the study. During data analysis, any identifying information such as names or specific personal details were removed or replaced with codes to maintain confidentiality. After the conduct of the study, all data collected were destroyed. Additionally, in any future publications or presentations, participants would be referred to using generic terms or codes to further safeguard their anonymity.

POLICY FRAMEWORK ON THE ETHICAL UTILIZATION OF AI-POWERED TOOLS IN BASIC EDUCATION

I. RATIONALE

The rapid advancement and widespread adoption of artificial intelligence (AI) technology across various sectors of society have changed ways of life, occupations, and educational practices. Over the past few years, there has been a noticeable rise in the utilization of AI-powered tools within the field of education. These tools have demonstrated their ability to provide innovative methods aimed at improving the overall quality of teaching and learning experiences. The utilization of artificial intelligence (AI) tools in the field of education holds great promise, as it encompasses a wide range of applications which have the potential to bring about a transformative impact on education including customized assistance to students and simplifying administrative responsibilities for educators. However, the rapid adoption or use of these technologies

raises ethical concerns due to their adverse impacts like threats to academic integrity or dishonesty.

Considering the increasing prevalence and usage of AI-powered tools in learning institutions, it is necessary to establish a policy guideline that govern its utilization to ensure that all activities conducted in relation to AI is in line with the desired educational objectives and values. These guidelines can establish specific criteria that educators can follow when selecting and utilizing AI tools, with the aim of maximizing their advantages while reducing any associated risks.

The threat to academic integrity is considered one of the most significant potential risks associated with the utilization of AI-powered tools in education. Given the advanced capabilities of artificial intelligence (AI) in generating content and delivering prompt responses, it is important to acknowledge the potential increase in the risk of students resorting to AI tools that could lead to academic dishonesty, such as cheating or plagiarism. Policy guidelines play an important role in addressing the aforementioned risk by providing a framework that outlines clear standards and corresponding consequences for both students and educators with regards to the ethical utilization of AI technology in order to maintain academic integrity and prevent cheating.

Through the establishment and promotion of a culture centered around integrity and accountability, the implementation of policy guidelines can effectively safeguard the integrity of education. These guidelines serve the purpose of ensuring that AI-powered tools are utilized responsibly, with the primary objective of supporting student learning and fostering their overall development.

II. SCOPE

The scope of this policy is to establish a comprehensive framework for the ethical utilization of AI-Powered tools in the field of education, with the primary objective of upholding academic integrity.

This policy shall apply to:

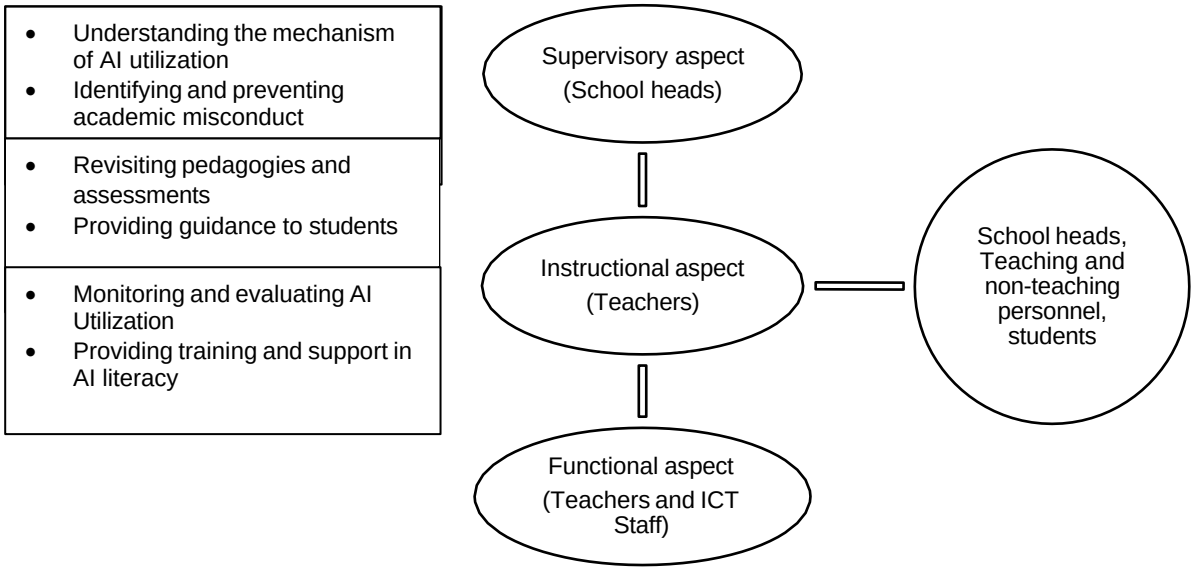
1. School heads and administrators
2. Teaching and non-teaching personnel
3. Learners in public and private elementary and secondary schools

III. POLICY STATEMENT

This policy provides the framework and enabling mechanism for the ethical utilization of AI-powered tools in the basic education department. It is directed towards addressing the issues and concerns and the risks brought about by AI that challenge the integrity of educational process.

IV. POLICY GUIDELINES

A. Conceptual Framework



The conceptual framework outlined covers three major aspects: supervisory, instructional, and functional, each with its own goals and responsibilities aimed at ensuring the ethical utilization of AI-powered tools in education.

Under the supervisory aspect, school heads play an important role in understanding how AI may be appropriately used in education. This entails understanding the fundamental mechanisms of AI technologies, such as their potential, drawbacks, and possible impact on learning and teaching.

School principals are responsible to upholding academic integrity in the schools they supervise. With the emergence of AI technology, they must identify possible areas for academic misconduct caused by AI and adopt measures to prevent it. This may entail creating AI use policies, procedures, and ethical guidelines.

In the instructional aspect, teachers have the main task to revisit their instructional methodologies and assessment methods to effectively use AI in the teaching process. This could include revising pedagogies and developing ways to evaluate AI-generated work and give useful feedback to students. They are also entrusted with the responsibility of ensuring the proper use of AI tools, as well as providing guidance to students throughout the process.

For the functional aspect, teachers and ICT staff are responsible for monitoring and evaluating the effectiveness of AI in education. This includes monitoring student progress and determining the impact of AI on learning outcomes. Teachers and ICT staff must be equipped with the knowledge and skills needed to properly use and guide students with AI tools and technologies. This involves training in AI literacy, learning how

to use AI-powered instructional resources, and troubleshooting any technical challenges that may arise.

B. Guidelines and Procedures

1. The school governing body plays an important role in ensuring the effective and ethical utilization of AI technologies, making sure that they are in line with and promote the educational aims and objectives of the Department of Education.
2. The establishment of a culture of academic integrity within the school community, emphasizing the values of honesty, fairness, and ethical conduct in all academic endeavors must be given priority.
3. School heads should prioritize providing training and support for teachers and staff members to enhance their understanding of AI mechanisms and promote academic integrity in its utilization. This can be achieved through regular workshops and seminars focusing on understanding AI, ethical practices, and plagiarism detection.
4. The school administrators should lead by example, demonstrating ethical leadership in their own actions and decisions and promoting a culture of ethical behavior throughout the school community.
5. School heads should respond promptly and appropriately to any ethical concerns of academic misconduct in AI utilization, conducting thorough investigations and taking corrective actions as necessary to uphold academic integrity and maintain trust within the school community. They must ensure that claims of misconduct are investigated promptly, thoroughly, and impartially, with appropriate safeguards to protect the rights of all parties involved.
6. Teachers should serve as role models of ethical behavior in their own AI-related activities, demonstrating honesty, transparency, and integrity in their teaching, research, and interactions with students. If AI is used in preparing course materials, this should be acknowledged. Strategies for assessing AI-generated work should be developed in order to detect any forms of cheating.
7. ICT staff should support the implementation and enforcement of academic integrity policies and guidelines within the school. They should provide technical guidance and support to teachers and students through training and education sessions in using AI technologies and tools ethically and responsibly.
8. Students should be educated about copyright laws and intellectual property rights, emphasizing the importance of obtaining permission before using or sharing copyrighted materials and encourage originality and creativity while respecting the intellectual contributions of others.
9. A mechanism for monitoring compliance with academic integrity policies and guidelines, including the use of plagiarism detection tools, and investigation of reported violations should be implemented.
10. To uphold academic integrity in schools, it's essential to adhere to the following specific guidelines in using AI-powered tools:
    a. The use of AI for completing assignments, tests, or any evaluations must be approved first by the teacher.
    b. AI tools may be used as an aid in learning and research to gather information, identify relevant sources, and generate ideas for projects and essays, provided

that they are cited appropriately according to established citation styles (e.g., APA, MLA).

c. AI tools may be used to assist with grammar checks, sentence structure, and paraphrasing (with proper citation).

d. Assignments should emphasize critical thinking, problem-solving, and analysis to discourage relying solely on AI. When AI is used for this purpose, teachers have the right to request the original work logs from AI interactions if deemed necessary.

e. Teachers should ensure that AI projects and assignments are evaluated fairly and impartially, based on established criteria and standards. Evaluation criteria should be transparent, communicated in advance, and applied consistently to all students.

f. To check originality of assignments, teachers should employ strategies to detect AI-generated work. (e.g. asking students to discuss or present ideas in class, counter check submitted outputs.)

g. If a plagiarism checker is available, students will be asked to submit similarity index.

h. All forms of academic dishonesty are prohibited including:

- Copying, paraphrasing, or presenting AI-generated contents without proper acknowledgement
- Falsifying data or manipulating research results using AI tools
- Submitting AI-generated work as one's own without proper citation
- Using AI to conduct unauthorized collaboration on individual assignments
- Manipulating AI tools to excel in assessments and examinations
- Using AI to generate fake data or results
- Using of technology in the classroom to gain an unfair advantage over others
- Sharing exam questions or answers with AI-enabled cheating networks for unfair advantage

11. The consequences for violating the AI academic integrity policy should be clearly outlined and enforced to maintain the integrity of the academic institution.

The following are the suggested consequences:

a. Student Violations

First Offense:

- The student receives a formal warning and must attend a session on academic integrity or undergo counselling.
- The student may be required to redo the assignment.

Second Offense:

- The student may receive a failing grade for the subject in which the violation occurred.
- The student could be placed on academic probation for a specified period.

Repeated Offenses:

- The student may face suspension from the school.

- In severe or repeated cases, the student may be expelled from the institution.

b. Faculty and Staff Violations:

- Faculty or staff may receive a formal reprimand and be required to undergo training.
- Continued violations could lead to suspension or demotion.

V. Appeals Process

It is important that the consequences are proportionate to the severity of the violation and that they are consistently applied. The policy should also allow for discretion based on individual circumstances. An appeals process should be in place to ensure that disciplinary procedures are fair, consistent, and conducted in accordance with due process.

VI. Monitoring and Evaluation

The school administration shall oversee the monitoring and evaluation of the implementation of this policy framework to ensure strict compliance. Appropriate monitoring, and evaluation tools shall be developed. This shall include the documentation of good practices as well as issues and challenges in the implementation of the Policy Framework and how they are addressed. Regular reviews will be conducted to assess the effectiveness of these guidelines and adapt them as necessary.

The adherence to this Academic Integrity Policy is essential for maintaining the credibility, reputation, and ethical standards of academic institutions in the age of AI. By steadfastly upholding these principles, it is hoped for that academic integrity will be preserved, fostering a culture characterized by honesty and excellence.

REFERENCES

Abdulla, A. D. 2023. Duolingo - The Language Learning Hack. International Journal of Educational Technology in Higher Education. Retrieved from https://myspringring.com/blog/edtech-tool-review-duolingo

Anderson, J. R., Corbett, A. T., Koedinger, K. R., & Pelletier, R. (1995). Cognitive tutors: Lessons learned. *The Journal of the Learning Sciences, 4*(2), 167-207.

Anderson, T., & Dron, J. (2011). Three Generations of Distance Education Pedagogy. *The International Review of Research in Open and Distributed Learning, 12*(3), 80-97.

Blikstein, P. (2018). AI, Analytics, and the Future of Learning. *Educause Review.*

Di Xu & Shanna S. Jaggars (2014) Performance Gaps between Online and Face-to-Face Courses: Differences across Types of Students and Academic Subject Areas, The Journal of Higher Education, 85:5, 633-659, DOI: 10.1080/00221546.2014.11777343

Ghosh, B. et al. (2019) Taking a systems approach to adopting AI. Harv Bus Rev. https://hbr.org/2019/05/taking-a-systems-approach-to-adopting-ai

Idroes, G. et al. 2023. Students Perspectives on the Role of Artificial Intelligence in Education: A Survey-Based Analysis. Journal of Educational Management and Learning 1(1):2023. DOI:10.60084/jeml.v1i1.58

Intelligent.com. (2023, January 23). *Nearly 1 in 3 College Students Have Used ChatGPT on Written Assignments.* Retrieved from https://encr.pw/j9Yuf

McCulloch, W. S., & Pitts, W. (1990). A Logical Calculus of the Ideas Immanent in Nervous Activity. Bulletin of Mathematical Biology, 52, 99-115. Retrieved from https://bit.ly/48YAL8C

Nguyen, A., Ngo, H.N., Hong, Y. *et al.* Ethical principles for artificial intelligence in education. *Educ Inf Technol* 28, 4221–4241 (2023). https://doi.org/10.1007/s10639-022-11316-w

Ritter, L. A., & Sue, V. M. (2007). Introduction to using online surveys. First published. https://doi.org/10.1002/ev.230

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology, 61,* Article 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

Selwyn, N. (2019). *Should robots replace teachers? AI and the Future of Education*. (1st ed.) Polity Press.

Taylor, Kiara. 2023. The Digital Divide: What It Is, and What's Being Done to Close It. https://www.investopedia.com/the-digital-divide-5116352

Walter, Y. (2023). Embracing the future of Artificial Intelligence in the Classroom: the relevance of AI literacy, prompt engineering and critical thinking in modern education. *International Journal of Educational Technology in Higher Education* volume 21, Article number: 15 (2024)

Williams, M. S. (2021, August 8). Technological Singularity: An Impending "Intelligence Explosion." Retrieved from https://bit.ly/3Otspxk

APA Citation:

Bongcac, G. J., & Pabalan, A. P. (2024). POTENTIALS, RISKS, AND ETHICAL IMPLICATIONS IN THE UTILIZATION OF AI-POWERED TOOLS IN EDUCATION. Ignatian International Journal for Multidisciplinary Research, 2(8), 413–432. https://doi.org/10.5281/zenodo.13285255

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

PROCESS EVALUATION FOR THE 8-WEEK READING REMEDIATION: A BASIS FOR ENHANCEMENT

Edwin M. Balderas Jr. [1], Edilhynie M. Jambangan [2]

[1] *Ampon National High School, Davao City, Philippines*
[2] *University of Southeastern Philippines, Davao City, Philippines*

https://doi.org/10.5281/zenodo.13335003

ABSTRACT

This qualitative research study employed phenomenological approach to conduct a process evaluation for the 8-Week Reading Remediation Program in identifying issues and challenges faced by reading teachers and coordinators drawing out proposed improvement to enhance the effectiveness of the program. Based on the findings, the themes derived revealed numerous issues, including insufficient funding, communication gaps, lack of training, limited parental involvement, inadequate monitoring, and implementation deficiencies. As a result, identified themes in the challenges revealed were resource constraints, unfitting materials, scheduling difficulties, teacher-role mismatches, student absenteeism, limited communication, unreliable results, and inconsistent resources. The process evaluation categorized proposed improvement into four components: development focused on securing resources and promoting collaboration, implementation strategies emphasized comprehensive teacher training, schedule adjustments, and elevating reading to a core subject, monitoring initiatives aimed to increase parental involvement and robust program monitoring, and feedback demands consistency to enhance resource quality. The results highlighted the need for substantial program enhancement that provides training on intervention strategies, enhance teachers' skills with localized workshops, develop participatory training programs, implement effective teaching approaches, and examine the effectiveness of localized reading materials.

Keywords: *challenges, enhancement, issues, process evaluation, reading remediation, reading teachers*

INTRODUCTION

Reading is crucial for academic success, as weaknesses in this area hinder learning across disciplines. Remediation of reading inadequacies is vital for reducing educational gaps and enhancing competencies for further education. The prevalence of various reading programs in schools underscores the ongoing significance of reading challenges for learners.

In the global context, Weikert (2018) stressed the importance of reading remediation in addressing learners' unique needs, providing targeted support to prevent long-term academic difficulties and boost confidence. This personalized approach helps close achievement gaps, improve overall academic performance, and align interventions with students' learning styles and preferences to enhance academic success and close learning gaps.

In the Philippines, schools were tasked with fostering proficient readers among students as part of the Department of Education's initiatives like the 3B's Initiative, or "Bawat Bata Bumabasa" (DepEd, 2019). However, the COVID-19 lockdowns have exacerbated the issue of students' reading comprehension nationwide. According to UNICEF, less than 15% of 3 in every 20 learners can read simple texts (de Vera, 2022).

To help struggling readers improve their reading comprehension and prepare for the next grade level in advance of classes during the summer, the Division of Davao City launched the 8- Week Reading Remediation, also known as the 8-Week Reading Curriculum for Struggling Readers (DepEd Davao City, 2021). This program is designed to provide intensive, focused instruction that caters to the individual needs of each student, ensuring they gain the necessary skills to succeed in the upcoming school year.

Despite efforts, the Philippines continues to rank poorly in reading comprehension, placing in the bottom 10 out of 81 countries in the most recent PISA assessment (Servallos, 2023). While there was a slight improvement from being the lowest in 2018 to 76th out of 81 countries in 2022, indicators show a decrease of 4.3 percent in reading comprehension among low-performing students, with no improvement among top-performing students. This ongoing struggle negatively impacts students' academic performance (Southeast Asia Primary Learning Metrics, 2021).

This necessitates further investigation to determine why such issues persist despite the implementation of reading programs. This study also evaluated the effectiveness of the 8-Week Reading Remediation Program by examining the challenges encountered by reading teachers during its implementation. The purpose of this research was to offer recommendations and improvements to enhance the reading program, thereby better addressing the needs of the students.

Research Questions

The research study aimed to explore the issues and challenges received by the reading teachers in the conduct of the 8-week reading remediation program and evaluate its process to seek solutions and improvement. To address the above-cited problem, an answer to the following questions were sought:

1. What are the issues and challenges experienced by the reading teachers in the conduct of the 8-week reading remediation program?
2. What are the proposed improvement of the 8-week reading remediation program?

METHODOLOGY

This qualitative study employed phenomenological approach to explore and understand the lived experiences of people and meanings in natural settings, aiming to provide rich descriptions of complex phenomena, albeit often within a limited scope (Casey, 2000). This method was used in this study to identify the issues and challenges faced by the reading teachers in implementing the 8-Week Reading Remediation Program. The results obtained through in-depth interviews were then used to offer improvements to the program.

Sources of Data

For this study, data were gathered via in-depth interviews with six (6) reading teachers from a designated school cluster within the Division of Davao City. Recognizing the importance of ensuring the accuracy and reliability of these insights, the researcher conducted additional in-depth interviews with three (3) reading coordinators from the same school cluster. This approach was taken to validate and corroborate the teachers' experiences, thereby enhancing the credibility and trustworthiness of the study's findings.

In addition, data saturation was met when the responses of the three (3) reading teachers consistently echoed similar themes, which were then affirmed by the reading coordinators, indicating that a comprehensive understanding had been achieved within the qualitative study

Data Gathering Instrument

The researcher used a semi-structured questionnaire during the interviews that consisted of two parts: the first sought to identify problems that arose during the 8-Week Reading Remediation Program implementation, and the second sought suggestions for improving the program's effectiveness.

The first version of the questionnaire had undergone rigorous validation from experts. After pilot testing and inter-rater reliability assessment with a rating of 3.864, the final

version was created. Then, the questionnaire was utilized during the in-depth interviews to identify areas that required improvement and to solicit ideas on addressing the difficulties associated with the 8 - Week Reading Remediation Program being studied.

Sampling Technique

The participants of this study were selected using purposive sampling from the selected schools in one of the clusters in Davao City. The reading teachers and reading coordinators were also purposively selected using a set of criteria to realistically explain the phenomenon that this study wanted to address.

The selection of reading teachers and coordinators adhered to specific criteria: they had to be reading teachers or reading coordinators within the school, with a minimum of three years teaching experience, proficient in Cebuano, Filipino, and English languages, and had consideration of gender diversity. This specific sampling technique was used to emphasize the specific resemblances among participants and their relevance to the research subject (Etikan *et al.,* 2016).

Procedures of the Study

The data collection of this research employed the following steps;

Seeking Approval of the Research Protocol. The researcher ensured approval and guidance for this study from their advisor, technical panel members, and validators before proceeding with the study.

Seeking permission. The submission of letters was the initial stage. To request approval for the required participation, a letter was sent to the Schools Division Superintendent of Davao City. When the letter was accepted, it was sent to the principals of the chosen schools where the research participants who had been identified were situated.

Securing consent from the participants. Signed consent was also obtained from the study participants. They were informed of the research objectives and provided a clear understanding of the research to be conducted. The participants were also informed of their right to withdraw from the study without consequences.

Setting up the interview. The next step was setting the time and place for interviews. The researcher identified the place and time available and convenient for the participants, which was mutually agreed upon by both parties.

Interview proper. The last stage was the interview proper. The participants were informed of the necessary steps to be taken by the researcher, such as recording their responses on a laptop and taking down notes on their responses. The reading teachers were initially interviewed, followed by interviews with the reading coordinators to validate the collected data. The researcher started using in-depth interviews with participants which involved detailed discussions to explore their perspectives, experiences, and insights on a

particular topic or phenomenon (while maintaining professionalism and respect (Eppich *et al.,* 2019)

Gathering and analysis of the data gathered. The digitally recorded in-depth interviews and focus group discussions were transcribed and analyzed. Additionally, the researcher assured the respondents of the confidentiality of these data.

Data Analysis

In analyzing the interviews, the researcher used Thematic Analysis using the seven steps of Colaizzi's Method to systematically treat the qualitative data collected from participants in the 8-Week Reading Remediation Program.

First, was transcribing the audio-recorded interviews. *Second*, was extracting and numbering of transcriptions according to their significance to the study. *Third,* was formulating a more general statement for each significant statement. *Fourth,* was clustering of the codes to form into themes. *Fifth,* was developing of the exhausted descriptions based on the synthesis of all the theme clusters. *Sixth,* was identifying the fundamental structure through a careful analysis of the description of the phenomenon under study. And *seventh*, was returning to the participants for validation of their answers. The final step had ensured that their intended meaning was conveyed in the fundamental structure of the phenomenon and was given opportunity to provide additional information for the inclusion of the final description of the process of the implementation of the 8-Week Reading Remediation Program.

RESULTS

The Issues and Challenges Experienced by Reading Teachers in the Conduct of the 8- Week Reading Remediation Program

Insufficient funding emerged as a significant issue, while the challenge it posed was the reproduction constraint. The issue on lack of participatory planning between reading teachers led to the challenge on use of inappropriate materials, and scheduling conflict further complicated the planning and execution of the program. Additionally, the issue on the lack of training resulted in lack of teacher participation, while the issue on parental involvement deficiency contributed to higher rates of students' absenteeism, exacerbating the challenge of communication barriers. The limited program monitoring posed a big challenge on the fabrication of results; and data-driven improvements which was hampered by the issue on implementation deficiency and resulted in the last identified challenge which was supplement uniformity.

These themes collectively undermined the program's effectiveness and highlighted the need to enhance the efficacy of reading remediation efforts and achieve meaningful improvements in student literacy.

Insufficient Funding

One of the pressing issues in the implementation of the 8-Week Reading Remediation program was insufficient funding. This referred to the inadequacy of financial resources to cover necessary expenses, such as materials, which hindered the reading program's ability to achieve its literacy objectives. Furthermore, this was seen as a major issue in the aspect of program development. Reading teachers A claimed:

“Yes. One of them is that there were no textbooks. As I said, there were no printed materials. We were not able to print individual reading materials. In our case, we lack enough bond papers and photocopiers.” - Reading teacher A

The same supplies were mentioned by Reading teachers C and F. Teachers utilized printers and bond papers to reproduce materials needed for the reading programs. The statements were as follows:

“We need to consider that some schools like us does not have enough allocations for printers, bond papers and inks. It would break the printers if we print everything.” - Reading teacher C

“Our school faced limited resources in terms of materials, and funding for remediation programs. Uhhm these resources involve the production of reading resources such as photocopy machines, inks and bond papers.”- Reading Teacher C

These statements were affirmed by Reading coordinators A and C:

“The problem with the limitation of printing resources. Ang MOOE man gud is budgeted na ba, di sya pwede na mahurot ra for bond papers tanan or pampalit ug photocopier.” [The problem with the limitation of printing resources.The MOOE was already budgeted and it should not be spent entirely for the purchase of bond papers and photocopiers]. - Reading Coordinator A

“Another is again the financial constraints. Limited financial support was given to us that’s why we were also limited on the implementation since we just used the given budget.” - Reading Coordinator C

Reproduction Constraint

Because of the issue of insufficient funding, the challenge faced by schools in implementing the program was the time constraint in reproducing the reading materials. Thus, the limited supplies and equipment hindered teachers from adequately catering to each student's needs in terms of the learning resources to be used in the remediation.

The shortage of resources, such as modules and books, necessitated the printing of materials within the school premises. This experience was affirmed by Reading Coordinators A and B, as they stated that:

“We couldn’t find time to print and if we could, wala mi photocopier.” [We couldn’t find time to print and if we could, we don’t have photocopier machines. - Reading Coordinator A)

“Furthermore, there was also a constraint in the reproduction of the reading materials would take hours due to the number of pages and the number of students to be provided.” - Reading Coordinator A

The reading teachers D, and C furthered this claim by mentioning:

“Actually, sir sa printing, wala jud nako nabuhat pud sir na maprint tanan para sa mga bata.” [Actually, in printing, I was not able to print enough for all students] - Reading teacher D

“First, ahh the reading materials itself its already a challenge because its only few, we need to print a lot of modules which takes a lot of time and resources.” - Reading teacher D

One major barrier to offering learning materials to every student in need of remediation was thought to be the time required to reproduce the reading materials. The time required for printing had also interfered with teachers' ability to do their main jobs.
Reading teacher B revealed that:

“If the teachers are the one who provide the materials, magtake pa mi ug time namo magprint mi so mabawasan among time for something else like checking of papers, feedbacking sa essay etc.” [If the teachers are the ones who provide the materials, it will take so much time to print and our time for checking papers, feedback and essays and other activities will be lessened.] - Reading teacher B

Lack of Participatory Planning

Another issue experienced by the reading teachers was the lack of participatory planning in the crafting of the program, that hampered its flexibility to cater to different contexts. Participatory planning entailed the essential involvement of reading teachers in program design, prompted by the challenges encountered during implementation. Reading teacher E strongly supported this by stating:

“ahhm ang implementation mismo sa program sir dapat mahan-ay jud siya ilabi na sa ilahang planning gud sir, lisod man gud kung sila sa taas ang magdesign sa program kay di nila masabtan ang situation ni teacher sa field inig implement. Siguro involvement ni reading coor jud sir sa pagplano sa program.” [The implementation of the program itself needs to be organized especially in the planning. It is really difficult when the program

heads design the program, because they can't understand the situation of the teachers in the field during the implementation. I think the reading coordinators should be part of the program planning.] - Reading teacher E

The lack of participatory planning was a common issue among reading teachers in various schools. They emphasized the need for collaborative planning to create contextualized reading materials and flexible schedules, stating:

"Wala man gud nila giklaro ang instructions sir ba na kita na jud ang mangita ug reading passages na fit sa atong context gud sir." [The instruction wasn't clear if it was us who will look for reading passages that would fit our context.] - Reading teacher D

"I guess the heads should think of ways on how to solve this problem in schedules like probably making a separate of different way on how to implement this in our schedule as TVE curriculum, but as you know we only accept and implement what is mandated." - Reading teacher B

These statements underscored the particular difficulties arising from insufficient teacher participation in program planning, notably in the identification of contextualized reading materials. Contextualized teaching and learning in reading comprehension were vital as they facilitated meaningful connections between text and students' lived experiences, thereby enhancing comprehension, retention, and critical analysis skills (Sambayon, et al., 2023).

As affirmed by Reading Coordinator B:

"In terms of strategies, provision of indigenized or localized reading materials provided individually would be the best. However, this could only be achieved if there was a participation of reading teachers and reading coordinators in the crafting of the program." - Reading Coordinator B

Lack of Participatory Planning

Another issue experienced by the reading teachers was the lack of participatory planning in the crafting of the program, that hampered its flexibility to cater to different contexts. Participatory planning entailed the essential involvement of reading teachers in program design, prompted by the challenges encountered during implementation. Reading teacher E strongly supported this by stating:

"ahhm ang implementation mismo sa program sir dapat mahan-ay jud siya ilabi na sa ilahang planning gud sir, lisod man gud kung sila sa taas ang magdesign sa program kay di nila masabtan ang situation ni teacher sa field inig implement. Siguro involvement ni reading coor jud sir sa pagplano sa program." [The implementation of the program itself needs to be organized especially in the planning. It is really difficult when the program heads design the program, because they can't understand the situation of the teachers

in the field during the implementation. I think the reading coordinators should be part of the program planning.] - Reading teacher E

The lack of participatory planning was a common issue among reading teachers in various schools. They emphasized the need for collaborative planning to create contextualized reading materials and flexible schedules, stating:

“Wala man gud nila giklaro ang instructions sir ba na kita na jud ang mangita ug reading passages na fit sa atong context gud sir.” [The instruction wasn’t clear if it was us who will look for reading passages that would fit our context.] - Reading teacher D

“I guess the heads should think of ways on how to solve this problem in schedules like probably making a separate of different way on how to implement this in our schedule as TVE curriculum, but as you know we only accept and implement what is mandated.” - Reading teacher B

These statements underscored the particular difficulties arising from insufficient teacher participation in program planning, notably in the identification of contextualized reading materials. Contextualized teaching and learning in reading comprehension were vital as they facilitated meaningful connections between text and students' lived experiences, thereby enhancing comprehension, retention, and critical analysis skills (Sambayon, et al., 2023).

As affirmed by Reading Coordinator B:

“In terms of strategies, provision of indigenized or localized reading materials provided individually would be the best. However, this could only be achieved if there was a participation of reading teachers and reading coordinators in the crafting of the program.” - Reading Coordinator B

Inappropriate Materials

Due to the lack of participation in the program planning, one of the major challenges that the reading teacher faced was the deficiency of unified materials that fit the needs of the learners. Consequently, it led to confusion among reading teachers as to what materials to use and their appropriateness for each grade level. This situation was witnessed by Reading teachers D and B who pointed that:

“Wala pud tay kanang coming from the division gani sir na unified na materials. We only had the grade 7 baya sir in the Phil IRI. Kahit na ano sir, kanang from 8-12 diba wlay klaro ang materials. Bisan pa ug pre-test sir lisod. Pareho ra ang 8 and 9 and 10 and 11 so the level of the abilities of the learners dili siya ano.” [We also don’t have a unified material coming from the division. We only have the Grade y Phil IRI. We don’t even have materials for Grade 8-12. Even the pre-test is hard because we use that same material for Grades 8,9,10 and 11. The levels are very different.] - Reading teacher D

“The struggle for the implementation in terms of limitation of resources is that we had to print only the materials in the Phil-IRI but in choosing the materials, we were thinking, “tama aba tong pinili namin? Kaya ba to nang bata?” [The struggle for the implementation in terms of limitation of resources is that we had to print only the materials in the Phil-IRI but in choosing the materials, we were thinking, “Have we chosen the appropriate one? Can the student answer this?] - Reading teacher B

Both reading teachers acknowledged the lack of adequate reading materials for remediation, noting that the Phil IRI manual alone was insufficient. Reading Teacher B further elaborated on this issue, stating:

“Sa Phil IRI mao man jud na ang gina-use pero for me, the result is not that reliable. Dili jud siya reliable sir para sa akoa jud. And then, mao mana ang advise sa atoa na kana ang gamiton, so, mao pud jud na akong ginagamit.” [Phil IRI is what we use but for me, the result is really not reliable for me. Then, that is what was advised for us to use, so that was what I was using.] - Reading teacher E

The coordinator’s experiences highlighted the inadequacy of the provided reading materials to be used in the program. As observed by Reading Coordinator B:

“The main resources that we used were coming from the Phil IRI package. However, the package only has until Grade 7 reading materials. When the program was implemented to include the grade 12, there were no materials readily available to be used or as advised, use the grade 7 for the entire year levels.” - Reading Coordinator

Scheduling Conflict

Another challenge brought by the lack of involvement in program planning was the difficulty in scheduling the reading sessions in the congested curricula where time for reading programs competed with many other subjects for attention, leading to a problem known as "subject congestion,” which negatively affected student engagement. The time and resources needed to carry out reading interventions, successfully, were reduced by this dilemma. This case was noted by Reading Teachers B and E:

“The major issue for the implementation of the intervention programs is actually time. Particularly because the big schools and some schools in cluster 9 are specialized STVE curriculum, so we don’t have vacant time, but the other schools have. I’m not sure how many vacant time the other schools have. In our case, we have the standard subjects plus 2 hours of TVE every day. So that’s from grade 7 up to grade 12. Although we have advisers time, it overlaps my other class for other year level.”- Reading teacher B

“Tech Voc school mi sir and we have ten subjects no sa grade 7 to grade ten. 10 subjects kay naa silay entrep and technical drawing and ICF. So, gamay ra pd mi na teachers.. and then ang klase namo is 7:30 to 4:30 loaded kaayo mi sir.. Naay uban gani over kaayo ilang load especially the Tech Voc ahh katong mga nagtrack ug TVE so loaded kaayo mi and ang implementation mismo sa program si kay medyo maglisod jd ko kay di jd ko

makatouch mismo sa mga teachers because mao lage to loaded kaayo sila." [Translation: Since we are under technical vocational curriculum, we have 10 subjects from Grade 7 to Grade 10. Ten subjects because we have entrepreneurship and Technical Drawing and our classes are from 7:30 am to 4:30 pm. We are heavily loaded with subjects. This hinders the implementation of the program because I can't ask for help from other teachers because the other teachers are loaded with subjects] - Reading teacher E

Both reading teachers from a school with a Tech Voc Curriculum highlighted the difficulty of finding time to implement the program due to overloaded subjects and a congested schedule. Reading Teacher D expanded on this, emphasizing the schedule conflicts caused by overlapping activities. Reading Teacher D shared:

"Sa karung face to face sir, medyo overlapping na jud ang activities sir ba. So ang gibuhat namo, wala jud namo to naimplement sir. Because it's hard for us to insert the reading activities because we have 10 subjects baya sir." [Now that we are having face to face, there were overlapping activities. That's why we were not able to implement the program, because it's hard for us to insert the reading activities because we have ten subjects] - Reading teacher D

The time constraints also mentioned by the reading coordinators in the STVE Curricula and the overlapping activities had made it difficult to include in the schedule the Reading Remediation Program. As affirmed by Reading Coordinators A and B:

"Pero kung ako ang pabut-on, cguro need nato pangitaan ug schedule ang remediation diri sa school ilabi na kay ang head sa reading wala siguro kahibalo sa cases nato di sa TechVoc schools." [If I were to decide, we really need to find schedules for remediation especially that our reading head does not know our situation in Tech Voc schools. - Reading Coordinator A

"I think the biggest problem is the schedule. The program was implemented during summer and was later inserted during the school year. However, it was difficult to focus only in reading because teachers have numerous subjects to teach. - Reading Coordinator B

Lack of Training

The insufficient training of reading teachers was a major issue that many reading teachers faced during the program's implementation. The lack of training denoted an absence of systematic instruction or preparation in a particular skill or knowledge area essential to the conduct of reading programs. During implementation, reading coordinators observed this circumstance, as Reading Coordinators A and C disclosed:

"One thing is the training. Most reading teachers lack training in the conduct of the program because only the coordinators were required to join and they were on online format." - Reading Coordinator A

“It would be more effective I think if all teachers are engaged and trained with the necessary skills in implementing the program.” - Reading Coordinator C

These statements accentuated the challenges faced by the reading teachers in the lack of training in the reading program implementation. This resulted in limited training for the teachers under their care. Reading teacher E noted that:

“Kanang ako sir kulang jud ko anang training para maimplement nako tarung ang program. Kanang kulang ko ug dapat jud ko matrain unsay mga pamaagi para mahan-ay despite sa mga challenges ug mga issues na muface nato as reading ano coordinator.” [There must be trainings. I admit that I lack training to implement the program properly. I am really lacking and I need the training on the ways on how to implement the program properly despite the issues and challenges that we face as reading coordinators.] - Reading teacher E

Reading Teacher E emphasized the need for training, admitting that this was a skill she lacked in the program's implementation. Other teachers expanded on this, highlighting that training was essential for establishing a clear direction and vision for the implementation:

“There was no proper training on our end on how to implement or, where to start ahhm what to do with the materials. The materials were provided but we were tasked to choose on our own accord but the problem was again there was no ahh orientation on the timeline on when was the exact date to begin, how to proceed with it, ahmm the papers that should be done with it.” - Reading Teacher B

“Lastly, we need to be properly guided on the implementation through a more comprehensive and teacher training for reading coordinators. I think this will prevent us from being lost in the process.” -Reading Teacher A

Teacher’s Participation

The limited number of reading teachers as program implementers in schools necessitated participation from other teachers to get involved. However, their lack of expertise brought challenges due to their limitations. Undoubtedly, in fostering a holistic approach to literacy development, the involvement of non-language teachers in the reading program gave a huge challenge in enhancing students' overall literacy skills. Consequently, the absence of training among participating teachers uncovered their reluctance to engage, stemming from apprehensions about making mistakes and a lack of preparedness. Reading teachers D and B made a strong claim about this as they revealed:

“Ang teachers pud, one of the science teachers approached me. Willing to help man si Mam. But when she implemented the reading materials na gihatag, na-correct man siya sa bata sa pronunciation. Giduol ko niya “kanang Mam” kanang sorry jud kayo. Gusto jud ko mutabang pero lahi man jud no? Thankful ko kay mam kay willing jud kayo mutabang si mam. Nakatawa lage siya kay ang bata nagcorrect niya. Mao to, wla na siya

nagpadayun." [As for the teachers, one of the Science teachers approached me. She was willing to help, but when she implemented the reading material given to them, she was corrected by the student in pronunciation. She approached me and said, "Ma'am, I am really sorry. I really want to help but this is really different." I am thankful for her willingness to help. She even laughed that a student corrected her. So that was the reason why she didn't continue.] - Reading teacher D,

"Hindi man ako English teacher, hindi man ako Filipino major, pano ko yan gagawin?" Or How am I going to do that when that's not my major or I don't specialize on that?" [I'm not an English teacher, I'm not a Filipino major, how would I do that? Or How am I going to do that when that's not my major or I don't specialize on that?] - Reading teacher B

The hesitation from non-language teachers to become reading teachers reflected their lack of expertise in the field, highlighting the disparity in their skills. Additionally, the heavy workloads and limited number of school personnel further constrained their participation. As Reading Teacher C shared:

"We have limited time and personnel. In our case as a newly established school, we only have few teachers. That means that we handle numerous subjects. I think that was the main reason why most of them are not really into this program because it would be an extra burden for them." - Reading teacher C

Training was very important for the teachers to implement the program effectively. Because of the limited number of language teachers in a school, non-language teachers were asked to assist, consequently causing slip-ups in the implementation, hesitation, and confusion. Furthermore, to meet the needs of the teachers who would carry out the program, it became clear that all needed to receive training. But this problem was exacerbated by time constraints and the lack of initiatives by the personnel in the Department. As confirmed by the Reading Coordinators A, B, and C;

"Ang uban medyo naa pud hesitance na mujoin kay dili lage sila kabalo sa program pud." [Others are hesitant to join because they also don't know how to implement it.] - Reading Coordinator A

"I understand the case of the teachers that they were already bombarded with tasks, ancillaries and deadlines." - Reading Coordinator B

"Because we are all reading teachers. Whatever subject matter you are focused on, we are all considered as reading teachers and we are all capable of teaching our students the skill of reading." - Reading Coordinator C

Parental Involvement Deficiency

One other aspect of the reading program's implementation that was thought to have contributed to the myriads of issues was the deficiency in parental involvement. This referred to the active participation and engagement of parents or guardians in their

children's educational activities, including but not limited to school events, homework assistance, and communication with teachers (Iroegbu and Igweike, 2020). However, the lack of parental participation in the monitoring of students' progress in reading intervention was perceived as a great issue. This condition was also witnessed by Reading Coordinators B and C:

"In terms of monitoring their progress at home, it was really difficult because of the absence of involvement of parent in their child's learning progress." - Reading Coordinator B

"Parental support was also limited during the program. Some parents were not responsive when they were asked to get the reading materials in school." - Reading Coordinator C

The statements of the coordinators confirmed the need for improvement in the participation of parents during the remediation program. It was undeniable that parents should be seen as partners with teachers in fostering student success through collaborative efforts to support academic, social, and emotional development (Lekli and Kaloti, 2015). This difficulty was noted by the reading teachers A, and F as they declared:

"I think the very first thing is the parent's participation. Parents need to monitor their children's progress and guide them in reading at home and refrain them from frequently using their phones." - Reading Teacher A

"Siguro because sa ilang balay jud walay follow up reading from parents and guardians so lisod jud kayo." [Maybe the difficulty was because at home, there was no follow up of their reading tasks from parents and guardians] - Reading teacher E

These statements highlighted the need for more participation from parents in the reading progress of their child. Furthermore, parents had to understand and perform their part in watching over and supporting their children at home (Tomas et al., 2021). This was furthered by Reading Teacher F in her claim that:

"…lack of parental involvement or support from parents to provide guidance to the activities provided to students under remediation." - Reading teacher F

Student's absenteeism

The issue in the lack of parental guidance resulted in a challenge in the student's presence during the program implementation, which affected the consistent participation and had impeded learning outcomes. The persistent or prolonged absence of students from school led to missed opportunities for participating in activities aimed at addressing their reading problems. Dismally, students who should be participating in reading remediation had the highest number of absences during its conduct. The Reading teachers A and D identified this problem and expressed that:

“One of them is the students’ absenteeism, because not all students are present during the conduct of the reading activities. To add, most of the students who are in need of improvement are the ones who are frequently absent.” - Reading teacher A

“But the problem sir is no participation due to absences kay luoy pud sila sir ba. They came from a kanang luoy na family. … xxx … Ang problema wala man pud cooperation sir uy.” [But the problem is no participation due to absences because of their situation at home. They came from a poor family. … xxx … However, I don’t see and cooperation from them.] - Reading teacher D

The reading teachers’ statements emphasized the presence of the students targeted for remediation since reading was a nonstop process of enhancement. In cases where students were sent materials to work on them at home, Reading Teacher E experienced an almost similar dilemma.

“And syempre the long time problem nato which is the absenteeism. Lisod jud sir kay if padad-an ug module di mu-answer. Karun na face-to-face na, di muskwela. Mao jud ni ang struggle sa pagpabasa sa ilaha kay wala man sila.” [and of course, our long-time problem in absenteeism. ..xxx, because when you send them modules, they won’t answer. Now in face-to-face, they won’t go to school. This is the struggle in letting them read and they are not around.] - Reading teacher E

Reading Coordinators A and B confirmed these statements by stating that:

“The primary factor siguro is the absences of the students. Most students jud na kelangan ug remediation sa reading were mostly absent.” [Maybe the primary factor is absenteeism. Most students who are in need of remediation were the ones mostly absent.] - Reading Coordinator A

“However, most were really a problem due to absenteeism. It was really a problem because we needed to provide help for them but the problem is that they were not always in school.” - Reading Coordinator B

Communication Barriers

Monitoring learners' progress in the conduct of the program was seen as a prevalent issue. The barriers to communication referred to the restricted ability to connect and interact due to the absence or unreliability of mobile devices, cellular signals, and Wi-Fi access. In the context of the 8-Week Reading Remediation Program, monitoring the students’ progress with the assistance of the parents enabled teachers to tailor instruction, identify areas needing improvement, and ultimately enhance literacy skills effectively. Nevertheless, reaching these students posed a challenge due to human resource limitations and time constraints. Reading teachers B and D strongly claimed that:

“Majority of the problem was logistic issue. We can’t locate them, we can't reach them and we have difficulty in trying to find them because we don’t have enough people or even time to reach them particularly because teachers already have enough on their plate.” -Reading teacher B

“I tried also sir kanang mag messenger. I let them record their ano activity in reading. Syempre katong musend lng pud ato, those students na mga good students. Sila lang pud ang nagcomply pero katong students na belong to frustration jud very hard for us to reach out the learners.” [I tried to use the messenger app. I let them record their activity in reading. Of course, only those students who are already good were the ones active in submission. Those who belong to the frustration level are very hard to reach out] -Reading teacher D

These statements highlighted the issue in communicating with the learners in terms of sending the materials and tracking their progress. Tracing students' progress was vital as it provided insights into their learning outcomes and developmental journey (Yang and Li, 2018). Reading Coordinator A expanded this by stating:

“We couldn’t reach most of the students and track on their learning progress because most of the students have no cellphones. There were some who had pero [but] mostly walay [no] signal or wifi.” - Reading Teacher A

Reading Coordinators A and C also witnessed this scenario, as they affirmed:

“Another big factor was when this program was conducted during the summer vacation, we couldn’t reach most of the students and track on their learning progress because most of the students have no cellphones. There were some who had pero mostly wala [no] signal or wifi. That’s the biggest factor I think.” -Reading Coordinator A

“The worst case was when we couldn’t reach the learners. I think it was due to the fact that they don’t have cellphones or they lack internet connections at home.” -Reading Coordinator C

Limited Program Monitoring

The lack of effective mechanisms on program monitoring on the learning progress served as a major hurdle in the reading remediation program implementation which contributed to the challenge in the establishment of efficient monitoring schemes. Inadequate monitoring by school administrators or authorities impeded teachers' ability to gauge program’s effectiveness and students' progress. Reading coordinators, as one of the key channels for receiving instructions, even highlighted this situation. According to Reading Coordinator B:

“So far, like what I could notice, the supervising head would only be active during the pretest and post-test. I think the presence of the program heads in terms of constant

updating and monitoring would provide a more effective implementation.” - Reading Coordinator B

Similarly, reading teachers B and E emphasized the importance of constant monitoring in the implementation of the reading remediation program, highlighting the ineffectiveness of executing tasks without proper oversight:

“We’re honestly feeling a bit lost in the process in all honesty. I guess, although I need to understand the part of the heads that it does take time and resources to do the follow up and the meetings but we’re doing this for the students and we want to make a good effort and a good work with a certain standard so I guess if it will cost you that much.” - Reading teacher B

“Implement the program with constant progress monitoring kay useless jud kaayo kung nakaimplement ta ug program pero dili kaayo nato sya inana ka namonitor so dapat mamonitor jud ta kung tama ba ni atong ginabuhat sa atong program.” [We need to implement the program with constant progress monitoring because it is useless to implement a program without monitoring if the tasks in the program were properly executed.] - Reading teacher E

With a similar claim, Reading Teacher D suggested:

“Kana gud sa mga higher level authorities. Magsabot sila ba. Katong nagvisit si EPS diri arun makita pud nila ang sitwasyon and matabangan nila labi na sa schedule namo.” [In the case of the higher-level authorities. They should talk about this. Like the visit of the EPS here in our school to see our situation and to be given help especially in our schedule.] - Reading teacher D

Fabrication of Results

The lack of program monitoring posed a challenge in providing trustworthy assessment outcomes, hence the question of its reliability. The shortage of teachers and the number of tasks that reading teachers were given forced the coordinators to provide reports that were just made made-up. Hence, it was difficult for them to firmly implement the reading remediation program. With this, the Reading Teacher C disclosed:

“Whether we like it or not most of them do this only for the implementation itself, but it's up to us to make-up the results." - Reading teacher C

This full disclosure of reading teachers in the falsification of data highlighted their desperation to accomplish a task, compromising its truthfulness. Though it might seem demoralizing, Reading Teachers E and A furthered:

“…it hard, I only make up results in Filipino and base it on the results in English” -Reading teacher E

“There were cases pa gani na padad-an namo ug reading materials pero wala jud gihapon giansweran. If maansweran man, di pud mi sure if sila ba nag answer.” [There were instances when we sent reading materials to learners, but they were not completed. Even when the materials were returned, we couldn't be certain if the learners themselves had answered them]. -Reading Coordinator A

The Reading Coordinators were well aware of this situation. However, they only grasped the full extent of it due to the heavy workload faced by the reading teachers. This was confirmed by Reading Coordinator B who stated:
“Admittedly, I even understand that sometimes we needed to just create data for compliance because we had no choice due to the numerous deadlines and activities.” - Reading Coordinator B

Implementation Deficiency

Another issue was the implementation deficiency due to ineffective execution of the program. In addition, this deficiency was primarily due to a lack of feedback, hindering the ability to assess progress and make necessary adjustments. The Reading Teachers C and B indicated that:

“One more thing is that the division should provide us feedback at the end of the implementation for us to reflect on the result and for them to know our struggles. You see what happened, instead of addressing our struggles, they even added more grade levels during the following year, that’s why proper feedbacking is really essential.” - Reading teacher C

“ang implementation ngayon is based on reports and if the implementation is done, yes or no, how did you do it but there is no word on dapat ganito ang ginawa mo there is no feedback so, as teachers you know that feedback is important and that is what we are short of from our division coordinator.” [The implementation now is based on reports and if the implementation is done, yes or no?. How did you do it? There were no words like “This is what you should have done”. there was no feedback. As teachers you know that feedback is important and that is what we are short of from our division coordinator.] - Reading teacher B

These statements stressed the need for constant feedback. The reading teachers emphasized this to receive improvement; thus, Reading Teacher E added:

“..and dapat pud siguro after nila magmonitor makabalo pud ta if namao ba ni atong mga trabaho kay arun maimprove gud ta sir and they will know ba our difficulties para ma-address nila. No words man gud ba.” [After the monitoring, we should know if our work was right in order to improve and for them to know our difficulties so they would address them] - Reading teacher E

As highlighted by Reading Teacher E, feedback from the DepEd Division at the end of program implementations was crucial for reflection and addressing challenges. Without

it, the issues persisted, as seen with the perennial matters of additional grade levels and unresolved reading struggles. This called for the necessity of effective feedback mechanisms for reading program improvement. Reading Coordinator A revealed more about the problem by stating that:

“Isa pa, I need pud communication from the program supervisor. So far, wala may feedback sa amoa pud regarding sa unsaon namo pagtabang amoa reading teachers.” [one more thing, I need communication from the program supervisor. So far, there were no feedback to us on how to help our reading teachers.] - Reading Coordinator A

Implementation Uniformity

Due to the issue of implementation deficiency, it resulted to a challenge on supplement inconsistency. Program heads should provide directives to teachers that align with the program objectives, empowering them to adapt strategies based on student needs to maximize the program's impact on literacy development. However, the inconsistency of instructions and directives from program heads to teachers led to confusion, irregularities in implementation, and reduced effectiveness of the reading program. This was true even in the uniformity of materials to be used. Reading coordinator B elaborated:

“We have no standard or uniform reading materials. It was the burden of the teachers to look for them which suits the level of the learners.” - Reading Coordinator B

The participants also highlighted the lack of unified instructions and materials for implementing the reading program, leading to discrepancies in schedules, directives, and resources across different grade levels. Reading Teachers A and D expounded on this by stating that:

“There should also be a unified instruction regarding this implementation, because we didn’t have the same schedule, instruction and reading materials. This is understandable because we have different schedule of classes.” - Reading Teacher A

“Wala pud tay kanang coming from the division gani sir na unified na materials. We only had the grade 7 baya sir in the Phil IRI. Kahit na ano sir, kanang from 8-12 diba wlay klaro ang materials na gamiton.” [We also don’t have unified reading materials to use coming from the Division. We only had Grade 7 coming from the Phil IRI. There were no clear instructions on what to use for the Grade 8-12.] - Reading teacher D

The reading teachers stated the need for unified reading materials to cater to the needs of the learners in every grade level. Similarly, Reading Teacher B demanded for uniformity in templates for monitoring students’ progress, as she stated:

“Although it might seem that it can be done on our own initiative, ahmm, We kind of need the templates for recording the scores, although we can do it by ourselves, but it would be effective if we have a uniform way of monitoring students’ progress.” -Reading teacher B

The Proposed Improvement to Enhance the 8-Week Reading Remediation Program

In the context of the program implementation in the cluster 9, SOP 1 revealed the issues and challenges that the reading teachers experienced during the implementation. It highlighted the need to address these hurdles to enhance the program holistically. These identified issues and challenges formed the basis for proposing solutions, which were categorized under the four components of process evaluation: Development, Implementation, Monitoring, and Feedback. The concentration was to get the proposed solutions based on the identified challenges in SOP 1 as suggested by the participants.

Resource Availability

In the first SOP, the discussion emphasized the challenges faced by reading teachers regarding the accessibility of reading materials in implementing the program. These concerns pertained to the program's development phase, which included issues related to the availability, reproduction, and lack of standardized reading resources. It was emphasized that the availability of diverse reading resources was essential for fostering a successful reading program, as it provided students with access to a wide range of texts catering to their interests and reading levels. In terms of addressing this issue, Reading teachers B and E suggested:

"... the provision of materials. I think we can, kaya man siguro na gumawa na lang kami ng libro na hindi kami yung magprint, like kanang mga procured na books so it would really help if the students had their reading materials not from printed bond paper but hardbound" [...the provision of materials. I think we can make a book that we are not the ones who will print like procured books. It would really help if the students had their reading materials not from printed bond paper but hardbound] - Reading teacher B

"I think the provision of reading materials gud sir. Kanang dili na mi magprint ba or kanang naay books gud na ipanghatag sa school sir. Mas sayon na siya na paagi for us." [I think there should be provision of reading materials like books to be given in school so that we won't need to print. It would be lighter for us.] - Reading Teacher E

The participants saw the importance of physical books being used by students rather than reading materials printed on ordinary bond paper. Students wanted to hold books in their hands, therefore, having printed reading materials available was vital (Elmarash and Mokhtar, 2023). Further, Reading Teacher F highlighted the use of a modern solutions:

"Investing in technology resources such as educational software, digital literacy tools, and online learning platforms, providing a wide range of print and digital materials, including leveled readers, decodable texts, audiobooks, and digital libraries, can support differentiated instruction and engage students with diverse interests and reading abilities." - Reading Teacher F

The statements emphasized the significance of investing in a variety of technology resources, including print and non-print materials, to support differentiated instruction and engage students with diverse reading materials to ignite their interests. Reading coordinators also identified a shortage of materials as a significant challenge, prompting them to suggest solutions to address this issue. Reading Coordinator A and C claimed:

“Isa pa is the materials to be used. Unta naa na para print na lang ta.”[One more thing is the materials to be uses. I hope they are already available for us to just print directly.] - Reading Coordinator A

“Another is creating the materials digital or printed that are more suitable to the learners and not just mere stories, but text materials that students could relate, they may add pictures that are colorful and attractive.” - Reading Coordinator C

Program Collaboration

The challenge of addressing the gap in program planning was highlighted in the initial SOP as it consequently affected the appropriateness of materials to be used and the scheduling conflicts if the implementation. This not only targeted the essential aspect of the program that needed to be addressed but also provided solutions to contextual issues. This was strongly remarked by reading teachers D and E who stated:

“And siguro dapat naay actual planning jud sir na involved ang reading teachers or bisan ang principals sir to identify lang ang mga issues in the program and address them accordingly.” [Maybe there should be actual planning that involves the reading teachers and principals to identify issues in the program and address them accordingly] - Reading teacher D

“…lisod man gud kung sila sa taas ang magdesign sa program, kay di nila masabtan ang situation ni teacher sa field inig implement. Siguro involvement ni reading coor jud sir sa pagplano sa program. [It’s difficult when only the heads are involved in the design of the program because they won’t understand our situation during the implementation in the field. Maybe there should be involvement of the reading coordinator in the planning of the program] - Reading teacher E

Meanwhile, Reading Teacher A stressed the representation of teachers in the actual planning in her statement:

“I think we as teachers or there should be a representative to represent us in the planning of the program. especially that we need a reading material that is fit for the students’ level and that it should be interesting and engaging to students.” -Reading teacher A

The reading teachers emphasized the importance of teacher collaboration in program design, which enhanced understanding of student needs and instructional strategies, leading to personalized interventions for diverse learners. This was attested by the Reading Coordinators A and B who affirmed that:

“Siguro ang hinungdan ani is walay participation sa atong mga reading coordinators sa crafting sa program. This way we can design programs and materials na suited sa atoa learners and sa atoa mga context. [Maybe the cause of the problem is that there was no participation of the reading coordinators in the crafting of the program. This way we can design programs suited for our learners context.] - Reading Coordinator A

“In terms of strategies, provision of indigenized or localized materials provided individually would be the best. However, this could only be achieved if there was a participation of reading teachers and reading coordinators in the crafting of the program.” -Reading Coordinator B

Teachers’ Training

Providing teacher training during the Implementation stage enhanced the competence of reading teachers, reduced errors made by non-language teachers, and boosted their participation in the program. These measures addressed the challenges identified in the initial SOP.

Implementing comprehensive teacher training programs was essential to enhancing the effectiveness of a reading program by equipping educators with the necessary skills and strategies to address diverse learner needs and facilitate optimal student engagement and progress. However, during implementation, this was the main difficulty the coordinators had to deal with. As proposed by Reading Coordinators A and B:

“One thing is the training. Most reading teachers lack training in the conduct of the program because only the coordinators were required to join and they were on online format.” - Reading Coordinator A

“Training is the biggest need that our reading teachers need especially in the implementation of this program. we need to capacitate our reading teachers.” - Reading Coordinator B

The necessity for personnel training depended on their ability to effectively adapt to diverse learner needs during assessment and remediation, as emphasized Reading Teachers C and E:

“Training for the personnel of course that’s they need also enough training to be able to ahh adjust to the different kinds of learners that they are going to assess and that needs remediation.” - Reading Teacher C

“In terms of teacher ahh investing in teacher training... There should be teacher training.” - Reading teacher E

As stated by Reading Teacher C and E, there should be proper training for teachers to cater to the reading needs of learners. Reading Teacher B supported this proposition in her statement:

“The key issue here is on the number one, training, and it should be done in person, because if online which was done before, there are a lot of problems. There will be a lot of confusions and a lot will be hesitant to ask in zoom meetings., So there is a lot of miscommunications that happens when the inquiry is done online so ahmm. Number one issue is, there has to be proper training and it should be done in person.” - Reading teacher B

As proposed by the Reading Coordinators B and D:

“I can only think of utilizing the monthly SLAC sessions. So if we maximize our SLAC and find a way to address the ahmm learning concerns of the students, which is kind of rooted in reading, then we can make it a reading session and maybe do reading a way to do the intervention trainings in between the SLAC session.” - Reading teacher B

“For the SLAC session, make it clear to them what is the program all about, unsay (what) target and goals. The process.” - Reading teacher D

This addressed the common issue of teachers' insufficient training for both language and non-language teacher who implemented the 8-Week Reading Remediation Program. Reading teachers B and A supported this by stating:

“I think this can be done in the school level, like training all reading teachers whether they are language or non-language teachers. We can use the SLAC sessions and invite some speakers” - Reading Coordinator B

“Trainings for reading teachers for the basics of reading to share to other teachers through roll-out sessions or SLAC sessions.” - Reading Coordinator A

Through utilizing School Learning Action Cell sessions, reading teachers could promote a common goal. This enabled them to acknowledge the differences in teaching language and non-language subjects and work together with non-language teachers to teach reading in classrooms (Haukas et al., 2022). Through collaborative inquiry, educators could identify contextual challenges, explore innovative approaches, and implement evidence-based solutions to enhance the quality of education (DO 35, s. 2016).
Although the main differentiation was formed within each topic's framework, the outcome of SLAC sessions might be used to integrate reading through subject integration. Reading Teachers A and B suggested:

“I think the best strategy is integrating reading in all subjects. I really believe reading can be integrate in all subjects. I think students will improve when they make reading habit, for example in mathematics or science. Then the teacher will ask questions regarding the texts read from their lessons. I think this is an effective strategy to enhance the reading of the students. - Reading Teacher A

“Then the outcome of the SLAC would be for teachers to make an effort and integrate in their daily teaching the reading strategies that have been learned in the sessions.” - Reading teacher B

Adjustment of Schedules

The congestion of the curriculum was seen as a huge challenge in the Implementation stage. This was especially because half of the respondents belong to a Strengthened Technical Vocational Education (STVE) Curriculum where 8 subjects were taught within the day.

The development of reading programs necessitated modifications to class scheduling, which provided flexibility and ideal learning environments. It also enabled educators to allocate sufficient time for reading interventions. Therefore, the participants emphasized that the program supervisors should find workable ways to implement the reading intervention and incorporate it into the class schedule for protected time in cases where schools implementing with congested curricula such as the Strengthened Technical Vocational Education (STVE) strand. Reading teachers D and A suggested:

“Sa case sa mga heads sir, sa akoa lang sir. Tech-Voc man mi sir. kabalo man sila na 10 subjects. Siguro kanang mahan-ay unta among schedule. Kanang naa jud time na mapasok namo ang reading.” [In the case of the heads, as for me, since we are Tech-Voc, they know that we have 10 subjects. Maybe they need to arrange the schedules to have time to include reading.] - Reading teacher D

“Pero kung ako ang pabut-on, cguro need nato pangitaan ug schedule ang remediation diri sa school ilabi na kay ang head sa reading wala siguro kahibalo sa cases nato di sa TechVoc schools.” [If I were to decide, we really need to find schedules for remediation especially that our reading head does not know our situation in Tech Voc schools. - Reading Coordinator A

Similarly, Reading Teacher C added:
“Considering that there a lot students that need to be assessed and the limited and overlapping activities, so I guess that it is better to move this program back to the summer vacation. To provide more focus for students in improving their reading.” - Reading teacher C

Furthermore, the implementation of the program during the school year was seen as a struggle as it overlapped with other school activities. Reading Coordinator B also provided a similar solution to the issue:

“As for the scheduling conflict, since we really couldn’t insert this program, I think its better to move it back during summer.” - Reading Coordinator B

Reading as a Subject

To radically address the need to provide a schedule for intervention due to a congested curriculum, the reading teachers also proposed to make reading a standalone subject. This theme advocated for the formal incorporation of reading as a separate subject within educational curricula, emphasizing its critical role in fostering literacy skills and academic success. Reading teachers D and E suggested that:

“Naa untay one hour sir na magabsa lang jud ang bata. Or himuon sya na subject para matutukan jud ang reading kay kung i-insert-insert lang ang English nimo four days, i-insert nimo diha nag-apas pa ko sa competencies. Kay kulang jud.” [There should be an hour that the students will read or make it a subject to have reading as a focus. Because if you only insert it in your four days of classes, it won’t be enough.] - Reading teacher D

“I-consider siya as load para naa jud syay schedule or time na para jud ma ano jud ang reading. Murag ibutang jud sya as subject jud sya. Kay mao man gud na ang pinaka-foundation sa mga students.” [Consider it as a load for it to have a schedule or time to address reading. Maybe make it as a subject, because that is the very foundation of students.] - Reading teacher E

The statements of the reading coordinators proposed to elevate the status of reading by advocating for it to be a stand-alone subject, emphasizing the crucial need for dedicated focus and resources on developing literacy skills. Reading Teacher B added:

“But if if the schedule won’t be moved to the summer, I’d probably go with making it a single load sir or dedicate really a period that student’s main focus is really reading.” - Reading Teacher B
As affirmed by Reading Coordinator A:

“.. or if pwede one load na lang ning reading especially for struggling readers jud.” [If possible, we make reading a teaching load especially for struggling readers] - Reading Coordinator A

Parental Involvement

Parental engagement in reading initiatives was pivotal for children's literacy growth. As outlined in the initial SOP, parental involvement played a vital role in monitoring the program to ensure active participation and attendance of learners during implementation, given that absenteeism posed a significant challenge to the program’s implementation.

Delving deeper, collaborative efforts between parents and English teachers significantly influenced children's reading proficiency and attitudes, underscoring the necessity of actively involving parents in the program. In order to achieve students' reading achievements, the reading teachers recognized this as a significant barrier in the first SOP and emphasized the crucial role that parents should play in cooperating with and

supporting school reading programs. As attested and proposed by Reading Coordinators B and C:
“When the program was conducted during the summer, the parents play a big role in terms of guiding and helping the child at home. However, when the program was conducted in school, the role of the parent was to make sure that the learners were present. “ - Reading Coordinator B

“One more thing is the support coming from parents because they too have a big part in improving their child’s reading abilities in terms of guidance and monitoring of progress.” - Reading Coordinator C

With their firsthand experience, they observed this situation. As suggested by Reading teacher A and F:

“Parents need to monitor their children’s progress and guide them in reading at home and refrain them from frequently using their phones.” -Reading teacher A
“For me, engaging families as partners in the reading remediation process by providing resources, workshops, and support for promoting literacy at home.” -Reading teacher F

As highlighted by the reading teachers, parental involvement in the program directly affects their child's performance and participation, underscoring the necessity for enhanced parental support. This need was reinforced by Reading Teacher D, who expressed:

“Dapat man gud naa jud cooperation ang parents sir kay sila ma magbantay ug mutudlo sa bata sa balay kay we consider them as partners baya.” [There should be cooperation among parents because they will provide guidance and assistance at home and we consider them as partners.] - Reading teacher D

Regular Program Monitoring

The challenge in the absence of regular monitoring, as stated in the first SOP, resulted in questionable assessment results. Thus, this was seen as a vital solution to address reading program issues by providing ongoing assessment and adjustment to ensure the effectiveness of interventions. This was observed by reading teachers A and E who recommended:

“There should also be monitoring in schools or clusters to check the implementation. Though it may be scary to some especially when program heads would come and visit, I think it is very important to provide technical assistance to reading teachers.” -Reading teacher A

“Implement the program with constant progress monitoring kay useless jud kaayo kung nakaimplement ta ug program pero dili kaayo nato sya inana ka namonitor so dapat mamonitor jud ta kung tama ba ni atong ginabuhat sa atong program.” [We need to implement the program with constant progress monitoring because it is useless to

implement a program without monitoring if the tasks in the program were properly executed.] - Reading teacher E

While the reading teachers acknowledged the numerous responsibilities of the program supervisor, they emphasized the essential presence of the supervisor. Reading Teacher B noted:

“I understand he has overlapping responsibilities but ahh it’s a big task to lead reading coordinators of the high School unit particularly because we have non-readers in high school. He should be there with us. So, he has to constantly update us.” - Reading teacher B

The reading teachers articulated a favorable reception to the monitoring initiative by program leaders while also acknowledging the prevailing culture of apprehension among teachers during such engagements. With this, Reading Coordinator B also had a similar proposition:

“I think, I would recommend that there is a need to provide constant monitoring to us coordinators so that we can relay them to our reading teachers.” -Reading Coordinator B

Consistency of Feedback

One of the emphasized challenges encountered in executing the reading program was the presence of feedback from program heads. Participants underscored this as a significant factor in verifying the accuracy of program implementation. Consistent feedback from program heads in the reading program ensures a steady flow of guidance and evaluation for teachers, contributing to ongoing improvement and alignment with program objectives. As stated by reading teachers B and E:

“First is of course the guidance and the follow through and feedbacks from our heads … it could be of great help so feedback from the heads would be a wonderful start.” - Reading teacher B

“…dapat pud siguro after nila magmonitor makabalo pud ta if namao ba ni atong mga trabaho kay arun maimprove gud ta sir and they will know ba our difficulties para ma-address nila. No words man gud ba.” [After monitoring, maybe they should tell us if our implementation was right for us to improve and for them to know our struggles for it to be addressed. There were really no words about it.] - Reading teacher E

Reading Teacher C added:

“One more thing is that the division should provide us feedback at the end of the implementation for us to reflect on the result and for them to know our struggles.” - Reading teacher C

The guidance, follow-through, and feedback from program heads were vital components that could greatly support the implementation of the 8-Week Reading Program, receiving feedback from program heads was an essential starting point for improvement. Reading Coordinator A attested this by stating that:

“Isa pa, I need pud communication from the program supervisor. So far, wala may feedback sa amoa pud regarding sa unsaon namo pagtabang amoa reading teachers sa ilahang mga problems sa pagconduct sa program.” [one more thing, I need communication from the program supervisor. So far, there was no feedback regarding how to help my reading teachers on how to cope with the problems in the program.] - Reading Coordinator A

DISCUSSION

The Issues and Challenges Experienced by Reading Teachers in the Conduct of the 8- Week Reading Remediation Program

Insufficient Funding

The accessibility and utilization of reading materials played a pivotal role in enhancing reading proficiency by affording learners exposure to a breadth of textual contexts, styles, and subject matters. Such exposure fostered the development of critical reading skills, fluency, and comprehension abilities, constituting fundamental components of literacy acquisition and cognitive development (Omuna et al., 2016). Similarly, allocating a budget for reading programs was crucial as it ensured the provision of necessary resources and support systems to foster literacy development and educational equity (Knight et al., 2016).

The fact that there was insufficient funding for reading materials in schools, even with budget allocations from Maintenance and Other Operating Expenses, or MOOE, was another urgent issue. MOOE pertained to a spending category aimed at supporting the operational needs of government agencies, encompassing expenses related to supplies, transportation, travel, utilities such as water and power, and repairs (DepEd Order No. 8, s.2019). However, due to either limited funding or insufficient budget allocation specifically designated for instructional materials, this provision was deficient to cover the costs of printing instructional materials or purchasing books.

Needless to say, to fund or allocate a budget to meet the requirements for reading resources and other basic needs, teachers had to be involved in the process. They get money out of their pockets to placate their instructional needs (Ochada and Gempes, 2018). Other nations, such as Tanzania, experienced a similar scarcity of educational resources, with textbooks, reference books, and other school supplies being unavailable

(Liyomo et al., 2017). Similar to Nigeria, where funding was insufficient, there were also not enough educational resources (Uzuegbu et al., 2013).

Reproduction Constraint

It was highlighted that the teachers faced difficulty in finding time to reproduce reading materials due to their already extensive workload. In the Philippine public school system, educators were allotted a teaching load of six hours, supplemented by an additional two hours designated for pedagogical activities encompassing lesson preparation, assessment, and documentation of academic progress (DepEd Order 5, 2024).

Nevertheless, within the milieu of smaller schools' human resources, educators found themselves burdened by an excess of instructional responsibilities and supplementary tasks, impeding their ability to adequately attend to individual class needs, let alone fulfil their supplementary obligations, thereby impairing logistical challenges such as the production of printed reading materials (Tarraya, 2023).

Research suggested that the acquisition of reading skills was intricately linked to environmental factors, with studies indicating a significant correlation between reading achievement and the presence of literacy materials both at home and in educational settings. For instance, Huang et al., (2019) found a direct association between reading attainment and the accessibility of literacy resources. Therefore, these findings emphasized the critical importance of having abundant literacy materials within a reading remediation program, highlighting the necessity of rich resource environments in both program implementation and educational contexts.

Lack of Participatory Planning

Tailored fit materials were crucial for ensuring the validity of interventions by aligning content with individual learners' needs, thus enhancing comprehension and overall effectiveness (Afflerbach, 2018). Furthermore, personalized reading materials for reading interventions were crucial as they addressed individual learners' specific reading requirements, ensuring content alignment with proficiency levels, interests, and learning styles, thereby enhancing engagement, comprehension, and overall effectiveness of corrective efforts (Frankel and Pearson, 2014). Aside from tailored-fit reading materials, contextualized schedules should also be considered in developing a reading program.

The Strengthened Technical Vocational Education Program (STVEP) which was offered in the cluster under study, emphasized technical and vocational education, augmenting the standard six daily classes in regular high schools' schedules with an additional two hours devoted to specialized subjects (DepEd Order 67, 2012). This caused challenges to the reading coordinators in terms of providing a proper schedule of implementation suited to the tight schedules.

This necessitated the involvement of reading teachers in participatory planning with program heads to determine the effectiveness of the reading program in terms of its execution (Mubita et al., 2017).

Inappropriate Materials

This was not seen as a problem during the first year of intervention because the program was only focused on Grade 7 students (DepEd Davao City, 2021), hence, during the following year, when all grade levels (grades 7-12) were involved, and reading teachers were tasked with selecting reading material from the Phil IRI (Philippine Informal Reading Inventory), confusions had begun.

While the Phil-IRI served as a standardized tool for assessing reading abilities, its scope was limited to Elementary and Grade 7 levels (DepEd-BLR, 2018). Therefore, adaptations or additional assessment tools was necessary for evaluating reading proficiency in higher grade levels or other educational contexts.

The responses also highlighted the lack of standardized materials for reading assessment across grade levels, particularly noting the absence of resources for Grades 8 to 12, leading to challenges in administering a suitable pre-test due to the varying proficiency levels among students.

The significance of an appropriate reading assessment instrument was rooted in its capacity to guarantee the reliability of collected data, permit precise assessment of individuals' reading proficiencies, and guide efficacious instructional interventions (Dougherty Stahl et al., 2019). That was the reason why utilizing a reading assessment designed for Grade 7 across all grade levels raised doubts about its credibility. This situation underscored the necessity for diverse reading approaches and language assessments, as a uniform approach might not be suitable for all learners (Ashton, 2016). Additionally, an increased improvement in reading fluency occurred when reading instruction was customized and tailored to individual needs, especially their lexical level (Forster et al., 2018)

Scheduling Conflict

These were supported by the claim of an overly jammed-packed K-12 curriculum that needed revision (Galvez, 2023). The curriculum offerings of an arts and trade school encompassed various fields such as automotive technology, building construction, cosmetology, drafting, electronics, food trades, garments, machining, PC hardware servicing, plumbing, refrigeration and air-conditioning, and welding. This had caused overlapping responsibilities to reading teachers and other teachers concerned.

Furthermore, the transition to face-to-face learning had resulted in scheduling challenges due to overlapping activities, hindering the implementation of the program. The presence of multiple subjects further complicated the incorporation of reading activities into the curriculum, posing logistical difficulties for the implementers.

Lack of Training

Mentoring teachers was crucial for providing personalized support, guidance, and professional development opportunities to enhance their teaching skills and effectiveness (Vikaraman et al., 2017), especially that even non-language teachers were tasked to handle the 8-Week Reading Remediation Program.

The importance of teacher training programs in fostering effective literacy instruction was exemplified in the study by Ahmed et al., (2021), entitled "The Role of Teacher Training Programs in Optimizing Teacher Motivation and Professional Development Skills" wherein teacher training played a vital role in developing learners' reading skills by bolstering educators' confidence and fostering their professional growth, thereby equipping them with the pedagogical knowledge, instructional strategies, and assessment techniques necessary to effectively cultivate literacy development in their students.

Teacher's Participation

Similar to other professions, teachers needed to maximize their capabilities to deliver high-quality service and excel in their roles. Though it was only a school arrangement to involve non-language teachers participating in the implementation of the program, their roles were seen as vital to the reading program's success. Teacher collaboration strengthened program implementation by leveraging diverse perspectives, pooling resources, and facilitating effective problem-solving, ultimately enhancing student outcomes and fostering a culture of continuous improvement within the educational community (Schleifer, 2017).

Furthermore, remedial reading teachers needed to acquire essential knowledge and skills. The training in language skills was crucial as it would help them understand their teaching role better, making it easier to meet their professional needs effectively (Gatcho and Bautista, 2021).

By engaging educators from diverse subject areas, such as mathematics, science, and social studies, the reading program extended beyond traditional language instruction, fostering a cross-disciplinary approach to literacy education (Fisch and Chenelle, 2018). To provide teachers with the knowledge and techniques they need to create an engaging classroom and prevent mistakes in execution. Thus, thorough training programs on the implementation of the 8-Week Reading Remediation Program were crucial to avoid mistakes

Parental Involvement Deficiency

The responses underscored the crucial role of parental involvement and support in monitoring children's progress, guiding them in reading at home, and providing follow-up to reading activities, thereby addressing the challenge of lack of parental engagement in

student remediation efforts. To address this, parents should be seen as supports in reading intervention, where they provide sustenance to their children's literacy development by offering guidance, feedback, and encouragement during reading activities (Mermelshtine, 2017).

This active involvement also facilitated children's confidence, comprehension, and independence in reading, highlighting the crucial role of parental engagement in fostering literacy skills outside of the classroom. Reading skills could significantly cultivated at home to contribute to students' academic achievement by fostering literacy proficiency and comprehension, crucial for success across various subjects and learning contexts (Castro, et al., 2015).

Student's absenteeism

The acknowledgment by reading coordinators of the challenge posed by student absenteeism underscored the urgency of addressing this issue. It was evident that reducing student absenteeism stood as a crucial factor in improving rates of foundational reading success among students (Anderson, 2022).

Improving the understanding of absenteeism involved identifying its underlying factors. Balkis et al. (2016) found that students' living conditions had a major influence on their attendance and participation in class; the majority of them came from low-income families. Unfortunately, absenteeism affected students' academic performance in addition to impeding their development as readers (Keppens, 2023).

Reading remediation programs were designed to cater to struggling readers. However, without the presence of these learners, the existence and implementation of it would not be successful. In addition, it was important to note that teachers often missed seeing the difficulties of students at home (Buck and Deutsch, 2014) due to different motives; one of the complications was poverty. It was undeniable that poverty was one of the reasons, making it the root cause of absenteeism in schools (Gee, 2018).

Communication Barriers

The difficulty of locating the learners hampered the process of providing them with reading materials and getting their completed answer sheets. Hence, the failure to effectively provide reading interventions resulted in poor performance in other learning areas such as Science and Mathematics as reflected in the recent Program for International Student Assessment (PISA) assessment for the years 2018 and 2019 (Servallos, 2023). In addition, poor reading skills could lead to disengagement, frustration, and a higher likelihood of dropping out of school due to limited academic success and opportunities for advancement, emphasizing the critical role of literacy proficiency in fostering educational persistence and achievement (Mar and Ancho, 2019).

Limited Program Monitoring

The reading coordinators and reading teachers underscored the need for higher-level authorities to be actively involved, suggesting collaborative efforts to address challenges and provide support, particularly in managing schedules and addressing operational constraints, so that the reading remediation program would be successfully implemented. Active program monitoring in schools was imperative for optimizing the effectiveness and efficiency of educational initiatives (Sanchez and Sarmiento, 2020).

Recognizing the pivotal role of monitoring in enhancing teacher performance through accountability and adherence to standards (Bunger et al., 2019), it becomes evident that effective monitoring could ultimately improve students' educational experiences by enhancing teacher effectiveness and engagement.

In the context of the 8-Week Reading Remediation in Cluster 9, identified as a rural area, assessment of program the implementation could have enabled administrators to identify areas for improvement and intervene promptly, ensuring accountability, fostering continuous improvement, and upholding standards of quality, all of which ultimately would contribute to enhancing student learning experiences and academic success.

Fabrication of Results

The risk of falsifying results in reading programs was alarming due to the breach of professional ethics, notably honesty, which was a cornerstone of the code of ethics for professional teachers. Such actions not only undermine the integrity of educational practices but also batter trust among stakeholders, potentially leading to disciplinary actions, tarnished reputations, and a compromised learning environment (Professional Regulation Commission, 2021). The making up of results was due to the pressure given to the coordinators to submit results as mandated.

This dishonesty had a significant impact on the accuracy of the findings. It should be noted that the importance of result reliability relied on its ability to ensure the accuracy, consistency, and validity of findings, thereby enhancing the credibility and trustworthiness of outcomes (Wang et al., 2004). Falsified results in a reading program dented the credibility of educational interventions and misinformed decision-making processes, which led to ineffective resource allocation and hindered student progress (Moran, 2022). Furthermore, falsified data demoralized stakeholders' trust, harming the educational institution's reputation and reducing support for future endeavors.

Implementation Deficiency

The provision of a feedback mechanism was vital as it provided valuable insights, identified areas for improvement, and ensured alignment with overarching goals, ultimately enhancing the effectiveness and efficiency of the initiative (Wisnieski et al., 2020). Moreover, in the absence of feedback, errors were likely to persist, and

deficiencies remained unaddressed, perpetuating a cycle of suboptimal performance and hindering opportunities for improvement (Dawson, et al., 2018).

The Philippine Professional Standards for Supervisors (PPSS) represented a cornerstone in the realm of supervisory practices, particularly concerning the facilitation of reading programs. Within this framework, Strand 3.1 assumed paramount importance, delineating the requisite competencies and responsibilities expected of supervisors tasked with overseeing reading initiatives (DepEd Order 25, 2020). By adhering to the guidelines outlined in Strand 3.1 of the PPSS, supervisors should effectively navigate the complexities inherent in managing reading programs, thereby fostering a conducive environment for literacy development and educational advancement among participants. This scholarly approach underscored the significance of integrating the PPSS within the context of reading program supervision, ensuring adherence to professional standards and best practices aimed at optimizing program outcomes.

Implementation Uniformity

This inconsistency underscored the need for coordinated efforts and clear communication among program supervisors to ensure equitable access to resources and optimize the effectiveness of the reading initiative (Honig and Rainey, 2019). Likewise, the challenge of ensuring a consistent method for recording and reporting results was identified as a significant obstacle requiring constructive feedback for resolution.

The reading teachers also emphasized the reputation of standardized templates for recording scores, suggesting that while teachers could manage independently, uniform monitoring methods would enhance effectiveness in tracking student progress. Furthermore, standardized templates for recording scores were crucial as they ensured consistency, accuracy, and efficiency in tracking student progress, facilitating informed decision-making, and promoting collaboration among stakeholders (Aase, et al., 2020).

Therefore, the directives from program heads to teachers should ensure the alignment with the program objectives and to empower teachers to adapt strategies according to student needs and to maximize the program's impact on literacy development (Bunger, et al., 2019). Incorporating regular feedback mechanisms and fostering a collaborative environment among educators could further enhance the effectiveness of the program. By systematically addressing these areas, schools could foster an environment where teachers feel equipped and supported to navigate the diverse challenges of program implementation.

In conclusion, the data analysis highlighted critical challenges affecting the 8-Week Reading Remediation Program's success. Key issues included insufficient funding, poor communication, and inadequate teacher training, leading to the use of unsuitable materials and misassigned roles. Scheduling difficulties and low parental involvement further exacerbate student absenteeism and inconsistent participation. Additionally, effective program monitoring was hindered by implementation deficiencies and inconsistent supplementary materials. These challenges collectively underscored the

need for targeted interventions to enhance the program and improve student literacy outcomes.

The Proposed Improvement to Enhance the 8-Week Reading Remediation Program

Resource Availability

The participants highlighted the importance of leveraging technology to enhance access to educational content and cater to student needs, aligning with contemporary pedagogical approaches aiming for inclusivity and personalized learning experiences. Consequently, integrating educational technology promoted better reading outcomes compared to traditional ones (Ni et al., 2022). This would enhance accessibility, engagement, and personalized learning experiences and foster literacy development in diverse educational settings.

Giving students access to concrete reading resources could improve their reading habits and interests (Kung, 2017). However, the provision of reading resources to students should not only be limited to print media but also consist of non-print materials.

The significance of tangible reading materials, such as books, over ordinary printed materials was underscored by participants, highlighting students' preference for holding physical books. This insight emphasized the importance of ensuring access to printed reading resources during the 8-Week Reading Remediation Program. By providing students with diverse reading materials, including both print and non-print resources, educators could potentially enhance students' reading habits and interests, contributing to the overall effectiveness of the program in fostering literacy development.

Program Collaboration

The collaboration of program implementers in the program's Development stage was essential given their invaluable expertise and insights necessary for devising tailored and effective strategies that met the diverse needs of students (Afflerbach, 2018). Collaborative efforts enabled teachers to collectively take ownership of program implementation, driving meaningful changes in instructional practices and promoting continuous improvement in reading remediation efforts (Voogt et al., 2018).

Additionally, proper representation of teachers in program planning could address key issues like providing appropriate learning materials for learners. According to Drits-Esser and Stark (2015), working together to share perspectives during program design improved comprehension and produced more effective treatments suited to a range of student requirements. Offering individualized reading materials for interventions implied a customized strategy to meet each student's unique reading demands.

To sum, participatory planning in program design could improve comprehension, engagement, and the efficacy of remedial efforts. Additionally, this underscored the importance of considering learners' proficiency levels, interests, and learning styles when designing the reading intervention, highlighting the potential impact on student outcomes and program efficacy (Frankel and Pearson, 2014).

Teachers' Training

The reading teachers underscored the importance of teacher training in fostering student enthusiasm for reading, enhancing vocabulary, and refining pronunciation skills. Effective training should be done to assess and address existing problems in the implementation and aid the queries stated by the reading teachers. In light of this, the Department of Education should offer more engaging training for teachers.

By giving teachers practical direction, individualized attention, and interactive learning opportunities, in-person teacher training could give reading program teachers and implementers the tools they need to meet the varied learning needs of their students (Heafner, 2022). By doing this, it would be possible to achieve collaborative and participatory planning and develop a cohesive strategy for meeting the needs of the learners.

Training at the school level was a great way to help language and non-language teachers implement the program. The use of SLAC, or School Learning Action Cell, could convene small groups of teachers regularly to reflect on teaching methods, share experiences, and develop strategies for improving learning outcomes.

Interdisciplinary teaching practices were perceived to be one of the most effective ways to enhance literacy skills and knowledge across different learning areas. This was one of the indicators in classroom observations in the year-end assessment of public-school teachers known as the Individual Performance Commitment and Review Form, or IPCRF (DM No. 008, s. 2023).

Using reading to subject integration, teachers could apply content knowledge within and across curriculum teaching areas. Furthermore, integration of reading across all subjects enhanced students' comprehension, critical thinking, and retention, fostering a holistic approach to learning while nurturing a lifelong love for reading (Blintz and Monobe, 2020).

Adjustment of Schedules

This reflected the participant's contemplation regarding the timing of implementing a reading program, expressing uncertainty about integrating it within or after the school year. Clearly, the teachers proposed that school administrators should reorganize schedules to incorporate reading activities effectively within the curriculum, given the demanding nature of their ten-subject structure and limited vacant time slots.

Reading as a Subject

This suggestion highlighted the identification of reading as a core ability and a subject or program that deserved dedicated instructional time. Regular reading increased one's vocabulary, fluency, and comprehension while fostering critical thinking skills and extending one's knowledge across a range of topics. Moreover, the quantity and quality of reading material with varying degrees of complexity was also a better strategy for improving overall reading and literacy, even though the amount of time spent reading was still considered a factor (Zebroff and Kaufman, 2017).

Parental Involvement

According to Iroegbu and Igweike (2020) there was a positive correlation between students' reading comprehension and parental involvement. In the same way that a positive community-school dynamic produced better results for students' well-being and development, increasing parental involvement in their children's reading development would help them succeed more. Thus, parental involvement in school-related activities such as reading would contribute to academic success (Castro et al., 2015).

Regular Program Monitoring

Regular monitoring was essential for enhancing teacher productivity by providing feedback, support, and tailored professional development opportunities to improve instructional practices and maximize student learning outcomes (Qurtubi, 2017). Similarly, progress monitoring among students' reading assessment was essential as it provided insights into individual learning trajectories, informed instructional decision-making, and enabled timely intervention strategies to address any emerging challenges or gaps in reading proficiency (Harper-Young and Harper-Young, 2018).

It might be that teachers experienced a pervasive culture of fear during visits by administrators or program heads since it was characterized by heightened anxiety and apprehension regarding potential evaluation and criticism of their performance (Agalday and Yigit, 2022), this was one way of providing technical assistance to teachers in enhancing program implementation and carrying out their duties and responsibilities (Sangalang, 2019). Nevertheless, the provision of regular program monitoring was crucial to ensuring consistency in providing guidance to the teachers and, in turn, improving the conduct of the reading remediation program.

Consistency of Feedback

This underscored the importance of establishing clear channels of communication between program heads and teacher implementers, highlighting the need for constructive feedback mechanisms throughout the implementation process. Additionally, it emphasized the significance of post-implementation feedback to facilitate reflection,

identify challenges, and inform future improvements in reading program delivery (Opiela, 2018).

The consistency of feedback not only played an important role to teachers, but also a critical move in providing students with timely and targeted support to enhance their reading skills and overall learning experience (Bastola and Hu, 2023).

Conclusions

Based on the aforementioned summary, the study concluded with the following implications:

1. The research underscored the pressing need for targeted interventions to address issues like insufficient resource allocation, lack of appropriate reading materials, and gaps in program design and execution.

2. The challenges hindered the effective delivery of reading remediation services and impeded student progress in literacy development.

3. Educational policymakers and stakeholders must prioritize allocating resources and support mechanisms to rectify these deficiencies, ensuring equitable access to quality reading materials and tailored interventions for students with diverse learning needs.

4. The identified gaps in teacher training, student engagement, and parental involvement emphasized the importance of comprehensive professional development programs and community outreach initiatives to foster a collaborative environment conducive to enhancing reading outcomes.

5. The proposed enhancements for the program, such as promoting teacher collaboration and integrating reading as a core subject, suggested avenues for innovation and improvement in literacy instruction methodologies.

6. Implementing the proposed enhancements could contribute to the overall effectiveness and sustainability of reading remediation efforts, thereby fostering a culture of literacy excellence within the educational system of Davao City.

Recommendations

Drawing from result, recommendations were developed as follows:

1. The School Reading Coordinators may provide training to reading teachers and non-language teachers to promote participation in the implementation of the program. Furthermore, they may design School Learning Action Cells (SLAC) sessions tailored for teacher training in reading, including both language and non-language mentors.

Furthermore, they may participate in professional development workshops and training sessions focused on evidence-based reading instruction and intervention techniques.

2. The Cluster Reading Coordinators may conduct tailored and culturally sensitive training workshops designed to elevate teachers' abilities in crafting personalized reading materials, thereby tackling concerns regarding material suitability and schedule flexibility. These materials would cater to schools with diverse schedules and curriculum offerings, fostering heightened student engagement and participation.

3. The Education Program Supervisor in English may advocate for additional budget allocation to schools to address the need for more photocopiers, printers, and ink supplies, thereby expediting the reproduction of materials. He/she may also develop in-person training programs which include participatory program planning and establish a timeline for regular monitoring of schools or clusters. To ensure consistent feedback and avoid the fabrication of data, the supervisor may utilize online or electronic systems for real-time monitoring, feedback, and reporting of results.

4. The English/Reading Teachers may engage in the training sessions facilitated by the Reading Coordinators to enhance their proficiency in supporting struggling readers. Additionally, they may establish provisions for regular parent conferences and establish communication mechanisms to address the problems in students ‘absenteeism using online, SMS or establishing partnerships with school stakeholders or LGUs to assist in locating students in need of remediation.

5. Future researchers may examine the effectiveness of localized reading materials on reading comprehension and engagement, considering variables like cultural relevance and individual differences, to provide comprehensive insights.

Compliance with Ethical Standards

The following ethical consideration were followed before, during and after the conduct of the study.

Informed Consent. The researcher ensured that prior to conducting the interview, all participants were provided with and signed the informed consent form, detailing the purpose of the study, their rights as participants, and the voluntary nature of their involvement.

Vulnerability of the Research Participant. The researcher assured high confidentiality was also observed since the researcher had personal interaction with the participants through an interview. Aside from the aforementioned, subjects were neither mistreated

or abused, both physically and psychologically, during the interview. Also, the researcher aimed to create and sustain a comfortable environment.

Risks, Benefits and Safety. The researcher posed the risks and benefits of participating in this study. While discussing personal experiences during interviews may cause discomfort or emotional distress, contributing insights could potentially enhance educational programs and practices. Safety measures, including confidentiality and the option to withdraw at any time, will be implemented to mitigate risks. Overall, participation is voluntary, with participant safety being a top priority.

Privacy and Confidentiality. Participants were thoroughly briefed on the study's objectives and reassured that their responses would remain anonymous and confidential. They were informed that their input would be used solely for academic purposes and the specific research at hand, with strict adherence to ethical guidelines to safeguard their privacy.

Archiving the Data. The collected data would be securely archived for a designated period, adhering to ethical guidelines. Stored in password-protected electronic files or locked physical storage, access would be restricted to unauthorized personnel. Participants' confidentiality would be maintained, with identifying information removed. Additionally, the raw data would be deleted three (3) years following the study's publication date.

Acknowledgments

The researcher expresses profound gratitude and genuine appreciation to all individuals who have contributed to the successful completion of this study. Dr. Edilhynie M. Jambangan, his thesis adviser, for her unwavering guidance, invaluable insights, and steadfast support throughout the entirety of this research journey. Her expertise, encouragement, and constructive feedback have been instrumental in shaping the direction and refinement of this thesis. Dr. Ruby A. Serrano, TDAC Chair, for her unwavering support and guidance throughout the success of this paper. Dr. Rogelio D. Rasay III and Dr. Vivien Grace A. Jubahib, TDAC panel members, for their invaluable contributions, perceptive assessments, and helpful feedback, all of which have enhanced the caliber and thoroughness of this thesis, as well as for their dedication, patience, and mentorship.
Dr. Reynante A. Solitario, CESO V, the Davao School Division Superintendent, Public Schools District Supervisors and public-school Principals of Cluster 9, for their continuous assistance in facilitating the execution of the study through the cooperation of their English department heads/supervisors and English teachers. The participants of this study who willingly provided their willing support and extended their priceless time in partaking in the study. His Ampon National High School family, for the unwavering support and collaboration throughout this endeavor. Mr. Lyndon M. Dumael, Mr. Marlon A. Bernados and Ms. Carolyn D. Domingo, his principals, for their understanding, patience, guidance, and unwavering support throughout this undertaking. Cherlene R. Balderas, his beloved wife and Athaliah, his beautiful daughter, from whom he derives inspiration and strength during the trials and challenges encountered on this journey. The

researcher's parents, for the unwavering trust, confidence and support. On top of all, to the Almighty God, the source of all strength, love, mercy and wisdom.

REFERENCES

Aase A, Fabbrini AE, White KM, Averill S, Gravely A, Melzer AC. Implementation of a Standardized Template for Reporting of Incidental Pulmonary Nodules: Feasibility, Acceptability, and Outcomes. J Am Coll Radiol. 2020 Feb;17(2):216-223. doi: 10.1016/j.jacr.2019.11.013. Epub 2019 Dec 17. PMID: 31857099.

Afflerbach , P. (2018). Understanding and Using Reading Assessment, K-12. Alexandria : International Literacy Association.

Agalday , B., & Yigit, M. (2022, March). Why Do Teachers Fear? Investigating Teachers' Perceptions of the Culture of Fear through Mixed Methods Research. International Journal of Contemporary Educational Research, 9(1), 204-218. Retrieved from https://doi.org/10.33200/ijcer.1025710

Ahmed , H. N., Pasha , A. R., & Malik , M. (2021). The Role of Teacher Training Programs in Optimizing Teacher Motivation and Professional Development Skills. Bulletin of Education and Research, 43, 17-37.

Anderson, K. (2022, August 1). Absenteeism: Crisis for Students Struggling to Read. https://tinyurl.com/2t6z7nx8

Ashton , K. (2016). Reading Approach and Strategy Use Across Languages in an Assessment Context: Does One-size Fit All? The Language and Learning Journal, pages 34- 48. https://doi.org/10.1080/09571736.2016.1172333

Balkis, M., Arslan, G., & Duru, E. (2016). The School Absenteeism among High School Students: Contributing Factors. Educational Sciences: Theory and Practice, 1819-1831. DOI 10.12738/estp.2016.6.0125

Bastola , M. N., & Hu, G. (2023, March). From the other Side of The Desk: Supervisors' Perceptions of Supervisory Feedback. Journal of Second Language Writing, 59. https://doi.org/10.1016/j.jslw.2023.100965

Blintz, W. P., & Monobe, G. (2020). Interdisciplinary Curriculum Using Poetry to Integrate Reading and Writing Across the Curriculum. In L. Harrison , E. Hurd , & K. Brinegar , Integrative and Interdiscipinary Curriculum in Middle School : Integrated Approaches in Teacher Preparation and Practice (p. 24). New York: Routledge.

Bunger , A. C., Birken , A. S., Hoffman, J. A., Macdowell, H., Choy-Brown, M., & Magier, E. (2019). Elucidating the Influence of Supervisors' Roles on Implementation Climate. Implementation Science , Volume 14, article number 93,. DOI: 10.1186/s13012-019-0939-6

Buck, R., & Deutsch , J. (2014). Effects of Poverty on Education. Journal of Human Sciences, 11(2), 1139–1148. https://tinyurl.com/2p8jcjc4

Casey, E. S. (2000). Remembering: A phenomenological Study 2nd Ed. . Bloomington: Indiana University Press .

Castro , M., Exposito-Casas, E., Lopez-Martin , E., Lizasoain , L., Navaro-Asencio, E., & Gaviria , J. (2015). Parental Involvement on Student Academic Achievement: A meta-analysis. Educational Research Review, 14, 33-46. https://doi.org/10.1016/j.edurev.2015.01.002

Dawson , P., Henderson, M., Mahoney, P., Phillips, M., Ryan , T., Boud , D., & Molloy, E. (2018). What makes for effective feedback: staff and student perspectives. Assessment & Evaluation in Higher Education, 44, 25-36. https://doi.org/10.1080/02602938.2018.1467877

de Vera, B. O. (2022, April 1). Lockdowns Impact: UNICEF Cites Poor-Reading Skills Among PH Kids. https://tinyurl.com/59btp2pc
DepEd Davao City. (2021).Conduct of the 8 Week Reading Remediation/ Intervention Dubbed as 8-Week Reading Curriculum for the Struggling Readers. Memorandum No. 1035, series of 2021.
DepEd. (2019). HAMON: BAWAT BATA BUMABASA (3Bs Initiative). Memorandum No. 173, series of 2019.
DepEd. (2023). Multi-year Guidlines on the Result-based Performance Management System-Philippine Professional Standards for Teachers.
DepEd Order 25. (2020). National Adoption and Implementation of the Philippine Professional Standards for Supervisors. Pasig City : Department of Education.
DepEd Order 35. (2016). The Learning Action Cell as a K to 12 Basic Education Program School-Based Continuing Professional Development Strategy for the Improvement of Teaching and Learning
DepEd Order 08, s. (2019). Revised Implementing Guidelines on the Direct Release, Use, Monitoring and Reporting of Maintenance and Other Operating Expenses Allocation of Schools, Including Other Funds Managed by Schools
DepEd Order 5. (2024). Rationalization of Teachers' Workload in Public Schools and Payment of Teaching Overload. Pasig City: Department of Education.
DepEd Order 67. (2012). Guidelines on the Implementation of Strengthened Technical-Vocational Education Program (STVEP) and Technology and Livelihood Education (TLE) Curriculum. Pasig City: Department of Education .
DepEd-BLR, D. B. (2018). The Philippine Informal Reading Inventory Manual. Pasig City: Department of Education.
Dougherty Stahl, K. A., Flanigan , K., & Mckenna , M. C. (2019). Assessment for Reading Instruction. Guilford Publications.
Drits-Esser , D., & Stark , L. A. (2015, December 8). The Impact of Collaborative Curriculum Design on Teacher Professional Learning. Electron J Sci Educ. 2015 Dec 8;19(8):15129. PMID: 33584089; PMCID: PMC7881916.
Elmarash, ,. G., & Mokhtar, N. (2023). A printed book or an e-book? Student Preferences & Reasons. Elmergib University.
Eppich, W. J., Gormley, G. J., & Teunissen, P. W. (2019). In-Depth interviews. In Springer eBooks (pp. 85–91). https://doi.org/10.1007/978-3-030-26837-4_12
Etikan, I., Musa, A. S., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive. American Journal of Theoretical and Applied Statistics, Vol. 5, No. 1, 2016, pp. 1-4. https://doi.org/10.11648/j.ajtas.20160501.11
Fisch , A. A., & Chenelle , S. (2018). "Inspired to Grow through Cross Disciplinary Teaching and Learning". New Jersey English Journal, Vol. 7. https://tinyurl.com/mr2y4zth
Forster, N., Kawohl, E., & Souvignier, E. (2018). Short- And Long-Term Effects of Assessment-Based Differentiated Reading Instruction in General Education on Reading Fluency And Reading Comprehension. Learning and Instruction, Volume 56, Pages 98-109. https://doi.org/10.1016/j.learninstruc.2018.04.009
Frankel , K. K., & Pearson , P. (2014). READING INTERVENTIONS Yesterday's Theories, Today's Pedagogy, and Tomorrow's Teachers. International Reading Association. doi:10.1598/e-ssentials.8053
Galvez, D. (2023, January 31). https://newsinfo.inquirer.net/. https://tinyurl.com/3dh7xxd4
Gatcho, A. G., & Bautista, J. C. (2021). A Literature Review on Remedial Reading Teachers: The Gaps in the Philippine Context. Journal of English Teachers. https://doi.org/10.33541/jet.v5i2.1063

Gee, K. A. (2018). Minding the Gaps in Absenteeism: Disparities in Absenteeism by Race/Ethnicity, Poverty and Disability. Journal of Education for Students Placed at Risk (JESPAR), 204-208. from https://doi.org/10.1080/10824669.2018.1428610

Harper-Young, K., & Harper-Young, K. (2018). The Impact of Progress Monitoring Structures on Student Achievement. https://digitalcommons.nl.edu/diss/301/

Heafner, T. (2020). Examining Online and In-Person Educator Preparation Program Learning Outcomes: Current Practices in Teacher Education. Impact of Digital Transformation in Teacher Training Models, pp 300. doi:10.4018/978-1-7998-9538-1.ch001

Haukas , A., Mercer, S., & Svalberg, A. M.-L. (2022). School Teachers' Perceptions of Similarities and Differences between Teaching English and a Non-Language Subject. TESOL Quarterly, pp 441-858. https://doi.org/10.1002/tesq.3062

Honig , M. I., & Rainey , L. R. (2019). Supporting Principal Supervisors: What Really Matters? Journal of Educational Administration, 5, 445-462. https://doi.org/10.1108/JEA-05-2019-0089

Huang , H., Tse, S.-k., Chu, S. K.-W., Xiao , X.-Y., Lam, J. W.-i., Ng, R. H.-W., & Hui, S.-Y. (2019). The Correlation Between Out-Of-School and In-School Reading Resources with Primary. Sweden: THE UNIVERSITY OF BORÅS.

Iroegbu, V. I., & Igweike, O. M. (2020). Effect of Parental Involvement on the Reading Skills of Pupils in Lower Primary School in Ondo State, Nigeria. Journal of Education & Social Policy, Vol. 7, No. 4 doi:10.30845/jesp.v7n4p10.

Keppens, G. (2023). School Absenteeism and Academic Achievement: Does the Timing of The Absence Matter? The Open University. https://doi.org/10.1016/j.learninstruc.2023.101769

Knight, D. S., Izquierdo, E., & DeMatthews, D. E. (2016). A Balancing Act: School Budgeting and Resource Allocation on a New Dual Language Campus. Journal of Cases in Educational Leadership, 19(4). https://doi.org/10.1177/15554589166647

Kung, F.-W. (2017). Teaching Second Language Reading Comprehension: The Effects of Classroom Materials and Reading Strategy Use. Innovation in Language Learning and Teaching, 93-94. doi: https://doi.org/10.1080/17501229.2017.1364252

Lekli, L., & Kaloti, E. (2015). Building Parent-Teacher Partnerships as an Effective Means. Academic Journal of Interdisciplinary Studies, 4(1). doi:10.5901/ajis.2015.v4n1s1p101

Liyomo, N., Too, J. K., & Kipng'etich, K. (2017). Perception of Teachers on Availability of Instructional Materials and Physical Facilities in Secondary Schools of Arusha District, Tanzania. International Journal of Educational Policy Research and Review, pp. 103-112.

Mar , I., & Ancho, I. V. (2019). Investigating Functional Reading Literacy and Dropout Rate. The English Teacher , 1-10.

Mermelshtine, R. (2017). Parent–Child Learning Interactions: A Review of The Literature on Scaffolding. British Journal of Educational Psychology, 87(2), 241-254. https://doi.org/10.1111/bjep.12147

Moran, R. L., Marquez, C., & Garner, J. (2022). The Art of Becoming Indispensable: What School Social Workers Need to Know: Developing Credibility and Establishing Trust. Oxford University Press.

Mubita, A., Libati, M., & Mulonda , M. (2017). The Importance and Limitations of Participation in Development Projects and Programmes. European Scientific Journal 238. https://doi.org/10.19044/esj.2017.v13n5p238

Ni, A., Cheung, A. C., & Shi, J. (2022). Effects of Educational Technology on Reading Achievement for Chinese K-12 English Second Language Learners: A Meta-Analysis. Frontiers. doi: https://doi.org/10.3389/fpsyg.2022.1025761

Ochada, N. C., & Gempes , G. P. (2018). The Realities of Maintenance and Other Operating Expenses (MOOE) Allocation in Basic Education System: Unheard Voices of Public

School Teachers. International Journal Of Scientific & Technology Research , Volume 7, Issue 4.
Omuna, M., Onchera , P., & Kurgatt, C. K. (2016). Availability and Use of Instructional Resources for Teaching and Learning of English Reading Skills in Secondary Schools in Teso North Sub County, Kenya. International Research Journals, 7. doi: http:/dx.doi.org/10.14303/er.2016.005
Opiela , L. (2018). Implementation of A Basic Skills Reading Program: A Mixed-Methods Study. New Jersey: Rutgers, The State University of New Jersey. https://doi.org/doi:10.7282/T3BK1GSJ
Professional Regulation Commission. (2021). Code of Ethics for Professional Teachers.
Qurtubi, A. (2017). Impacts of Monitoring and Evaluation, Active Role of Lecturers, Classroom Interaction, and Government Policy on Teaching Productivity. International Journal of Administrative Science & Organization, 24(3). doi:10.20476/jbb.v24i3.9648
Sambayon, J. T., Lucenara, D. P., Lucenara, C. P., Bayron, Q. M., Penaloga, R. A., Larombe , E. A., & Saro , J. M. (2023). Effectiveness Of Contextualized Learning Materials In Improving The Reading Skills And Comprehension Level Of The Students. Psychology And Education: A Multidisciplinary Journal, 435-444. DOI:10.5281/zenodo.7702258
Sanchez, R., & Sarmiento, P. (2020). Learning Together Hand-In-Hand: An Assessment of Students' Immersion Program in A Schools Division. International Journal of Research Studies in Education, 9, 85-97. doi:10.5861/ijrse.2020.5809
Schleifer, D., Reinhart, C., & Yanisch, T. (2017). Teacher Collaboration in Perspective: A Guide to Research. ERIC.
Servallos , N. (2023, December 6). Philstar Global. Retrieved from philstar.com: https://tinyurl.com/5eeyfz5a
Southeast Asia Primary Learning Metrics. (2021). SEA-PLM 2019 NATIONAL REPORT OF THE PHILIPINNES.
Tarraya , H. O. (2023). Teachers' Workload Policy: Its Impact on Philippine Public School Teachers (Public Policy Analysis and Review). Puissant. //puissant.stepacademic.net/puissant/article/view/246
Tomas, M. L., Villaros, E. T., & Galman, S. A. (2021). The Perceived Challenges in Reading. Open Journal of Social Sciences, , 9,107-122 DOI: 10.4236/jss.2021.95009 .
Uzuegbu, C. P., Mbadiwe,, H. C., & Anulobi, J. C. (2013). Availability and Utilization of Instructional Materials in Teaching and Learning of Library Education in Tertiary Institutions in Abia State. Wudpecker Journal of Educational Research, Vol. 2(8), pp. 111 - 120, .
Vikaraman, S. S., Masor, A. N., & Hamzah, M. I. (2017). Mentoring and Coaching Practices for Beginner Teachers—A Need for Mentor Coaching Skills Training and Principal's Support. Scientific Research: An Academic Publisher, Vol.8 No.1. doi:10.4236/ce.2017.81013
Voogt, J. M., Pieters, J. M., & Handelzalts, A. (2016). Teacher collaboration in curriculum design teams: effects, mechanisms, and conditions. Educational Research and Evaluation, 22(3–4), 121–140. https://doi.org/10.1080/13803611.2016.1247725
Wang, W., Loman, J., & Vassiliou, P. (2004). Reliability Importance of Components in A Complex System," Annual Symposium Reliability And Maintainability. RAMS, pp. 6-11. doi:10.1109/RAMS.2004.1285415.
Weikert, D. (2018). Effectiveness of Reading Intervention Program Types in Increasing Comprehension for Intermediate School Students. ProQuest Dissertation & Theses. doi:10830179
Wisnieski, B., Zierer, K., & Hattie, J. (2020). The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research. Sec. Educational Psychology, 10. doi:https://doi.org/10.3389/fpsyg.2019.03087

Yang, F., & Li, F. W. (2018, August). Study on Student Performance Estimation, Student Progress Analysis, And Student Potential Prediction Based on Data Mining. Computers & Education, 123, 97-108. https://doi.org/10.1016/j.compedu.2018.04.006

Zebroff, D., & Kaufman, D. (2017). Texting, Reading, and Other Daily Habits Associated With Adolescents' Literacy Levels. Educ Inf Technol 22, 2197–2216. https://doi.org/10.1007/s10639-016-9544-3

APA Citation:

Balderas, E. J. M., & Jambangan, E. M. (2024). PROCESS EVALUATION FOR THE 8-WEEK READING REMEDIATION: A BASIS FOR ENHANCEMENT. Ignatian International Journal for Multidisciplinary Research, 2(8), 986–1030. https://doi.org/10.5281/zenodo.13335003

Corresponding author: *embalderasjr@usep.edu.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

Project BALAY: A NEEDS ASSESSMENT FOR BASIC LITERACY AMONG YOUNG AND ADULT INDIGENOUS PEOPLE

Lorie Jane R. Delos Santos, Dr. Eva V. Briñosa, Enrique T. Magalay, Jr.

College of Teacher Education-English Faculty, Mindoro State University – Bongabong Campus, Labasan, Bongabong, Oriental Mindoro, Philippines

https://doi.org/10.5281/zenodo.13292242

ABSTRACT

Reading and writing skills are crucial for Indigenous communities as they preserve their unique cultures and traditions and aid in recording their language, stories, and historical knowledge. Additionally, they play a vital role in providing a platform for self-expression, allowing Indigenous voices to be heard, and advocating for their rights and interests. With this, the researchers were motivated to conduct the study to determine the basic literacy needs of young and adult Indigenous Peoples (IPs) which would serve as a basis for conducting needed training. This is descriptive research wherein 150 indigenous people from the selected Mangyan communities in Panaytayan, Mansalay, Oriental Mindoro were interviewed using the researchers' checklist to gather the needed data. Frequency and percentage were used in this study. According to the findings, it is evident that the participants have a considerable lack of reading and writing skills. Moreover, the IPs must receive proper training to master the fundamentals of reading and writing competencies. The researchers proposed creating a strategic plan to implement PROJECT BALAY – Basic Literacy for Young and Adult Indigenous people. The primary focus would be honing basic letter recognition skills and targeting reading comprehension and writing skills in older children.

Keywords: *needs assessment, Indigenous people, literacy, reading and writing skills, Panaytayan, Mansalay, Oriental Mindoro, Project BALAY*

INTRODUCTION

Literacy serves as the foundation for education, providing opportunities for personal growth, survival, safety, and stability. The ability to read, write, and comprehend written language is vital for success in all aspects of life - from academics to the workplace to everyday interactions. Developing strong literacy skills allows individuals to effectively communicate, access information, problem-solve, make informed decisions, and engage in community involvement.

Beyond these practical benefits, literacy also plays a crucial role in personal development, shaping individuals' understanding of societal norms and values. As noted by Abad (2020), it fosters human formation and empowers learners to embrace diverse cultures, appreciate literature and the arts, and sharpen critical thinking abilities. Ultimately, literacy opens doors to endless possibilities and enriching experiences.

In the Philippines, there is a deep appreciation for proficient reading and writing skills. As such, the country has wholeheartedly embraced initiatives to improve overall literacy levels, receiving enthusiastic support from both individuals and various organizations (Cristobal, 2015). The government and non-governmental entities alike have joined forces in pursuit of the Education for All (EFA) 2015 plan, which aims to make basic education accessible to all and revolutionize traditional educational practices that have primarily been limited to schools (UNESCO, 2015). This is evident in the enactment of DepEd Order 94 s.2009, which mandates the establishment of EFA division and regional committees to effectively work towards achieving global literacy goals. Likewise, the fourth Sustainable Development Goal of UNESCO places a strong emphasis on the quality of education. It aims to provide inclusive and fair access to education for all individuals, including Indigenous students from Indigenous communities (Rahim, et al. 2022). This not only ensures a high standard of education but also promotes lifelong learning opportunities for these students.

Moreover, the education of Indigenous Peoples (IPs) is held in high regard and receives significant attention in the Philippines. As reported by BusinessMirror (2017), the Department of Education (DepEd) remains committed to its Indigenous Peoples Education (IPEd) Program, actively working towards promoting culturally responsive education and integrating it into the K-12 curriculum. Unfortunately, despite these efforts to promote equality in education, prejudice, and marginalization persist among Indigenous communities (Abad, 2020).

The Indigenous Peoples (IPs) hold generations of collected wisdom within them as they weave a bright tapestry of cultures and customs worldwide. There are more than 17 million indigenous people, representing 110 ethnolinguistic groups in the Philippines (Camaya & Tamayo, 2018; Penaranda, 2019; Eduardo & Gabriel, 2021). Every group embodies a distinctive culture and language passed down from their ancestors (Bastida, Jr. et al, 2022). Bociaga (2020) mentioned that among these groups are the Mangyans, who reside on the island of Mindoro, with an estimated population of 100,000 to 280,000, making up 7.5% to 21% of Mindoro's total population. According to The Library of Congress Research Guide (2023), there are eight identified ethnic groups in the

Philippines, namely: Iraya, Alangan, Tadyawan, Tawbuid, Bangon, Buhid, Hanunuo, and Ratagnon. While commonly known as "Mangyan," only the Hanunuo tribe identifies with this term. It is worth noting as well that these indigenous groups each have their unique languages.

In Panaytayan, Mansalay in Oriental Mindoro resides a vibrant community of the Hanunuo tribes. These indigenous people, known for their rich cultural heritage and deep connection to the natural world, have called this region home for generations. Nevertheless, despite their rich history, there have been reports of illiteracy among the tribe members, attributed to a range of factors. As stated by Bamba, et al. (2021), there remain pockets of illiteracy among indigenous populations, particularly those living in secluded areas where traditional customs and values are still upheld. Unfortunately, these regions are situated far from the public schools, causing students to embark on a long and treacherous journey to receive a formal education. Not only that, but Paul, et al. (2013) also stressed that most of them face many barriers to education, brought on by unfavorable family environments, familial responsibilities including taking care of younger siblings, and poverty.

Given this premise, the researchers are driven to carry out a needs assessment study to gather essential data for the extension program that aims to improve the reading and writing skills of the youth and adults in the chosen Mangyan villages of Panaytayan, Mansalay, Oriental Mindoro. This initiative is crucial in enabling them to achieve economic independence and overall wellness, ultimately shaping them into responsible and thriving members of their community and society.

Research Objectives

The study aimed to determine the writing and reading needs of Indigenous People residing in the selected Mangyan Community in Panaytayan, Mansalay, Oriental Mindoro.

Specifically, the study sought to:

1. determine the knowledge level of the respondents in terms of:
   1.1 reading skills and reading comprehension.; and
   1.2 writing skills.
2. based on the findings of the study what intervention can be proposed?

METHODOLOGY

This study employed a descriptive research method. The Descriptive research method involved determining, describing, and identifying key elements (Ethridge, 2004) to assess the knowledge level of the Mangyan Community in Panaytayan, Mansalay in Oriental Mindoro.

The respondents of the study were the 150 Indigenous people living in the four adapted Mangyan communities in Panaytayan, Mansalay, Oriental Mindoro of the Mindoro State University and LGU Mansalay namely: Calibang; Ether; Tanawan; and

Sinugbuhan. The respondents were taken purposively among the selected communities. The participants were personally approached and provided with a clear explanation of the study's goals. Additionally, before an interview takes place, participants are given a thorough understanding of their rights. They are informed about the purpose of collecting their personal information, how it will be utilized, and who will have access to it. This is all under Republic Act 10173, also known as the Data Privacy Act (DPA), to ensure the protection of the participants. In addition, the respondents are carefully selected based on specific criteria and willingly choose to be a part of the research. Data collection was completed as required.

The main data-gathering tool used for this study to determine the IPs' understanding of basic literacy was a checklist with two major parts. The first part was the survey asked about the reading skills of the respondents while the second part is to assess their writing skills. This checklist was read to the respondents and their responses were analyzed and interpreted.

The results were presented in tabular format using descriptive statistics such as frequency and percentage.

RESULTS

1. Knowledge level of the respondents in terms of:

Table 1. Knowledge level of the respondents in terms of basic reading skills and comprehension

Statements	CAN		CANNOT	
	F	%	F	%
1. Can you recognize the letters of the alphabet? *Makikilala mo ba ang mga titik ng alpabeto?*	48	32%	102	68%
2. Can you read the syllables? *Kaya mo bang basahin ang mga pantig?*	30	20%	120	80%
3. Can you read and understand the words? *Kaya mo bang basahin at unawain ang mga salita?*	18	12%	132	88%
4. Can you read and understand the sentences? *Kaya mo bang basahin at unawain ang mga pangungusap?*	10	7%	140	93%

Table 1 shows that out of 150 participants, only 48 (32%) can identify the letters of the alphabet, and 10 (7%) can comprehend sentences. On the other hand, the majority, 140 (93%), struggle with reading and comprehending sentences, followed by 132 (88%) who struggle with words, 120 (80%) with syllables, and 102 (68%) who are unable to recognize letters of the alphabet.

1.2 Writing skills

Table 2. Knowledge level of the respondents in terms of basic writing skills

	CAN		CANNOT	
WRITING	**F**	**%**	**F**	**%**
1. Can you write the letters of the alphabet? *Kaya mo bang isulat ang mga titik ng alpabeto?*	40	27%	110	73%
2. Can you write syllables? *Marunong ka bang magsulat ng mga pantig?*	34	23%	116	77%
3. Can you write words? *Marunong ka bang magsulat ng mga salita?*	28	19%	122	81%
4. Can you write sentences? *Marunong ka bang magsulat ng mga pangungusap?*	11	7%	139	93%

As indicated in Table 2, 40 participants (27%) could write the letters of the alphabet and only 11 (7%) could write sentences. The data clearly shows that a larger number of participants possess only basic letter-writing skills, rather than more advanced sentence-writing abilities. Conversely, most of them 139 (93%) cannot write sentences, 122 (81%) cannot write words, 116 (77%) cannot write syllables, and 110 (73%) cannot write the letters of the alphabet.

DISCUSSION

1. Knowledge level of the respondents in terms of:

1.1 Reading skills and comprehension

The finding implies that there are some participants with foundational letter recognition skills, but only a small number possess advanced reading comprehension abilities that go beyond basic letter recognition. Thus, the result indicates a potential gap in foundational literacy skills, as there appears to be a low percentage of individuals who can identify letters of the alphabet and an even lower percentage who can comprehend sentences. Shaili (2023) asserts that as children embark on the journey of learning to read and write, one crucial skill they must acquire is letter recognition. This foundational skill allows them to identify letters, enabling them to absorb new vocabulary and improve their reading flow swiftly and effortlessly. This is consistent with Lynch's (2020) claims that developing letter recognition is crucial for mastering reading skills. Without this fundamental ability, children face challenges in understanding letter sounds and identifying words. It becomes increasingly difficult for them to grasp the basics of reading when they are unable to recognize letters and their corresponding sounds.

On the other hand, the majority, 140 (93%), struggle with reading and comprehending sentences, followed by 132 (88%) who struggle with words, 120 (80%)

with syllables, and 102 (68%) who are unable to recognize letters of the alphabet. These findings suggest that this group faces significant challenges in their reading abilities across all levels, including letters, syllables, words, and sentence understanding. While sentences and word recognition appear to be the most troublesome areas overall, lower-level skills like letters and syllables are also problematic for a significant portion of the group. Overall, a significant portion of the group struggles with reading proficiency across all levels. According to, Llego (2022) one of the most common challenges faced by students when it comes to reading is trouble with decoding words, insufficient comprehension abilities, and limited fluency. Further, as cited by Totto and Ramos (2021) from the study of Sünbül et al. (2010) students who struggle with reading fluency and comprehension will have difficulty achieving success.

The data clearly show that the IPs need to learn how to read. Learning to read is crucial for Indigenous empowerment, self-determination, and the preservation of their cultural heritage in a changing world. To address this gap in the reading abilities of the respondents, educational initiatives and support programs could be an immense help in giving them strong foundational reading skills. According to Mesmer (2020), foundational reading skills are crucial for developing advanced literacy. As students improve their word recognition abilities, they are better equipped to understand complex ideas and vocabulary. Furthermore, the ELA/ELD Framework specifically acknowledges the importance of basic skills, or foundational reading skills, as a key teaching and learning principle. This is because having a strong foundation in reading is necessary for becoming independent with written language, as noted by Spycher (2017). This correlates to the ideas of Chamba and Ramirez-Avila (2021), that to become a proficient reader, one must possess five essential elements of reading instruction: phonemic awareness, phonics, word recognition, vocabulary, and comprehension. These elements work together to provide the necessary tools for developing strong reading skills and becoming an accomplished reader (Gunobgunob-Mirasol, 2019). At the same time, Philipps (2022) highlights the critical role that foundational reading skills play in a comprehensive reading program aimed at fostering proficient readers. She stresses the idea that individuals cannot fully comprehend various types of texts without a solid grasp of fundamental reading skills.

Moreover, to enhance the reading skills of IPs, they must develop strong reading comprehension. This fundamental aspect of reading should be approached holistically, as it pertains to all aspects of life (Caraig & Quimbo, 2022). Granda and Ramírez-Avila (2020) similarly define reading comprehension as a vital process that involves absorbing and understanding a text. By making connections between their prior knowledge and new information, readers can effectively comprehend and make meaning of the text.

Further, the findings bring to light a pervasive issue of inadequate education leading to low literacy rates among the participants. The severity of reading difficulties emphasizes the urgent need for intervention within this community. Comprehensive reading remediation initiatives and individualized literacy support may be essential in addressing these deficiencies. Failure to do so may result in persistent struggles that can impact an individual's entire life.

1.2 Writing skills

As indicated in Table 2, 40 participants (27%) could write the letters of the alphabet and only 11 (7%) could write sentences. The data clearly shows that a larger number of participants possess only basic letter-writing skills, rather than more advanced sentence-writing abilities. This demonstrates that letter writing is a fundamental skill that is typically learned earlier than the ability to construct sentences and paragraphs. The comparatively smaller percentage of individuals with sentence writing skills hints at potential deficiencies in the development of advanced writing proficiency.

Conversely, most of them 139 (93%) cannot write sentences, 122 (81%) cannot write words, 116 (77%) cannot write syllables, and 110 (73%) cannot write the letters of the alphabet. This indicates that a considerable percentage of the participants possess insufficient writing skills. This finding aligns with Graham, et al. ‘s (2016) research, examining the writing abilities of elementary students classified as struggling writers. The data revealed strikingly low scores, as only 3% of the students met or surpassed grade-level standards for writing proficiency. They concluded that numerous students are lacking basic writing skills, even at the elementary level. Further, writing is not just a skill, but a powerful tool for communication, self-expression, sharing information, and preserving history (Stone, 2023; Tewari, 2022). Yet, the presence of gaps in the writing proficiency of the respondents can greatly hinder their ability to effectively convey their ideas and connect with others.

The data thus underscores a disconcerting level of illiteracy challenges within the group, emphasizing the pressing need to delve into and resolve these concerns. Targeted interventions are likely necessary to enhance the literacy and writing skills of the respondents. Offering educational opportunities and training in basic writing skills or writing intervention programs to indigenous people is imperative in preserving their cultural heritage and promoting self-governance. Cabigao (2021) concluded in his study that by implementing a writing intervention program, learners can develop their basic writing skills and ultimately bridge any gaps in their learning. Likewise, he said that engaging and well-designed writing activities and exercises play a crucial role in helping learners enhance their fundamental writing skills.

Conclusions

The study revealed significant deficiencies in the reading and writing abilities of the participants. While many were able to identify letters and syllables, a considerable portion struggled with constructing words and sentences in both reading and writing. These findings indicate a pressing need for interventions catering to various skill levels, specifically addressing the gap between basic letter formation and word construction.

Recommendations

From the gathered data, the following recommendations are proposed: prioritizing fundamental skills such as phonemic awareness and phonics to enhance decoding and

word identification, potentially leading to improved reading fluency, comprehension, and writing proficiency

Furthermore, the researchers proposed the creation of a strategic plan to implement *PROJECT - BALAY – Basic Literacy for Young and Adults*. The primary focus would be on honing basic letter recognition skills, while also targeting reading comprehension and writing skills in older children. This strategic plan aims to address the gaps in literacy skills and promote lifelong learning. The implementation process will commence with teaching the fundamentals of identifying, tracing, and comprehending letters of the alphabet, utilizing well-designed instructional materials. As the learners master these fundamental skills, the program will gradually progress to more advanced levels of reading and writing proficiency. The goal is to equip individuals with the ability to effectively comprehend and utilize written language for everyday tasks, such as reading and understanding signs, instructions, and labels.

Additionally, further studies can delve into the underlying factors contributing to the identified challenges, evaluate the efficacy of various intervention techniques, and examine the lasting effects of literacy initiatives on the personal and communal well-being of IPs in Panaytayan Mansalay Oriental Mindoro. These findings highlight the critical need to continuously strive to enhance literacy among IPs in the area.

Compliance with Ethical Standards

Researchers obtained informed consent from respondents, maintained anonymity, protected their well-being, avoided conflict of interest, plagiarism, and bias in interpretation, and used results solely for research purposes.

Acknowledgments

The authors wish to extend their utmost appreciation and gratitude to the following: Dr. Dionisio E. Briñosa, Associate Professor Zussette C. Aplaon, Awati Ti-KAPE Community Development Program members, LGU-Mansalay, and the Indigenous Community respondents from Panaytayan, Mansalay, Oriental Mindoro for contributing much on the realization of this endeavor.

REFERENCES

Abad, D. J. V. (2020). Designing a Contextualized and Culture-Based Reading Material for Indigenous Learners. *PalArch"s Journal of Archaralogy of Egypt/Egyptogy* 17(1), 153-163. ISSN 1567-214X. Retrieved January 24, 2024, from, https://www.researchgate.net/publication/361827985_Designing_a_Contextualized_and_Culture-Based_Reading_Material_for_Indigenous_Learners

Bamba, J., et al. (2021). Community Organizing for Indigenous People in the Philippines: A Proposed Approach. MedRxiv the Reprint Server for Health Science. Retrieved on January 25, 2024, from, https://doi.org/10.1101/2021.06.24.21259509

Bastida, Jr. E. L., Saysi, J. G., & Batuctoc, L. V. M. (2022). Pedagogical struggles and gaps in language literacy enhancement: the case of indigenous people's education teachers in the Philippines. *International Journal of Curriculum and Instruction*, pp. 142–165 https://files.eric.ed.gov/fulltext/EJ1383105.pdf

Bociaga, R. (2020). For the Philippines' Mangyans, COVID-19 extends a long history of discrimination. MONGABAY News and Inspiration from Nature's Frontline. Retrieved on January 23, 2024, from, For the Philippines' Mangyans, COVID-19 extends a long history of discrimination (mongabay.com)

BusinessMirror (2017). DepEd sustains support for culture based education for IP learners. Retrieved on January 22, 2024, from, DepEd sustains support for culture based education for IP learners | BusinessMirror

Cabigao, J.R. (2021). Improving the Basic Writing Skills of Grade 7 Learners in Filipino: An Action Research in Filipino Language. *Shanlax International Journal of Education*. Retrieved January 27, 2024, from, https://files.eric.ed.gov/fulltext/EJ1300857.pdf

Camaya, Y. and Tamayo, G. (2018) Indigenous Peoples and Gender Roles: The Changing Traditional Roles of Women of the Kalanguya Tribe in Capintalan, Carranglan in the Philippines. *Open Journal of Social Sciences, 6*, 80-94. https://doi:10.4236/jss.2018.62008

Caraig, R. V., & Quimbo, M. A. T. (2022). Assessing reading comprehension difficulties in core science subjects of senior high school students in a private school in Calamba City, Philippines. *International Journal of Curriculum and Instruction 14(3)* https://files.eric.ed.gov/fulltext/EJ1364296.pdf

Chamba, M. Y. & Ramirez-Avila, M. R. (2021). Word Recognition and Reading Skills to Improve Reading Comprehension. *Journal of Foreign Language Teaching and Learning Volume 6, No. 1*, January 2021, https://doi.org/10.18196/ftl.v6i1.10174

Cristobal, L. (2015). Literacy in the Philippines: The Story Behind the numbers. *International Literacy Association*. Retrieved January 23, 2024, from, http://tinyurl.com/mrxbhm49

Eduardo, J. P., & Gabriel, A. G. (2021). Indigenous Peoples and the Right to Education: The Dumagat Experience in the Provinces of Nueva Ecija and Aurora, in the Philippines. *SAGE Open, 11*(2). https://doi.org/10.1177/21582440211009491

Ethridge, D. E. (2004). Research methodology in applied economics.Ames, IA: John Wiley &Sons.

Gunobgunob-Mirasol, R. (2019). Vocabulary size, reading motivation, reading attitudes and reading comprehension performance among Filipino college learners of English. *International Journal of Evaluation and Research in Education (IJERE)*, 8(1), 64. https://doi.org/10.11591/ijere.v8i1.15335

Graham, S., Hebert, M., Sandbank, M. P., & Harris, K. R. (2016). Assessing the writing achievement of young struggling writers: Application of generalizability theory. Learning Disability Quarterly, 39(2), 72-82. https://doi.org/10.1177/0731948714555019

Granda, G. K. A., & Ramírez-Avila, M. R. (2020). Classifying vocabulary in Google Sheets to improve word recognition and reading comprehension in EFL learners: An action research study. AtoZ: novas práticas em informação e conhecimento, 9(2), 24 – 31. https://doi.org/10.5380/atoz.v9i2.73526

Library of Congress Research Guide (2023). Mangyan Bamboo Collection from Mindoro, Philippines, circa 1900-1939, at the Library of Congress. Retrieved on January 23, 2024, from https://guides.loc.gov/mangyan-bamboo-collection/background#:~:text=The%20term%20%E2%80%9CMangyan%E2%80%9D%20is%20an,Buhid%2C%20Hanunuo%2C%20and%20Ratagnon.

Llego, M. A. (2022). Reading Intervention Strategies for Teachers: Detailed Guide. TeacherPH. Retrieved January 27, 2024, from, https://www.teacherph.com/reading-intervention-strategies/

Lynch, M. (2020). Understanding Letter Recognition and Its Role In Preliteracy. The Techedvocate. Retrieved January 27, 2024, from, https://www.theedadvocate.org/understanding-letter-recognition-and-its-role-in-preliteracy/.

Mesmer, H. A. (2020). There Are Four Foundational Reading Skills. Why Do We Only Talk About Phonics? Reading and Literacy. EducationWeek. Retrieved January 26, 2024, from, http://tinyurl.com/mwhaw53u

Paul, K., Wilkinson-Flicker, S., A., Wang, X., Zhang, J. (2013). National Center for Education Statistics Retrieved January 23, 2024, from, https://nces.ed.gov/pubs2013/2013037.pdf Retrieved on January 23, 2024

Penaranda, A. (2019). Language as the Lifeline of Indigenous Identity and Transmission of Culture – AN Open Discourse.

Philipps, D. (2022). Foundational Reading Skills. White Paper. Saint Paul, Minnesota. Read Naturally, Inc. Retrieved January 25, 2024, from, https://www.readnaturally.com/article/foundational-reading-skills-white-paper.

Rahim, N.A.A., Shuhidan, S. M., & Husaini, H. (2022). Student Behavior, Sociocultural, Learning Environment and Information Literacy: A Proposed Framework in Managing Indigenous Knowledge. *International Academic Symposium of Social Science.* Retrieved on January 23, 2024, from, Proceedings | Free Full-Text | Student Behavior, Sociocultural, Learning Environment and Information Literacy: A Proposed Framework in Managing Indigenous Knowledge (mdpi.com)

Shaili (2023). Letter Recognition For Preschoolers – Importance And Activities. FirstCry Intelli Education. Retrieved January 27, 2024, from, https://www.firstcry.com/intelli/articles/letter-recognition-for-preschoolers-importance-and%20activities/?ref=afculk__9485_20240127cly2x4ygqun2&utm_source=afculk&utm_medium=aff&utm_content=afculk_9485#:~:text=Identifying%20letters%20is%20an%20important,essential%20for%20reading%20and%20spelling.

Spycher, P. (2017). Developing foundational reading skills in the early grades: Teaching decoding skills through small-group lessons. San Francisco, CA: WestEd. Retrieved January 25, 2024, from, Developing Foundational Reading Skills in the Early Grades (wested.org)

Stone, D. (2023). Is there a benefit to writing, for people who are not writers? LinkedIn. Retrieved January 26, 2024, from, Is there a benefit to writing, for people who are not writers? (linkedin.com)

Sünbül, A. Ms, Yılmaz, E., Ceran, D., Çintaş, D., Demirer, V., Işık, A & Alan, S. (2010). Primary school students reading habits, Konya province research report (Grades 5-6-7-8.) Selçuk University Ahmet Keleşoğlu Faculty of Education, Konya.

Tewari, L. (2022). Readers' Blog: The Power of the Pen: How Writing Can Change the World. Retrieved January 26, 2024, from, The Power of the Pen: How Writing Can Change the World (indiatimes.com)

Totto, P., & Ramos, A. (2021). Reading and Writing Performance of Senior High School Students. *International Journal of English Language Studies*, *3*(9), 09–22. https://doi.org/10.32996/ijels.2021.3.9.2

UNESCO (2015). EFA Global Monitoring Report (2015). Retrieved January 24, 2024, from, https://unesdoc.unesco.org/ark:/48223/pf0000232205

APA Citation:

Delos Santos, L. J. R., Briñosa, E. V., & Magalay, E. , J. T. (2024). Project BALAY: A NEEDS ASSESSMENT FOR BASIC LITERACY AMONG YOUNG AND ADULT INDIGENOUS PEOPLE. Ignatian International Journal for Multidisciplinary Research, 2(8), 534–544. https://doi.org/10.5281/zenodo.13292242

Corresponding author: *loriejanefaminialrey@yahoo.com.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

READINESS ON ONLINE DISTANCE LEARNING: ITS IMPACT TO THE MATHEMATICS ACHIEVEMENT OF FIRST-YEAR STUDENTS

Jerwin L. Repollo[1], Jennifer C. Burlado[1] and Romulo G. Doronio[2]

[1]BSEd-Mathematics Department, Agusan del Sur State College of Agriculture and Technology, Bunawan, Agusan del Sur, Philippines
[2]Graduate School, Assumption College of Nabunturan, Davao de Oro, Philippines

https://doi.org/10.5281/zenodo.13270873

ABSTRACT

The study aimed to determine which domain of Readiness on Online Distance Learning can best predict Mathematics Achievement in Mathematics in the Modern World (MMW). A Predictive- correlational method of research was conducted using an adapted and researcher-made questionnaire validated by the experts. The extent of Readiness on Online Distance Learning has the following indicators: technology access, technology skills, study skills, time management skills and motivation adapted from the study of Tuntirojanawong (2013) using the 25-item questions. On the other hand, the researcher's test questionnaire was utilized to determine the mathematics achievements of the first-year students in Mathematics in the Modern World Subject. The statistical tools used were mean, standard deviation, Pearson's product-moment correlation, and multiple regression. It was revealed that the Readiness on Online Distance Learning was evident among first-year students. In addition, the level of mathematics is moderately satisfactory with an average of 2.50 equivalent to the range (80-82%). The null hypothesis was tested at a 0.05 level of significance to test the correlation of variables. Results show that there is a significant very weak positive correlation between the readiness on online distance learning and Mathematics Achievements. Furthermore, Technology Skills is the indicator of Readiness on Online Distance Learning that best predicts the Mathematics Achievement of first-year students.

Keywords: *Readiness on Online Distance Learning, Mathematics Achievement, Predictive-Correlational Design, Philippines*

INTRODUCTION

Mathematics is one of the subjects wherein students are encouraged to master because it is important in the scientific and technological development of countries. However, it was found out that students' mathematics achievement in our country continued to decline, and the participation of the Philippines in Trend in International Mathematics and Science Study (TIMSS) confirmed this bad and shocking condition based on the report posted last 2013. The report added that the achievements of Filipino students in National and International surveys on mathematics lag its neighboring countries like Singapore, South Korea, Hong Kong, Chinese Taipei, and Japan. Thus, even college students from different colleges and universities in the country are not exempted from the problems of low mathematical achievements (Care et.al., 2014).

The global pandemic of COVID-19 has fundamentally affected nearly every area of life, including education. Concerning the issue, student online learning readiness (OLR) is identified as being an important predictor of online learning such as computer skills for social interaction, social communication, and learning outcomes (Kubiatko & Vlckoya, 2010). This is similar to the study of Watkins and Triner (2003) stated that online distance readiness is important for enhancing the delivery, interaction, and facilitation of teaching and learning processes. In addition, the Philippines Commission on Higher Education encouraged higher education institutions (HEIs) to continue with alternative modes of education. As an emergency response to the pandemic, online distance became the modal solution for various academic institutions (Joaquin et al.,2020). Thus, the implementation of any online distance education should be preceded by the measurement of readiness so that the institution can design a suitable and appropriate system to fit learning requirements (Chen & Fu, 2009).

In Agusan del Sur State College of Agriculture and Technology (ASSCAT), Trento Campus, common problems had been observed by the researchers and that was the sudden shift in the education system that leads to a decline in the student's mathematics achievement. The increase in the number of dropouts and students who got an In-process (IP) grade in GE 4 (Mathematics in the Modern World) subject became a problematic issue on the campus since the beginning of the new normal setting. It is the innermost reason that the researcher is interested in conducting a study to determine if there is a significant influence of readiness for online distance learning on the mathematics achievements of first-year students.

The researcher is eager to fill the gap in the literature and seek to establish information on the influence of readiness on online distance learning on the mathematics achievements of first-year students to become a basis for the making of interventions for school administrators and instructors and to be more productive in developing the mathematics achievement of students. Understanding also if readiness for online distance learning among students can relate to the mathematics achievements of the students is a good step in addressing the needs of students to improve their mathematics performance in the time of difficulties of this new normal education.

Research Questions

The main goal of this research was to determine which domain of Readiness on Online Distance Learning can best predict the Mathematics Achievement of first-year students in Agusan del Sur State College of Agriculture and Technology- Trento Satellite Campus.

Specifically, it attended to the following objectives:

1. To describe the level of Student's Readiness on Online Distance Learning when measured according to:
    1.1 Technology Access
    1.2 Technology Skills
    1.3 Study Skills
    1.4 Time Management Skills
    1.5 Motivation
2. To assess the level of Mathematics Achievements among the first-year students of ASSCAT, Trento Campus.
3. To determine the significant relationship between Readiness on Online Distance Learning and Mathematics Achievement among the first-year students of ASSCAT, Trento Satellite Campus.
4. To determine which of the domains of Readiness on Online Distance Learning can best predict the Mathematics Achievement of students in Agusan del Sur State College of Agriculture and Technology- Trento Satellite Campus.

METHODOLOGY

This study used a quantitative research design, specifically the Predictive-correlational technique to investigate which domains of Readiness on Online Distance Learning can best predict the Mathematics Achievements of First Year students. Further, the respondents of the study were first-year students of Agusan Del Sur State College of Agriculture and Technology (ASSCAT), Trento Satellite Campus who enrolled during the first semester, S.Y. 2021-2022. There were 284 total samples from the first-year students of BEED, BSEd-English, BSEd-Math, Applied Math, and AB-English which were obtained using Universal sampling. In addition, data gathering was done through online survey questionnaires through Google Forms after the researchers collected informed consent from the respondents. The procedure is deemed appropriate in the context of the pandemic and following the Inter-Agency Task Force (IATF) for management of emerging infectious disease resolution no. 38 series of 2020.

Moreover, the research instruments of this study consist of two parts. The first part is the independent variable which is Readiness on Online Distance Learning was adapted from the study of Tuntirojanawong (2013). It used a four-point Likert scale (4- Strongly Agree, 3- Agree, 2- Disagree, and 1- Strongly disagree). The second part is the dependent variable which is Mathematics Achievements which was determined using the

researcher's exam in the final term topics under GE 4 (Mathematics in the Modern World) subject. The researcher's exam underwent a pilot testing and item analysis of the selected students. Thus, the expert validators of the test questionnaire played a big part in the success of determining the appropriate validity and reliability of the questionnaires. Using Kuder Richardson Formula (KR20), the test of internal consistency gives a value of 0.75 which means high and acceptable. The study utilized Mean, Pearson's Product Moment Correlation, and regression analysis to measure students' readiness for online distance learning and their mathematics achievements, identifying which domains significantly predict these outcomes.

RESULTS

Table 1. Level of Readiness on Online Distance Learning

Readiness on Online Distance Learning	Mean	Description
Technology Access	2.58	High
Technology Skills	2.94	High
Study Skills	2.73	High
Time Management Skills	2.84	High
Motivation	2.93	High
Overall Mean	**2.80**	**High**

Table 2. Level of Mathematics Achievement in GE 4 (Mathematics in the Modern World)

Grade Scale	Equivalence	Descriptive Rating	Frequency	Percentage
1.00	98-100	Excellent	0	0%
1.25	95-97	Outstanding	0	0%
1.50	92-94	Very Good	4	1%
1.75	89-91	Very Satisfactory	10	4%
2.00	86-88	Good Work	32	11%
2.25	83-85	Satisfactory	41	14%
2.50	80-82	Moderately Satisfactory	60	22%
2.75	77-79	Quit Good Work	28	10%
3.00	75-76	Passing	51	18%
5.00	Below 75	Fail	58	20%
TOTAL			**284**	100%
Total Average		**2.50**	**Moderately Satisfactory**	

Table 3. Significance of the Relationship between Readiness on Online Distance Learning and Mathematics Achievement

	Mathematics Achievement		
Readiness on Online Distance Learning	r-value	p-value	Remarks
Technology Access	0.001	0.993	Not Significant
Technology Skills	0.189	0.001	Significant
Study Skills	0.118	0.047	Significant
Time Management Skills	0.127	0.032	Significant
Motivation	0.134	0.024	Significant
Overall	**0.13**	**0.03**	**Significant**

Table 4. Multiple Regression Analysis in determining which domain of Readiness on Online Distance Learning can best predict the Mathematics Achievement

Readiness on Online Distance Learning	Standardize Coefficient	t-value	p-value	Remarks
Technology Access	0.089	1.514	0.132	Not Significant
Technology Skills	**0.624**	**9.607**	**0.031**	**Significant**
Study Skills	0.111	1.766	0.079	Not Significant
Time Management Skills	0.065	1.102	0.271	Not Significant
Motivation	0.242	3.846	0.048	Significant

DISCUSSION

The level of readiness for online distance learning in terms of the specified indicators obtained an overall mean score of 2.80 which is high. This implies that the readiness for online distance learning among first-year students in ASSCAT, Trento Satellite Campus is evident. The result is similar to the study of Hashim and Osman (2021) revealed that readiness to use e-learning among science students in Tunku Abdul Rahman Putra Form Six College (KiSTARP) is also high. Among the indicators of Student readiness in online learning, Technology Skills got the highest mean of 2.94 which means high. This implies that Technology Skills is evident among the first-year students of ASSCAT, Trento Satellite Campus. Rodrigues et.al (2019) supported the idea that the basic technical skills of devices, together with the Internet, provide students and teachers greater access to online resources for teaching-learning. These skills influence students' academic performance (Lopez & Jose, 2013).

On the other hand, the level of the mathematics achievements of first-year students in the subject of GE 4 (Mathematics in the Modern World) is moderately satisfactory with an average score of 2.50 which is equivalent to the range of 80-82%. The result implied that Students' Mathematics Achievement is moderately Satisfying under the implementation of the new normal Setting in ASSCAT, Trento Satellite Campus. Similar to the findings of Garinganao & Bearneza (2021) where respondents show approaching satisfactory mathematic achievements. Moreover, Peteros et.al., (2020) showed an almost similar result of the approaching moderate performance on the respondents in the study conducted at a Public National High School, in Cebu, Philippines. Additionally, it was also found that the majority of the respondents, 60 students from 284 have a score of 2.50 which is equivalent to 80-82. In addition, 51 students from 284 got a 3.0 which is equivalent to 75-76% indicating that 18% of the respondents with a descriptive rating of passing score. However, 58 students out of 284 got a score of 75 below that is about 8% of the total students. This implies that 8% of the total respondents fail to pass the given final examination.

With regards to the relationship between Readiness for Online Distance Learning and Mathematics Achievement shows a significant very weak positive correlation reflected in Pearson's r which is 0.130, with a p-value of 0.03 showing $p < .05$ level of significance set in this study. This implies that if Readiness on Online Distance Learning among students increases or decreases, their Mathematics Achievement also increases or decrease, although the relationship is very weak. The study of Bovermann, Weidlich, and Bastiaens (2018) in Hagen Germany supports that there was a significant positive correlation found between students' online learning readiness in the dimension of technical competencies. This is like the study of Navani and Ansari (2016) stated that online distance readiness is important for enhancing the delivery, interaction, and facilitation of teaching and learning processes. Moreover, Wang & Guo (2022) highlighted online learning readiness showed a significant positive relationship with online academic performance during COVID-19. These results demonstrated that being ready to study online and having high emotional competence could make adolescents more resilient toward COVID-19 related challenges and help them learn more effectively online.

The Multiple Regression analysis gleaned that among the indicators of Readiness on Online distance learning, Technology Skills, and Motivation significantly predict the Mathematics Achievement of first-year students because of its p-value of 0.031 is lower than the 0.05 level of significance set in this study. Moreover, among the two indicators, Technology Skills is considered as the best predictor because it has the highest standardized coefficient of 0.624. This result supports the claim of Saenz (2015) that the basic technical skills of devices, together with the Internet, provide students and teachers greater access to online resources for teaching-learning. These skills influence students' academic performance (Lopez & Jose, 2013).

Conclusions

Based on the results, it is indicated that the student's readiness on online distance learning is high and evident. Moreover, students' Mathematics Achievements is

moderately satisfactory in the Ge 4 (Mathematics in the Modern World) subject. It was perceived that the high readiness on online distance learning has a significant relationship to the improvement of Mathematics achievement, however weak relationship was observed. In addition, Technology Skill was found to be the best predictor of Readiness on Online Distance Learning helping to improve the Mathematics achievements of the student. Moreover, the teachers must exert extra drive and passion on their teaching specifically in modular learning and Asynchronous flatform since it was found out that most of the students have difficulty in the internet connection at home.

Recommendations

Based on the conclusions drawn, the following recommendations are suggested:

1. ASSCAT, Trento Satellite campus should find any means to develop the readiness on online distance learning of the next incoming first-year students since it was found that high readiness on online distance learning and has a significant relation to good mathematics achievements.

2. Students should be more innovative and trained with new technology that can be useful in their studies to improve their academic performance. They should exert effort in their study because access to the internet at home is not essential to performing at school.

3. Instructors/Teacher shall provide technical assistance to the students to access the learning materials. Also, initial orientation to the students in the platform utilized in the class should be given promptly.

4. School Administrators should plan a learning strategy or method that is appropriate to use in online learning and to plan an alternative way to continue the teaching-learning process despite of pandemic to enhance student learning skills. Hence, readiness on online distance learning has a significant relationship to mathematics achievements, then this variable should be considered by the administrator even after the pandemic crises.
5. Future Researchers should explore other factors that can be related to mathematics achievements since it was found that readiness on online distance learning has very weak relationship to the Mathematics Achievement of the students.

Compliance with Ethical Standards

The study adhered to ethical guidelines set by the ACN Research Committee and followed the steps below in the gathering of data.

Seeking Permission to Conduct the Study. The researchers made a letter to ask permission to the college president of Agusan Del Sur State College of Agriculture and Technology (ASSCAT). After the approval, the researcher wrote another letter

request to inform the Campus Administrator of ASSCAT, Trento Satellite campus about the conduct of the study.

Conduct of the Study. Informed consent forms were secured, providing participants with information about the study's purpose, rights, risks, benefits, safety, privacy, confidentiality protocols, and the researcher's qualifications. Data was collected online using Google Forms, following health protocols set by the Inter-Agency Task Force on Infectious Diseases (IATF). Then, the researchers administered the survey questionnaire and examination for the final term to the first-year students of Agusan Del Sur State College of Agriculture and Technology (ASSCAT), Trento Satellite Campus through the Google form platform. The researcher ensured that respondents were well-oriented as to the mere purpose of the instrument and assured that the data gathered will be treated with the utmost confidentiality.

Acknowledgments

The researchers would like to extend their sincere gratitude and genuine appreciation to the following individuals who helped and contributed to the success and the completion of the study. First and foremost, to the Almighty God, for giving them insight, wisdom, and encouragement to make this study a successful one. Roel P. Villocino, EdD. and the Panel of Examiners, Delfin J. Enargan, MA and Elizabeth D. Dioso, EdD. for sharing their optimum expertise with the researchers and suggestions for improvement. Agusan del Sur State College of Agriculture and Technology, Trento Satellite Campus colleagues, friends, and felatives in several ways supported and encouraged the researchers to complete this undertaking; Most beloved family of the researcher for the unconditional love, incessant moral support, and financial assistance.

REFERENCES

Bovermann, K., Weidlich, J., & Bastiaens, T. (2018). Online learning readiness and attitudes towards gaming in gamified online learning–a mixed methods case study. International Journal of Educational Technology in Higher Education, 15(1), 1-17.

Care, E., Azim, F., Beswick, B., Harding, S. M., Luo, R., Bustos, T., & Cagasan, L. (2015). Large-scale assessments for use in the Philippines. Retrieved from https://www.researchgate.net/deref/http%3A%2F%2Fbit.ly%2F2G0PvYq

Chen, S. Y., & Fu, Y. C. (2009). Internet use and academic achievement: gender differences in early adolescence. Adolescence, 44(176), 797–842. Warner, R.M. (2013). Applied statistics: From bivariate through multivariate techniques. Thousand Oaks, CA. Sage Publications. Hashim, N., & Osman,K. (2020). Students' knowledge of the readiness to use E-Learning. International Journal of Academic Research. Conf. Ser. 1700 012033.

Garinganao, N & Bearneza, F. (2018). Algebraic skills and academic achievements in mathematics of grade 7 students in Philippines Chiness school. Philippine Social Science Journal. DOI:https:doi.org/main.v4i3.396

Hashim, N. H. C., & Osman, K. (2021). Students' Knowledge of the Readiness to Use E-Learning. Learning, 10(2), 596-604.
Joaquin, J. J. B., Biana, H. T., & Dacela, M. A. (2020, October). The Philippine higher education sector in the time of COVID-19. In *Frontiers in Education* (Vol. 5, p. 576371). Frontiers.
Kubiatko, M., &Vlckova, K. (2010). The relationship between ICT use and science knowledge for Czech students: a secondary analysis of PISA. InternationalJournal of Science and Mathematics Education, 8(3), 523–543. http://dx.doi.org/10.1007/s10763-010-9195-6
Lopez-Islas & Jose, R. (2013). Digital literacy and academic success in online education for underprivileged communities: The prep@net case. Doctoral dissertation, The University of Texas at Austin. http://hdl.handle.net/2152/20948
Navani, Y., & Ansari, M. A. (2016). A study of e-learning readiness of university faculty. International Journal of Current Research, 8(8), 35752-35756.
Peteros,E.,Gamboa, A.,Etcuban,J.,Dinauanao, A.,Sitoy, R., & Arcadio, R.(2020). Factors affecting mathematics performance of junior high school students.International Electronic journal of Mathematics Education.e-ISSN:1306-3030.2020,Vol 15,em0556. http:/doi.org/10.29333/iejm/5938
Rodrigues, A.L.; Cerdeira,L.; Machado-Taylor, M.d.L.; Alves, H. (2021). Technological Skills in HigherEducation—Different Needs and Different Uses. Educ. Sci.2021,11,326. https:/doi.org/10.3390/educsci11070326
Saenz, R.M.(2015). The relationship between technology skills performance and academic achievements among 8 th grade students: A canonical Analysis. Texas A&M University Corpus Christi. Retrieved from https://tamuccir.tdl.org/handle/1969.6/623
Tuntirojanawong, S. (2013). Students ' readiness for E-learning : A case study Journal Of Learning In Higher Education, 9(1), 59–66.
Wang, Y., Xia, M., Guo, W. Academic performance under COVID-19: The role of online learning readiness and emotional competence. Curr Psychol (2022). https://doi.org/10.1007/s12144-022-02699-7
Watkins, L., &Triner, D,. (2003).Assessing readiness for e- learning. Performance Improvement Quarterly,17(4)66- 79

APA Citation:

Repollo, J. L., Burlado, J. C., & Doronio, R. G. (2024). READINESS ON ONLINE DISTANCE LEARNING: ITS IMPACT TO THE MATHEMATICS ACHIEVEMENT OF FIRST-YEAR STUDENTS. Ignatian International Journal for Multidisciplinary Research, 2(8), 371–379. https://doi.org/10.5281/zenodo.13270873

jrepollo@asscat.edu.ph
jburlado@asscat.edu.ph

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

'READ LIKE ME' TO INCREASE THE READING COMPREHENSION OF GRADE IV STRUGGLING READERS

John Kelly F. Madeja, LPT, Rizalyn A. Merindad, Jhonnylyn G. Masungca, Krisciel Joy Gonzales, Abigail F. Fruelda, Aboven F. Galacan

Education Department, Romblon State University - San Andres Campus, Romblon, Philippines

https://doi.org/10.5281/zenodo.13334946

ABSTRACT

This study aimed to determine the impacts of 'Read Like Me' to increase the reading comprehension of Grade IV struggling readers in Linawan Integrated School. It was a four-week study; three times a week implementation every Monday, Tuesday and Wednesday. It was an experimental research wherein the researchers implemented 'Read Like Me' to increase the reading comprehension of Grade IV struggling readers in Linawan Integrated School and determine how they influenced the reading comprehension of pupils. The study sample composed of 21 Grade IV struggling readers in Linawan Integrated School who have shown difficulty when it comes to reading comprehension. The research instruments include pre-test, post-test and a daily tracking form to track the participant's words correct per minute (WCPM). Based on the data gathered, the study showed that the mean pretest score of the Grade IV struggling readers before the intervention was 10.71 (SD= 4.43) indicating a lower level of reading comprehension. As a result of the posttest, the pupils got a mean score of 15.62 (SD= 3.98), showed an improvement in their reading comprehension. Moreover, it was revealed that there is a significant difference in the scores of the pupils before and after the 'Read Like Me' intervention. It indicates that repeated reading intervention had a positive impact on the pupil's reading comprehension.

Keywords: *reading, reading comprehension, repeated reading, struggling readers and words correct per minute (WCPM)*

INTRODUCTION

Learning to read was one of the most important skills that children should master. According to WETA Public Broadcasting (2020), reading provided a lot of benefits which include stimulation of the brain, increased imagination and curiosity, decreased stress and anxiety, and children building self-confidence. As stated in DEPED Memorandum No. 173, s. 2019, there was a need to strengthen the reading proficiency of every learner and to nurture the philosophy of reading which a requisite skill in all content areas is. In response to this DepEd Memo, the Division of Dasmariñas released DepEd Memorandum No. 181, s. 2021. It was stated that the Division continuously envisions making every learner a reader even amid this pandemic as indicated in the Division Basic Education Learning Continuity Plan (BE-LCP). According to Romig and Jetton (2023); due to the COVID-19 pandemic, teachers are left to transition from face-to-face instruction to the blended mode of learning (modular and online formats) without much of evidence on how to do so effectively. School closures lead teachers to prepare and implement programs to create new approaches to evidence-based reading intervention. As stated by Lee and Yoon (2017) in their meta-analysis of repeated reading interventions and included peer-reviewed journal articles and dissertations. Repeated reading interventions were more successful with elementary pupils than with secondary pupils, for primary reading levels than with secondary reading levels, with passage preview (modelling) than without, and with non-transfer passages than with transfer passages.

Research Questions

This research focused on the impacts of 'Read Like Me' to increase the reading comprehension of Grade IV struggling readers in Linawan Integrated School.

Specifically, it sought to answers the following questions:

1. What is the mean pre-test score of Grade IV struggling readers in Linawan Integrated School before the 'Read Like Me' intervention?
2. What is the mean post-test score of Grade IV struggling readers in Linawan Integrated School after the 'Read Like Me' intervention?
3. Is there a significant difference between the reading comprehension of Grade IV struggling readers before and after the 'Read Like Me' intervention?

METHODOLOGY

Research Design. This type of research was an experimental research. The vital aspect of experimental research is that researchers control and influence the conditions that determine the events in which they are interested, propose an intervention, and measure the difference that it makes. So, in this study, the researchers implemented 'Read Like Me' to increase the reading comprehension of Grade IV struggling readers in Linawan Integrated School and determine how they influenced the reading comprehension of

pupils. *Subject and Respondents of the Study.* The sample of the population of this study stood at 21 Grade IV struggling readers; giving a total of 21 respondents. *Sampling Techniques.* The method of purposive sampling was used in the study. The participants of this study were the Grade IV pupils in Linawan Integrated School who have shown difficulty when it comes to reading comprehension based on Phil-IRI curriculum-based screening indicating below-grade level reading comprehension. *Research Instrumentation.* The researchers obtained individual reading passages from the educational website of DIBELS-ORF or Dynamic Indicators of Basic Early Literacy Skills for the Grade IV Reading Fluency passages (University of Oregon, Center on Teaching and Learning, 2018). Additionally, researchers developed data collection documents such as a pre-test, post-test, and a daily tracking form to track the participant's words correct per minute (WCPM) wherein was validated by several experts.

The WCPM Daily Tracking form was used to record each session date, a number of words read correctly, the number of words in a text, the percentage range, and the reading level of participants. Additionally, a 20-multiple comprehension questions were made for pre-test and post-test. It was based on the reading passages from DIBELS-ORF used during the intervention process. Furthermore, the pupils were required to read each question and encircle the letter of the best answer. There were four (4) choices in each item wherein the pupils must choose the best answer for each question. The percentage of correct words circled by each pupil on the multiple-choice questions was recorded as a measure of comprehension. Also, a pilot testing of those research instruments happened. *Statistical Treatment of the Data.* Descriptive statistics such as mean were used in analyzing the data generated from the pre-test and post-test of the intervention. Furthermore, the Dependent T-Test or Paired Sample T-Test was used to determine if there is a significant difference in the reading performance of Grade IV struggling readers before and after the 'Read Like Me' intervention.

RESULTS

Table 1. The pretest results of Grade IV struggling readers in Linawan Integrated School before the 'Read Like Me' intervention

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test Scores	21	3	18	10.71	4.429
Valid N (listwise)	21				

Table 2. The posttest results of Grade IV struggling readers in Linawan Integrated School after the 'Read Like Me' intervention

	N	Minimum	Maximum	Mean	Std. Deviation
Post-test Scores	21	6	20	15.62	3.981
Valid N (listwise)	21				

Table 3. Paired Sample T-Test result

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1 Post-test Scores Pre-test Scores	4.905	4.312	.941	2.942	6.867	5.213	20	.000

DISCUSSION

As presented in Table 1, it showed that the highest score got by the Grade IV pupils was 18 and the lowest score was 3 (M= 10.71; SD= 4.43) before the 'Read Like Me' intervention happened. This indicates that the pupils have a lower level of reading comprehension. Most pupils scored in the *Frustration* oral reading level wherein the pupils have difficulty in understanding their reading materials. This supported the study of Kudan, H. & Kyol, H. (2018) which states that errors in reading affect the level of comprehension negatively, as they result in pupils losing their understanding.

As revealed in Table 2, it showed that the highest score got by the Grade IV pupils was 20 and the lowest score was 6 (M= 15.62; SD= 3.98). This indicates that there is an increase in the mean score of Grade IV pupils during the post-test. It showed an improvement in their reading comprehension. Thus, the pupils scored in the *Instructional* and *Independent* level of comprehension wherein the pupils can read their own or with the assistance of the teacher. This emphasizes the study of Papadima-Sophocleous and Charalambous (2014) which demonstrates improved results through the assistance of repeated reading to the pupils who are more inclined to read word for word.

As seen in Table 3, a paired sample t-test showed that the performance of students increased after the intervention had been made. There was a significant difference in the scores between the reading comprehension test before (M=10.71, SD = 4.43) and after (M = 15.62, SD = 3.98), t (20) = 5.213, p = 0.000 the intervention. The differences therefore indicate that the Repeated Reading strategy has a positive impact in raising pupils' comprehension levels. The current finding was similar to Dotson-Shupe's (2017) repeated reading study which showed that the repeated reading strategy was successful in increasing the pupils' comprehension abilities and the participants improved their accuracy when reading orally. In addition, Ates (2017) showed that RR develops pupils' metacognitive reading strategies. There is a significant improvement in reading rate and comprehension of the study's experimental group.

Conclusions

Considering the findings of the study, the following conclusions were drawn:
1. The pretest performance of the Grade IV struggling readers were low wherein they fall under the *frustration* oral reading level.
2. As evidenced, the posttest performance of Grade IV struggling readers after the 'Read Like Me' intervention was higher than their pretest performance. This implied that repeated reading intervention uplifted the performance of the pupils and the shift towards higher reading levels.
3. There is an indication that repeated reading improves the reading comprehension of Grade IV struggling readers.

Recommendations

Based on the findings of the study and the conclusions, the following are recommended:
1. Repeated reading strategy may be used to increase the speed, accuracy and reading comprehension of pupils.
2. The use of error correction, feedback, and progress monitoring influenced the motivation to increase the fluency skills of students. The pupils gained confidence with fluency with each passing week. A higher level of pupil achievement in reading can be achieved by combining the essential components of repeated reading.
3. By lengthening the study's timeline, the research could result in more accurate averages and the effectiveness of repeated reading.
4. As the study had its limits, there were some developments in research needed for the accuracy of this study. This study could be developed by future researchers by conducting the same studies on using the repeated reading intervention focusing on the pupil's reading comprehension.

Compliance with Ethical Standards

All the participants were informed about the details of the study. Participation in the study was voluntary, and the pupils could withdraw from the study without any consequences. Furthermore, only the researchers have access to the research data. The researchers respect and protect the confidentiality and privacy of the data and information that will be gathered as required by the Data Privacy Act of 2012 (R.A. 1017).

Acknowledgments

This research paper would not have been possible without the exceptional guidance and support of Prof. Dr. Mario A. Fetalver Jr. His knowledge, enthusiasm and attention to detail have been inspirational in shaping the trajectory of this project. In addition, our sincere gratitude to the generous support of Linawan Integrated School which enabled us to carry out this study. We want to extend our gratitude for their support with data collection and management. To conclude, we would like to thank God and our family. It

would would have been impossible to finish our study without their unwavering support over the past years.

REFERENCES

Ates, S. (2017). The effect of repeated reading exercises with performance-based feedback on fluent reading skills. *Reading Improvement*, 50(4), 158-165. Retrieved from https://www.thefreelibrary.com/

DepEd Memorandum No. 173 s. 2019. Hamon: Bawat Bata Bumabasa (3Bs Initiative)

DepEd Memorandum No. 181 s. 2021. Intensifying School Reading Programs amidst Pandemic

Dotson-Shupe, E. C. (2017). The impact of repeated reading on the comprehension level of eighth grade pupils at the middle school level. *Doctoral Dissertation*. University of South Carolina

Kudan, H. and Kyol H. (2018). Effects of choral, repeated and assisted reading strategies on reading and reading comprehension skills of poor readers. *Education and Science.* Vol 43. doi: 10.15390/EB.2018.7385

Lee, J., & Yoon, S. Y. (2017). The effects of repeated reading on reading fluency for students with reading disabilities: A meta-analysis. *Journal of Learning Disabilities*, 50 (2), 213–224. https://doi.org/10.1177%2F00222

Papadima-Sophocleous, P., & Charalambous, M. (2014). Impact of IPOD touch supported repeated reading on the english oral reading fluency of l2 students with specific learning difficulties. *The EUROCALL Review*, 22(1), 47-58. Retrieved from https://doi.org/10.4995/eurocall.2014.3639

Romig, J. E., & Jetton A. (2023). Effects of a repeated reading intervention delivered online to upper elementary students. *Journal of Special Education Technology*, Vol. 0(0) 1–11. doi:10.1177/01626434231184879.

University of Oregon, Center on Teaching and Learning (2018). Understanding the research behind DIBELS® 8th Edition (Technical Report 1801).

WETA Public Broadcasting (2020). Fluency. *Reading Rockets*. https://www.readingrockets.org/teaching/reading-basics/fluency.

APA Citation:

Madeja, J. K. F., Merindad, R. A., Masungca, J. G., Gonzales, K. J., Fruelda, A. F., & Galacan, A. F. (2024). 'READ LIKE ME' TO INCREASE THE READING COMPREHENSION OF GRADE IV STRUGGLING READERS. In Ignatian International Journal for Multidisciplinary Research (Vol. 2, Number 8, pp. 980–985). ICCE. https://doi.org/10.5281/zenodo.13334946

Corresponding author: *madejakelly@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

REVISITING GRAMMAR-TRANSLATION AND INDEPENDENT LEARNING METHODS IN TEACHING ENGLISH IN THE NEW NORMAL EDUCATION

Reynante M. Enriquez[1] & Dr. Eva V. Brinosa[2]

[1]Deparment of Education - San Roque National High School, Bulalacao, Oriental Mindoro, Philippines
[2]College of Teacher Education - Mindoro State University Bongabong Campus Bongabong, Oriental Mindoro, Philippines

https://doi.org/10.5281/zenodo.13358451

ABSTRACT

The teachers need to continually determine and decide on the kind of pedagogy that they are using to meet the needs of the learners. Educational pursuit amid and after pandemic should not only be a government's concern, rather, this also includes educators, particularly to those who actively engage in teaching. Thus, Revisiting Grammar Translation and Independent Learning Methods in Teaching Junior High School English for the 21st Century Education in the New Normal was conducted to come up with common strategies supportive of the pedagogy that suit to the current educational setting. Respondents of the study were the randomly selected 266 Junior High School Learners. Self-made questionnaires were used to gather necessary data to address the research problems consisting of four major parts revisiting the description of Grammar Translation, strategies in learning JHS English, the extent of the student's belief in the importance of the use of Independent Learning strategies, issues and challenges in the utilization of said methods, and common strategies that are supportive of the pedagogy suited in the new normal of the 21st-century education. As a result of revisiting, ten teaching strategies were confirmed to be supportive of the pedagogy that suit the new normal of 21st-century education. As an output, the Matrix of Strategies in Teaching English in the New Normal (MSTENN) was proposed for utilization.

Keywords: *21st Century Education, Grammar-Translation, Independent Learning, New Normal Pedagogy, Strategies in Teaching Junior High School English*

INTRODUCTION

The New Normal Education brings global challenges to the people, specifically the academe sectors had a sudden educational makeshift. Educational institutions find means and ways to address the issues by providing exhausting possible resources so that the quality of education is not compromised. Because of these, the teaching-learning processes also encountered problems that burden the teachers and the students. UNESCO (2017), stated that learning must continue because education cannot wait. After all, the world does not want to lose human capital. Likewise, teachers must recognize their roles in the process of adjustments. Department of Education (2020), said that they need to work harder and more creatively to carry out the objectives set of education.

The teaching in the new normal differs due to some practices which were no longer applicable and relevant at present; thus, there was a shift in the pedagogy to make the necessary adjustments. Cooper,(2022) confirmed that teachers are progressively advancing their teaching strategies in line with evidence-based practices and their student's learning needs. They need to be considerate of students' points of view to realize truly learner-centered instruction that utilizes teaching methods and strategies based on students' positive reception and acceptance. Hence, one of the teachers most relevant responses to the instruction challenges in the present is to initiate revisiting various teaching methods and strategies. It would help them adapt to the current instructional milieu and to be able to serve education in the most viable possible way.

While teachers are busy preparing their modules for Modular Distance Learning in a print medium, they continually experience a dilemma with some aspects of teaching. Most of these teachers' present apprehensions are regarding those practices that are hard to reconcile with those observances in instruction during the face-to-face classes when there were no threats of COVID-19 yet. Consequently, the bright side that the COVID-19 crisis presented points to the opportunity for the education sectors and partakers to come together, forge connections and share what works Obana,(2020). With the increasing need to make the Modular Distance Learning-Print (MDL-P) a more adequate and effective tool in teaching, there should also be an accumulating need to adjust teaching methodologies for teachers to employ relevant strategies that support learning in the current situation. Thus, Revisiting Grammar-Translation Method and Independent Learning in Teaching English in the New Normal education became an ever-relevant factor to account for with the usual strategies supportive of the pedagogy that suits the current educational setting.

With the realities and demands of the new normal, students are the direct targets affected by the abrupt changes and challenges. They often encountered difficulties understanding the modules written in English, accomplishing heavily loaded tasks provided in their self-learning modules, doing seemingly child-centered activities, and learning vocabulary and literature, as well as grammar and composition. These challenges emerged as the outcome of the shift in the focus of DepEd learning competencies prescribed by the newly adopted Curriculum Guide setting as Most Essential Learning Competencies (MELCs).

The initial implementation of the Basic Education-Learning Continuity Plan of the DepEd, considered successful as marked by the carrying out of its objectives in the School Year 2020-2021, there is an emerging need for continual adjustments to bring out the quality

of education being aspired for by the country. Parents and students pleaded for instruction more fitting for the learners amid the specific situations that prohibited the face-to-face delivery of teaching-learning processes. Learners particularly longed for Self-Learning Modules (SLMs) that are more considerate of their difficult learning situations.

In addition, most of the parents admitted their limitations to make the teaching facilitation roles with the right and expected outputs that would be the top concern of the teachers. Thus, this study which focuses on review of the use of Grammar Translation and Independent Learning Methods was conducted. It sought to determine whether application of embedded strategies would help carry out lessons in English. It also elaborated the two methods in teaching: to identify the extent of the importance of the strategies utilization, review common issues and concerns among revisited strategies, and name the common strategies supportive of the pedagogy that suits the new normal in teaching. As an output, a matrix of the styles found by learners supportive of the pedagogy that befit the new normal education emerged.

The study was conducted among the students to 824 learners that are 60% of this population belongs to the indigenous, while the remaining percent belongs to non-native lowland learners. The school implemented Modular Distance Learning-Print (MDLP) wherein learners are Home-schooled through the provided Self-Learning Modules (SLMs) with their parents, who are most of them, if not illiterate, have limited educational backgrounds.

Research Questions

This study aimed to revisit the Grammar Translation and Independent Learning Methods in Teaching Junior High School English, analyze issues and concerns on common strategies revisited, and identify which strategies under these methods are supportive of pedagogy that suits the new normal learning.

Specifically, this study sought answers to the following questions:

1. How are the common strategies on the Grammar-Translation Method described interms of:
    - 1.1 teaching vocabulary through wordlists and translation;
    - 1.2 reading literary passage with reading comprehension questions;
    - 1.3 practicing translation of texts to and from Mother Tongue;
    - 1.4 elaborating presentation of grammar rules;
    - 1.5 memorizing grammar rules and vocabulary;
    - 1.6 including antonyms and synonyms, definitions, and other vocabulary exercises based on words in reading texts; and
    - 1.7 providing composition exercises based on topics from reading texts?
2. To what extent Independent Learning Method is used in terms of:
    - 2.1 reflection;
    - 2.2 feedback; and
    - 2.3 decision?

3. What issues and concerns are experienced by learners regarding the use of Grammar Translation and Independent Learning methods in teaching Junior High School English?

4. Based on learners' perspective, which among the strategies of Grammar-Translation and Independent Learning Methods are considered supportive of the pedagogy that suits the new normal education?

5. Based on the results of the study, what teaching strategies be proposed.

METHODOLOGY

This study employed a descriptive research design. Mertler (2016),defined a descriptive research study aims to describe and interpret the status of individuals, settings, conditions, or events. It used a survey rather than an observation technique. The respondents were 266 Junior High School students who were chosen using the simple random sampling technique, and a self-made survey questionnaire was also used to gather necessary data. Gay et.al, (2012), described survey research primarily with the involvement of the collection of data to test premises or to answer questions about people's opinions regarding topics or issues and concerns. To establish reliability and validity, the instrument underwent the necessary procedures including test-retest validation with the aid of the t-test observing the .05 margin of error. Moreover, necessary communications, consents, and permits were observed and secured as deemed needed being an integral part of the processes of inquiry. The data gathered were tabulated, analyzed, and interpreted.

RESULTS

1. Describing common strategies on Grammar Translation Method (GTM)

Table 1.1 Teaching vocabulary through wordlist and translation

Items	Weighted Mean	Rank	Description
1. Presents list of words to learn from the reading text or selection	3.14	2	Useful
2. Provides translation of words from English to Filipino	3.17	1	Useful
3. Indicates translation of words from Filipino to English	3.11	6.5	Useful

4. Posts list of words to learn for every lesson being presented	3.11	6.5	Useful
5. Asks to translate words to the known language	3.12	4	Useful
6. Instructs to keep a list of words and their meaning	3.11	6.5	Useful
7. Requires a notebook intended for vocabulary learning/exercises	3.11	6.5	Useful
8. Prepares vocabulary listing for every lesson being studied	3.13	3	Useful
Overall mean	**3.13**	**Useful**	**Useful**

Table 1.1 showed that in opposition to the usual practice and principles on the instruction of the Second Language (L2), wherein the target language is taught solidly in the instruction process, learners are convinced that it is the other way round. The overall mean of 3.13 indicates that teaching vocabulary through wordlist and translation as part of Grammar Translation's strategies in Teaching English is generally functional, and noted that wordlist and translation are complementary ways of learning vocabulary.

Table 1.2 Description of Reading Literary Passages

Items	Mean	Rank	Description
1. Includes reading materials from any literature	3.23	4	Useful
2. Uses reading comprehension questions to check understanding	3.14	6	Useful
3. Asks to answer questions every after reading	3.28	1	Useful
4. Strengthens understanding of the reading text through guide questions	3.27	2	Useful
5. Gives importance to reading and literature	3.17	5	Useful
6. Present literary piece regardless of length and encourages reading and understanding	3.08	7	Useful
7. Utilizes questions to guide learners in reading activity	3.26	3	Useful

8. Incorporates literature in every lesson taught	3.05	8	Useful
Overall Mean	**3.19**		**Useful**

The overall mean score of 3.19 describes the reading of literary passages, even at low levels, with reading comprehension questions to be functional. As stated, despite learners' seemingly observable apprehension towards incorporating literature in every lesson, the students understand the value of using comprehension questions in reading activities. The overall impression maintained the affirmation of the mentioned strategy, although there is a dichotomy between the students' resistance and their actual perception.

Table 1.3 Description of Practicing Based on Translation of Texts

Items	Mean	Rank	Description
1. Provides exercises that allow learners to use own language to express ideas	2.88	7	Useful
2. Offers activities that encourage translation to and from learner's own language	2.84	8	Useful
3. Asks students to translate words/phrase/sentence to and from English	3.11	5	Useful
4. Encourages learners to understand lesson and relates it to equivalents in own language	3.24	2	Useful
5. Allows students to use Mother Tongue in answering comprehension questions	3.18	4	Useful
6. Gives exercises that allow translation of the reading text from English to Filipino	3.07	6	Useful
7. Permits the use of own language in explaining concepts learned from the reading text	3.25	1	Useful
8. Encourages learners to translate answers from own language to English	3.22	3	Useful
Overall Mean	**3.10**		**Useful**

The computed overall mean score of 3.10 revealed that practicing based on the translation of the text to and from the Mother Tongue is useful in teaching English. As noted, students consider it helpful when the teacher permits the use of their language in explaining concepts learned from the reading text. Despite this, learners do not want teachers to prepare extra activities specifically for translation to and from the Mother Tongue.

Table 1.4 Description of Elaborating Presentation of Grammar Rules

Items	Mean	Rank	Description
1. Presents clear explanation on principles of grammar being taught	3.23	3.5	Useful
2. 2. Demonstrates grammar rules through examples	3.08	6.5	Useful
3. 3. Uses illustrations to present clearly the grammatical concepts	3.08	6.5	Useful
4. 4. Provides complete discussions and details of grammar rules being studied	3.23	3.5	Useful
5. 5. Address complex grammar rules and principles with emphasis	3.24	2	Useful
6. 6. Intensifies grammar rules learning and mastery through progressive exercises	3.06	7	Useful
7. 7. Gives particular reminders on grammar rules exceptions when they should be remembered	3.27	1	Useful
8. 8. Contrasts grammar rules of the target language to the grammar rules of own language	3.03	8	Useful

Overall Mean	**3.15**	**Useful**	

The overall mean score of 3.15 signified that elaborating the presentation of grammar rules is useful for English teaching. Generally, it underlined the importance of clear explanations on the intricacy of grammar rules in English.

Table 1.5 Description of Memorizing Grammar Rules and Vocabulary

Items	Mean	Rank	Description
1. Guides learners to memorize grammar rules and vocabulary	3.18	3.5	Useful
2. Instructs students to master a list of words with their meanings	3.23	2	Useful
3. Gives activities to check the level of student's mastery of grammar rules and vocabulary	3.18	3.5	Useful
4. Checks mastery of grammar rules through the provided activities	3.15	6.5	Useful
5. Emphasizes to the learners the value of memorizing rules and vocabulary	3.15	6.5	Useful
6. Sets mastery of grammar rules and vocabulary as part of subject requirements	3.24	1	Useful
7. Devotes specific part of the lesson for memorization of grammar rules and vocabulary	2.89	8	Useful
8. Employs memorization as technique of learning grammar concepts and vocabulary	3.17	5	Useful
Overall Mean	**3.23**		**Useful**

The computed overall mean score of 3.23 revealed that student memorization of grammar rules and vocabulary is useful in teaching Junior High School English.and setting mastery

of grammar rules and vocabulary as part of subject requirements was described by learners as useful.

Table 1.6 Description of Including Vocabulary Exercises

Items	Mean	Rank	Description
1. Includes exercises on synonyms and antonyms for vocabulary mastery	3.23	2	Useful
2. Incorporates definition of words for vocabulary learning	3.06	6	Useful
3. Provides vocabulary exercises on words coming from the reading texts	3.05	7	Useful
4. Lead students to explore other meanings of words through synonyms and antonyms	3.26	1	Useful
5. Presents activities focused on vocabulary found in the reading text with their meanings	3.12	4	Useful
6. Emphasizes activities for vocabulary mastery in the lesson	2.86	8	Useful
7. Asks students to define words lifted from the literature being studied	3.10	5	Useful
8. Identifies words from the selection which meaning students need to know	3.15	3	Useful
Overall Mean	**3.10**		**Useful**

The overall mean score of 3.10 revealed that vocabulary exercises including antonyms and synonyms, definitions, and others based on words in reading texts was described as useful.

Table 1.7 Description of Providing Composition Exercises

Items	Mean	Rank	Description
1. Includes composition exercises relevant with the reading text	2.87	8	Useful
2. Prepares writing activities based on the given topics	3.26	1.5	Useful
3. Offers opportunity for writing every after reading activity	3.26	1.5	Useful
4. Uses the theme of the reading selection as subject of the composition exercises	3.11	3	Useful
5. Motivates writing interest through appreciation of the literature being read	2.95	6	Useful
6. Performs writing exercises to critic reading materials	2.94	7	Useful
7. Suggests writing themes taken from the topics of the reading text	3.01	4	Useful
8. Requires composition writing as an important course requirement in English	2.99	5	Useful
Overall Mean	**3.04**		**Useful**

Results revealed that students were convinced that preparing writing activities based on the topic of the given selection and offering the students opportunity for writing every after reading are vital in learning the English language. This finding emphasized that learners are inclined to integrating what they have learned into their real-life experiences through writing as shown in the overall computed mean score of 3.04

2. Extent of importance of independent learning with its selected common strategies used

Table 2.1 Extent of importance of reflection as Independent Learning strategy

Items	Mean	Rank	Description
1. Executes reflection as part of diagnostic activities	3.06	6	High
2. Does reflection as formative part of the lesson	3.05	7.5	High
3. Writes reflection as part of assessment of learning	3.28	1	High
4. Integrates reflection as an important process of learning	3.09	3	High
5. Devotes specific time for reflection in each lesson	3.07	5	High
6. Encourages to reflect on the content of the lesson	3.11	4	High
7. Establishes mastery of the lesson through reflection	3.05	7.5	High
8. Strengthens learning plans through reflections	3.12	2	High
Overall Mean	**3.04**		**High**

Having the overall mean score of 3.10, the results revealed that writing reflection as part of the assessment of learning was perceived by learners to be with high extent of importance. This finding indicates that learners recognize the value of doing reflection as evaluative part of learning journey.

Table 2.2 Importance of Feedback as Independent Learning Strategy

Items	Mean	Rank	Description
1. Corrects on reading comprehension activities through given feedback	3.29	3	High
2. Utilizes feedback on grammar and vocabulary exercises	3.09	5	High
3. Improves composition writing skills through feedback given	3.28	4	High
4. Develops positive attitudes towards language study through feedback	3.34	1	High
5. Applies corrections obtained through given feedback	3.05	6	High
6. Seeks feedback from peers and others to strengthen learning	2.86	7	High
7. Boosts learning opportunities through healthy feedback communication	3.33	2	High
8. Communicates feedback in a constructive manner	2.85	8	High
Overall Mean	**3.14**		**High**

The overall mean score obtained was 3.14 indicated that learners value feedback as part of the learning process, regardless how it is given to them.

Table 1. Importance of Decision as Independent Learning Strategy

Items	Mean	Rank	Description
1. Has the freedom to decide which learning activities to do	3.27	2	High
2. Decides on which materials to use for effective learning	3.07	3.5	High

3. Takes responsibility for every learning tasks	3.29	1	High
4. Observes own pacing for the learning processes	3.07	3.5	High
5. Sets own learning targets and makes own learning plan	2.95	8	High
6. Appraises learning progress through self-assessment	2.97	7	High
7. Distinguishes helpful inputs from not helpful ones	3.04	6	High
8. Chooses which tool to use to assess one's learning	3.25	3	High
Overall Mean	**3.14**		**High**

The result revealed that taking responsibility for every learning task was described as high extent of importance with the overall mean score of 3.11. This demonstrated that learners are interested to be empowered as they undertake their learning tasks.

3. Issues and concerns on the use of Grammar-Translation and Independent Learning Methods in teaching Junior High School English

Table 3.1 Issues and concerns on Grammar Translation Method

Items	Mean	Rank	Description
1. Focuses merely on translation	3.10	3.5	Manifested
2. Gives prime importance only to reading and writing but neglects speaking and listening	3.09	5	Manifested
3. Employs teacher-centered instruction	3.28	2	Manifested
4. Emphasizes memorization as best approach to master grammar rules and vocabulary	3.10	3.5	Manifested
5. Allows the use of mother tongue in teaching English	3.29	1	Manifested

6. Teaches vocabulary through lists of isolated words	3.08	6	Manifested
7. Neglects context of texts in the study of literature	3.07	7	Manifested
8. Neglects pronunciation	2.30	8	Less Manifested
Overall Mean	**3.04**		**Manifested**

The overall mean of score of 3.04 revealed that most students confirmed manifestation of the issues and concerns raised on the use of the said method based on their current experience in English language instruction.

Table 3.2 Issues and Concerns on Independent Learning

Items	Mean	Rank	Description
1. Considers setting self-learning goals difficult	3.29	1	Manifested
2. Can do self-assessment in a dishonest manner	2.85	7	Manifested
3. Lacks interest in doing reflection	2.82	8	Manifested
4. Depends highly on feedback of teachers and peers	3.08	3.5	Manifested
5. Affects quality of learning outcomes when given too much freedom	3.07	5	Manifested
6. Fails to use genuine materials when not guided by teachers	3.06	6	Manifested
7. Tends to choose only easy learning tasks or activities	3.09	2	Manifested
8. Doubts on the fairness of the method for all types of learners	3.08	3.5	Manifested
Overall Mean	**3.04**		**Manifested**

The overall mean score of 3.04 confirmed that all the named common issues and concerns under the Independent Learning were manifested based on the respondents' experiences.

Table 4. 1 Common Strategies in Teaching Junior High School English

Items	Mean	Rank	Description
1. Teaching vocabulary through wordlists and translation	3.20	3.5	Supportive
2. Reading of literary passages with reading comprehension questions	3.20	3.5	Supportive
3. Practicing translation of texts to and from Mother Tongue	3.19	6.5	Supportive
4. Elaborating presentation of grammar rules and vocabulary	3.20	3.5	Supportive
5. Memorizing grammar rules and vocabulary	3.19	6.5	Supportive
6. Providing composition exercises based on the reading texts	3.20	3.5	Supportive
7. Including vocabulary exercises on antonyms, synonyms, and definitions others based on words in reading texts	3.17	9	Supportive
8. Using reflection as part of learning process	3.10	10	Supportive
9. Employing feedback regularly to improve learning outcomes	3.18	8	Supportive
10. decide for their own learning goals	3.26	1	Supportive
Overall Mean	**3.19**		**Supportive**

The overall mean score of 3.19 described the common strategies in teaching Junior High School English as supportive of pedagogy that suits the new normal education. As data disclosed, Grammar-Translation and Independent Learning Methods are employing strategies that are relevant to the learning needs of the students at present.

DISCUSSION

The findings indicated in table 1.1,are substantially consistent with what Mart,(2013) said that translation is an aid to enhance proficiency via the target language. According to him, translation is functional in understanding another language studied. It claimed that the Grammar-Translation method indeed is supportive and has a unique role in foreign

language learning that it allows the students to distinguish the differences and similarities between the first language (L1) and the second language (L2), making the students comprehend better light the system of the target language. To support, Kaye,(2021) pointed out that most English Language teachers and theorists nowadays recognize the "validity and value" of translation as strategies in teaching. Designing translation activities well for instruction can hone multiple language learning skills, particularly in the vocabulary aspect. Translation is essential in developing communicative competence, because it demands accuracy, clarity, and flexibility. It was further pointed out that translation trains the reader to search (which is an act of exercising flexibility) for the best words' equivalent (which is an act of valuing accuracy) to communicate the meaning (which is an act of venturing on clarity).

The table 1.2 adheres to relevant guidelines set by the DepEd (Department of Education, (2020) stipulating that the learning competency shall be sub-tasked if it is necessary to allow the learners to easily follow the lesson's progression, following the principles of mastery learning. Engaging students to interact with the literature by asking them to answer given questions after reading was indeed said to be helpful for language learning. The same finding is relevant to what Bowen, (2016) stated that using more enlightened principles while combining them with the systematic approach of Grammar Translation suited learning needs and styles of various learners. This indicates that fluency takes place through reading literary passages after reading in the target language.

The table 1.3 means that respondents believe in the unique role of translation in the teaching-learning process though they do not want their teachers to devise separate activities plainly devoted for translation.This result is supportive of what Khan,(2018) found out that GTM is a very useful method for learners to learn English where learning becomes easy and advantageous noting that learners find hard time learning English through other presently trending methods like direct method and audio-lingual method emphasizing the drawback of the absence of English-speaking communit

In.elaborating presentation of grammar rules, the finding is consistent with Aqel,(2013) found that language skills acquisition and the mastery of the grammatical rules must also be focused on, thus, commending the application of grammatical structure and the practicing of the language skills in general at the target language as to strengthen the required forms that the students need to develop to succeed in the learning of the target language. In this way, learners enjoy the great benefit of full knowledge of the two languages alongside which liberates the students from any tendency of ambiguity of the language being studied. In addition, Chang,(2011) affirmed that being given the significant and necessary elaboration, learners will try to refrain from committing possible the same errors when using the target language and when errors take place, the students are already capable of giving reasons why avoiding repetitive mistakes, as a result. In the light of this finding, it is an important consideration to keep abreast with various activities that could be best employed to making the elaborate presentation of grammar rules more interesting to the learners.

Based from the results from table 1.5, it revealed that learners are more inclined to highlighting the importance of mastering grammar as significant component of language English learning in Junior High School This result directs teachers to set certain learning

rules among their students that emphasize the mastery of grammar and vocabulary. However, as result implied there is no necessity to devoting specific parts of the lesson for plain memorization purposes. This finding reiterated that while students remained to be in good esteem with the usefulness of memorizing grammar rules and vocabulary in learning the English Language, learners understand that it should not be done separately from each part but along with the lesson, Garlock,(2019) claimed that memorization in the context of formal education setting booster learning outcomes. Therefore, as the current research advocates its proper use, memorization which is usually involving a process employing techniques of repetition for mastery becomes an effective propeller to language mastery.

Table 1.6 result emphasized that learners expect their teachers to prepare lessons more on leading and allowing them to discover vocabulary meanings through various exercises like synonyms and antonyms, the definition of words, guided simulations about meanings, and reading text-driven vocabulary exercises. The results implied that students remained to have good esteem with the incorporation of vocabulary exercises in the lesson which is highly based on the selection embedded in the lesson.This result is conforming with the idea on vocabulary integration that taking vocabulary as the core consideration in teaching all grade levels. This entails activities that go beyond vocabulary familiarization and memorization aiming to integrate vocabulary words into learners' language patterns. Thus, it affirms activities that require the application of the learned vocabulary terms in various vehicles of learners' communication as well as remembering the value of word identification activities suggesting that teachers could guide learners to decode words from a given material honing the skills for word identification which consequently leads to stronger functional language used among learners. Using activities on vocabulary exercises make the learners critical ones in understanding and improving their vocabulary skills like what Ilter,(2019) confirmed in his study that doing this has a meaningful impact on learners' comprehension and increasing their proficiency and building the students' vocabularies.

In table 1.7, students, however, expect their teachers to engage them in writing activities that are not solely confined within the theme of the reading text used. While they recognize the value of relating the theme of the selection in their own lives, learners prefer writing activities for free self-expression.Considering this, it is important that composition writing be given particular importance as part of instruction. This kind of activity helps students crystallize and articulate the text's ideas so that they can explore them further. Moreover, activities like this, as Gibson,(2021) recommended, to remind teachers to provide learners high levels of a support system as they engage in the process. In addition, Ball,et.al (2021), noted that designing exercises like this is helpful to roll information providing insight on certain aspects of the story embedded in a literature read. In such manner, the learners are allowed to relay their insights and understanding as well as their opinions or reflection on the given text.

Table 2.1 Extent of importance of reflection as Independent Learning strategy indicates that learners recognize the value of doing reflection as evaluative part of learning journey. It also showed that students are more inclined to reflect as part of the assessment rather than doing it as part of the formative assessment. The finding noted the need for teachers to provide learners time for reflection as part of learning assessment, basis to strengthen

learning plans, deepen important part of the learning process, and understand the content of the lesson. This result is conforming to Cavilla,(2017) claimed that through reflection, learners can develop their ability to actualize the insights they gained into their learning or life experience so that they can do better and level up their learning performances.

The findings show the importance of feedback as independent learning strategy. The learners are more concerned with the availability of feedback because they consider them as part of the independent learning process.The result of this study conforms with the DepEd Interim Guidelines for Assessment and Grading in the Light of Basic Education Learning Continuity Plan stipulating that immediate feedback should be made accessible to the learners to enable them to take full responsibility for their learning and identify areas where they do well and where they need help. Double et al. (2020), revealed that feedback is considered the central component of the learning process which is vital for students' knowledge acquisition and learning progress.

As conveyed, taking responsibility caught the students' closer attention because learners sensed beneficial impact of this practice in their learning performance and outcomes. When learners have full freedom, they also learn to be more responsible for the things they do and accountable of the outcomes. This could also noted that decision-making is an important strategy in independent learning as perceived by learners. This result implied that students learn best when they are given full authority for the decisions they make towards learning. Expressively however, they are not inclined to setting their learning targets and making their learning plans. This finding is highly congruent with Schmitz,(2018), claimed that good decision making is a skill that is essential. This is affirmative with the claim that there is a strong need for individuals who can independently make a good decision nowadays. Improving students means improving their decision-making skills. As clearly affirmed, decision-making must be an important part of teaching using the Independent Learning Method Enriquez,(2018), found out that giving students freedom to decide or choose whatever kind of task or activity they want to engage in relevant with the set learning goals or objectives.

Table 3.1 revealed the Issues and concerns on Grammar Translation Method in which manifestation is considered a product of the learners' previous experiences as well as understanding of the factors influencing their behavior towards the issues and concerns being pointed out. This finding confirmed the issues and concerns raised on the utilization of Grammar Translation Method focuses merely on translation, gives only prime importance to reading and writing but neglects speaking and listening, employs teacher-centered instruction, and emphasizes memorization as best approach to master grammar rules and vocabulary. In addition to these issues, Abbas et al. (2014) signified that the method employs teaching of vocabulary through lists of isolated words and neglecting context of the texts in the study of literature. Although it could be deduced that the emergence of the articulated issues was prior to the pandemic, the manifestations remained to be the same articulating possible drawbacks with the utilization of GTM when not done in a more directed manner. Aqel,(2013) confirmed that utilization of this method should be dynamic and situational.

As regards to the Issues and concerns on independent learning, it is attributed to the learners being used to the kind of instruction readily and constantly directed and guided by

the teachers with a prototype learning process set for them with a conventional setting prior to pandemic. Manifestation on lack of interest in doing reflection was also noted. This result entailed students' perceived difficulty in doing reflection as part of instruction. This difficulty is associated with the lack of understanding of the value of self-reflection and its advantages in the learning process. Students also experienced difficulties in the process relative to lack of readily available guidance, tedious compliance to obligatory reflection writing requirements, and traumatic experience relative to reflection. Other things mentioned were doing self-assessment in a dishonest manner, depending highly on feedback of teachers and peers, affecting quality of learning outcomes when given too much freedom, failing to use genuine materials when not guided by teachers, tending to choose only easy learning tasks or activities, and doubting the fairness of the method for all types of learners.Relevant with this finding, teachers are reminded of "the black holes" in Independent Learning that Foley,(2016) commented on claiming that doing Independent Learning is knowing where teachers need to focus. As expressed, teachers need to find out the key factors on social, cultural, and environmental aspects that describe to what extent of independent learning the learners do actualize, while learners are convinced of the usefulness of Independent Learning Method's utilization. They also acknowledged the disadvantageous side described by the level of manifestations obtained with the use of the method.

The findings revealed that the strategies are deciding for learning goal, doing reflection, advocating vocabulary learning through wordlists and translation, reading of literary passages even at low levels with reading comprehension questions, practicing translation of texts to and from Mother Tongue, elaborating presentations of grammar rules, teaching through memorization, giving composition exercises based on topics from the reading texts, including vocabulary exercises on antonyms, synonyms, and definitions. Likewise,reflection, reading texts, and giving feedback regularly and decision to improve learning outcomes are also contibuting factors. . Concerning these findings, Vega,(2018) confirmed that despite the benefits of translation many linguists and teachers oppose the utilization of this method. There are linguists and grammarians who promote teaching without translating. Azar et.al (2012) insisted that grammar teaching should be done in explicit and implicit ways but without using translation. This position however is contested by the current study revealing students' favorable reception of the use of strategies under Grammar Translation Method at present. More than this, the use of the Independent Learning method is also reaffirmed for its obvious benefits.

Based on the results, students recognized the use of teaching strategies employed under Grammar Translation and Independent Learning Methods as supportive to the pedagogy the suits the new normal set-up. Respective of these results, this study proposed the conceptualization and construction of a matrix for the use of strategies under these methods which would be beneficial to ensuring that teaching Junior High School English in the new normal setting is done relevantly. The matrix is anchored with the Department of Education's Most Essential Learning Competencies (MELCs). Specifically, the matrix covers 10 strategies usable in teaching English across all grade levels in the four learning quarters of a School Year.

Conclusions

Based on the findings of the study, strategies in teaching under the Grammar Translation and Independent Learning Methods were described as useful and highly important, respectively. Most of the common revisited issues and concerns were manifested except the issue on pronunciation. All the strategies employed under the Grammar Translation and Independent Learning Methods are supportive of the pedagogy that suits the new normal of 21st-century education. Therefore, there is an implied need to use a matrix of teaching strategies for the utilization of Grammar Translation and Independent Learning methods.

Recommendations

Given these findings and conclusions, teachers may use strategies employed under Grammar-Translation and Independent Learning Methods. With this, learners, parents, and guardians may be constantly encouraged to be guided by the principles of Grammar-Translation and Independent Learning Methods to avoid the drawbacks relative with the various issues and concerns revisited and to maximize the benefits of utilization. Learners' Materials (LMs) developers and teachers may use the Matrix of Strategies in Teaching English in the New Normal (MSTENN) to ensure that their teaching strategies employ techniques and activities for learning relevant with the current educational setting.

Compliance with Ethical Standards

The utmost level of confidentiality was upheld for all data gathered for this study. Every participant's voluntary engagement was given a high priority including their withdrawal at any time they wish to.Furthermore, the researchers ensured that all the participants were properly oriented and assured that all of the data and results obtained were not disclosed in unauthorized persons and used for the intended purpose only.

Acknowledgments

The authors would like to thankBalugo National High School and Mindoro State University (MinSU) – Bongabong Campus for their support and encouragement, as well as the the authors' loved ones and friends. To God be the glory.

REFERENCES

Abbas, S. et al. (2014). Comparison Between Grammar & Translation Method & Communicative Language Teaching retrieved from http://www.journalijar.com/uploads/339_IJAR-3379.pdf.

Aqel, I (2013). "The Effect of Using Grammar-Translation Method on Acquiring English as a Foreign Language". International Journal of Asian Social Science, 3(12), pp. 2226-5139. Retrieved from http://www.aessweb.com/pdf-files/ijass-3(12)-2469-2476.pdf.

Azar, B., Folse, K. & Swan, M. A. (2012). Teaching Grammar in Today's Classroom. Part 1. Retrieved from https://www.youtube.com/watch?v=YJwbnQOguEk&t=24s

Ball, Cooks & Pettigrew (2021). The Expository Writing Program. Retrieved from http://websites.umich.edu/~exppro/info.html.

Bowen, T. (2016). Teaching approaches: the grammar-translation method. Retrieved fromhttps://www.onestopenglish.com/methodology-the-world-of-elt/teaching-approaches-the-grammar-translation method/146493.article.
Cavilla, D. (2017). The Effects of Student Reflection on Academic Performance and Motivation. Retrieved from https://journals.sagepub.com/doi/pdf/10.1177/2158244017733790.
Chang, S. C. (2011). A Contrastive Study of Grammar Translation Method and Communicative Approach in Teaching English Grammar. Retrieved from https://www.researchgate.net/publication/266467156_A_Contrastive_Study_of_Grammar_Translation_Method_and_Communicative_Approach_in_Teaching_English_Grammar.
Cooper, J. J., & Ozansoy, K. (2022). The Impacts of Strategies in Teaching on Students' Performance in School. Near East University Online Journal of Education, 5(2), 12–18. https://doi.org/10.32955/neuje.v5i2.631
Department of Education, (2020). Adoption of Basic Education Learning Continuity Plan in the Year 2020-2021 in the Light of the COVID-19 Public Health Emergency. Retrieved from https://www.deped.gov.ph/wpcontent/uploads/2020/06/DO_s2020_012.pdf.
Department of Education, (2020). Alternative Delivery Mode Learning Resources Standard. Department of Education Central Office. 2nd Floor Department of Education Building, Deped Meralco Avenue, Pasig, 1605 Metro Manila.
Double et al. (2020). The Impact of Peer Assessment on Academic Performance: A Meta-analysis of Control Group Studies. Educ Psychol Rev 32, 481–509 retrieved from https://link.springer.com/article/10.1007/s10648-019-09510-3#citeas.
Enriquez, R. M. (2018). Utilization of Independent Learning Instruction in Teaching English: Basis for the Proposed Module. 2019 Division Research Journal of Schools Division of Oriental Mindoro, Calapan City.
Foley, G. (2016). Beware the black hole of 'independent learning'. Retrieved from https://www.irishtimes.com/news/education/beware-the-black-hole-of-independent-learning-1.2652350.
Garlock, V., (2019). Garlock: The benefits of memorization. https://auburnpub.com/lifestyles/garlock-the-benefits-of-memorization/article_a212e6a4-24fe-5e8e-a8f8-cf345904b233.html.
Gay, L. R., Mills, G. E., & Airasian, P. (2012). Educational Research. Retrieved from https://yulielearning.com/plugin-file.php/4831/mod_resource/content/1/GayE%20Book%20Educational%20Research-2012.pdf
Gibson, S. (2021). A framework for guided writing instruction. Retrieved from https://www.readingrockets.org/article/effective-framework-primary-grade-guided-writing-instruction.
Ilter, I. (2019) The Efficacy of Context Clue Strategy Instruction on Middle Grades Students' Vocabulary Development. Retrieved from https://www.tandfonline.com/doi/full/10.1080/19404476.2018.1554522.
Kaye, P. (2021). Translation activities in the language classroom. Retrieved from https://www.teachingenglish.org.uk/article/translation-activities-language-classroom.
Khan, A. B. (2018). The Effectiveness of Grammar Translation Method in Teaching and Learning of English Language at Intermediate Level. Retrieved from https://www.researchgate.net/publication/328578620_The_Effectiveness_of_Grammar_Translation_Method_in_Teaching_and_Learning_of_English_Language_at_Intermediate_Level.
Mart, C.T. (2013). The Grammar-Translation Method and the Use of Translation to Facilitate Learning in ESL Classes. Retrieved from https://www.researchgate.net/publication/329268068_The_GrammarTranslation_Method_and_the_Use_of_Translation_to_Facilitate_Learning_in_ESL_Classes.

Mertler (2016). Quantitative Research Methods. Retrieved from https://us.sagepub.com/sites/default/files/upm-binaries/70019_Mertler_Chapter_7.pdf
Obana, J., 2020. What Will Schools Look Like Under the “New Normal”. Available: https://www.grantthornton.com.ph/insights/articles-and-updates1/fromwhere-we-sit/what-will-schools-look-like-under-the-new-normal/
Schmitz, A. (2018). Teaching Decision Making. Retrieved from https://www.conovercompany.com/teaching-decision-making-the-importance-of-good-decisions/.
UNESCO (2017). Education for Sustainable Development Goals - Learning Objectives. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000247444.
Vega, O. (2018) An Analysis of the Most Common Methods Used to Teach English as a Second and Foreign Language. Retrieved from https://mextesol.net/journal/index.php?page=journal&id_article=3777.

APA Citation:

Enriquez, R. M., & Brinosa, E. V. (2024). REVISITING GRAMMAR-TRANSLATION AND INDEPENDENT LEARNING METHODS IN TEACHING ENGLISH IN THE NEW NORMAL EDUCATION. Ignatian International Journal for Multidisciplinary Research, 2(8), 1262–1283. https://doi.org/10.5281/zenodo.13358451

reynante.enriquez001@deped.gov.ph
evabrinosa@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

SCHOOL PRINCIPALS' SUPPORT PRACTICES ON TEACHERS' PROFESSIONAL DEVELOPMENT, TEACHERS' COMMITMENT, AND PERFORMANCE: BASIS FOR PROFESSIONAL DEVELOPMENT PROGRAM

Raul B. Chua Jr., LPT, MAT, Ed.D.

Graduate School, Marikina Polytechnic College, Marikina City, Philippines

https://doi.org/10.5281/zenodo.13372738

ABSTRACT

Teachers' professional development is essential in achieving the quality of education with the school principals playing a vital part to obtain a conducive environment for continuous teachers' professional growth. This study aimed to determine the school principals' support practices on the professional development of senior high school teachers and their relationship to teachers' commitment and performance during the school year 2023 – 2024 in the Division of Rizal which served as basis for developing professional development program. This study utilized the mixed method of research specifically sequential exploratory design. The data gathering instrument for the qualitative type was the semi-structured interview questions while the quantitative type used the survey questionnaire and the IPCRF documents. The respondents were 37 school principals and 225 teachers for the quantitative type and eight school principals and 14 teachers for the qualitative type. The qualitative data were transcribed, coded and analyzed using the thematic analysis. Meanwhile, the statistical tools used to treat the quantitative data were the percentage, weighted mean, t-test, Pearson r, and correlated t-test. Findings revealed that school principals provided informational, emotional, appraisal, and instrumental support. While principals felt satisfied with their support practices, teachers desired more instrumental support to enhance their professional growth. Both groups shared similar views on teachers' commitment levels. Teachers developed competencies aligned with the KRAs of the IPCRF. Although principals' support positively influenced teachers' commitment, it did not significantly impact their performance. Based on these findings, a professional development program was proposed to improve and sustain principals' support for teachers' professional development.

Keywords: *school principal support, teachers' professional development, teachers' commitment, teachers' performance, professional development program*

INTRODUCTION

In the United Nations Report in 2022, it was reiterated that education stands as a fundamental right for all Filipinos. This responsibility is embraced by the Department of Education (DepEd) in its mission to uphold and advance quality education which further stipulated that this pursuit of excellence in education is pivotal, equipping learners with the knowledge, skills, and attitudes necessary to fulfill their potential and contribute meaningfully to society. Recognizing the role of quality education, the UN also underscored its significance as a bedrock for sustainable development, enhancing lives and empowering individuals to address global challenges innovatively. Within this context, it focused on improving quality education within the educational framework.

Prior to the UN 2022 report, Siena (2019) mentioned that teachers are the center of educational activities, who serve as architects of the future generation. Their role, according to Siena, "transcends curriculum delivery, extending to cultivating essential skills, and attitudes which are important in navigating an evolving world filled with complexities".

In the same view, Schleicher (2019) stated, "The quality of an education system can never exceed the quality of its teachers." Schleicher also claimed that the teachers' professional development initiatives directly shape the caliber of educators, thus, resonating throughout the educational sphere and affecting students' overall learning achievements. The channels through which teachers' professional growth occur are diverse, encompassing workshops, seminars, collaborative learning communities, peer mentorship, action research, online courses, and advanced degrees. These avenues require dedicated institutional commitment, including time, resources, and support, fostering pedagogical evolution, innovation, and ultimately, augmented student accomplishments.

According to Bernadine (2019), teachers' professional development can be best understood as a systematic process that promotes competence and creativity across their professions. This is aligned with the principles outlined in DepEd Order No. 35, series 2016, which emphasizes its full support for the continuous professional development of teachers. This is firmly rooted in the Enhanced Basic Education Act of 2013 and the Continuing Professional Development (CPD) Law. Furthermore, this is in accordance with DepEd Order No. 42, series 2017, which pertains to the National Adoption and Implementation of the Philippine Professional Standards for Teachers (PPST).

In 2018, Gonong cited one of the findings of the World Bank that a significant number of teachers expressed the need for additional opportunities for professional training and learning. However, Gonong remarked that the path to effective teacher professional development is beset with challenges. He cited hindrances such as constrained time due

to multiple responsibilities, limited access to training in remote areas and financial barriers preventing participation in workshops. Furthermore, Siena (2019) remarked that the cascading training approach in mass settings may dilute content and restrict opportunities for teachers to demonstrate their competencies. These challenges are compounded in the Philippine context, where the soaring number of teachers, lack of administrative support, and complexities in program completion hinder access to professional development. For example, conventional week-long seminars may prove inadequate to sufficiently equip teachers with new curriculum demands.

Teachers' professional development is essential in achieving the quality of education with the school principals playing a vital part in this process. School principals are instrumental in a conducive environment for continuous professional growth. Leithwood et al. (2021) mentioned that effective leadership by school principals involves a profound commitment to the teachers' professional development. This includes providing feedback and support, access to resources, and creating opportunities for professional learning. In addition, Mthanti and Msiza (2023) highlighted that school principals may support teachers to their professional development through motivations to engage, creating learning environment, informing opportunities, and allocating resources.

Teacher commitment involves being dedicated to the school, students' success, and teaching profession. High levels of commitment are often connected with greater performance and a willingness to engage in continuous professional development. In the same view, Medul (2022) underscored that through the provision of school principals' support, the level of teachers' commitment and performance is sustainable.

As observed by this researcher, teachers have limited opportunities in terms of professional development due to several factors like funding, access to training programs, subject or grade-level focus, administrative support, and prioritization of development. As mentioned by Magallanes (2022), one of the Philippine teachers' concerns is the lack of opportunities on professional development that may enable more collaborative activities among teachers. In another article, Morales (2023) mentioned about the unseen struggles of teachers in the Philippines, such as: a) obtaining appropriate training and growth opportunities; b) inadequate financing for professional development programs; and c) insufficient support from educational institutions. He commented that these impede their growth and capacity to give the finest education available.

In another view, one of the reasons why this researcher was challenged to conduct this study is the quality of professional development implemented in the schools. Tupas and Noderama (2020) revealed that majority of the teachers are not satisfied with their professional development program like the in-service trainings that are conducted due to limited time, irrelevant topics for teachers' effectiveness and efficiency, and lack of administrators' support. Relative to this, the researcher would like to determine if this scenario also occurs in the School Division of Rizal where he belongs.

Lastly, limited support on professional development was also observed by this researcher. Garcia and Weiss (2019) stated several supports from school principals that

need to be addressed such as: access to effective and high valued types of professional development, provision of much time and resources needed, intensifying mentoring and coaching experiences, establishment of learning communities, and increasing professional development opportunities.

To address these issues and to foster sustained commitment to professional development, a deeper exploration of the nexus between school principals' practices on teachers' professional development, commitment, and performance are imperative towards education quality. While previous research findings have touched on factors influencing teacher well-being, the specific role of principal practices on these aspects and in shaping commitment and performance still need to be further explored.

As a new principal in one of the DepEd schools in the Division of Rizal, the researcher believes that there is a need to determine the best practices of incumbent school principals to serve as a model for the new and other school principals to improve their teachers' professional growth and development thereby improving also their commitment and performance. From the good practices of the school principals, an innovative professional development program could be developed for the use of the school principals. If this is done, this study hopefully will be able to determine if this could improve the commitment and performance of the teachers, hence this study.

Research Questions

This study aimed to determine the school principals' support practices on the professional development of senior high school teachers and their relationship to teachers' commitment and performance during the school year 2023 – 2024 in the Division of Rizal which served as basis for developing professional development program.

Specifically, it sought answers to the following questions:

1. What are the school principals' support practices on the professional development of teachers based on the results of the interview and focus group discussion with the senior high school principals and teachers?
2. What is the extent of the school principals' support practices on the teachers' professional development on the following categories as perceived by the school principals and the teacher respondents?
    - 2.1 Emotional
    - 2.2 Instrumental
    - 2.3 Informational
    - 2.4 Appraisal
3. Is there a significant difference between the perceptions of the two groups of respondents on the school principals' support practices on the teachers' professional development on the aforecited categories?
4. What is the level of the teachers' commitment as regards the following categories as perceived by the school principals and the teacher respondents?
    - 4.1 School

4.2 Students
4.3 Teaching work
4.4 Profession
4.5 Body of knowledge, skills, and attitudes

5. Is there a significant difference between the perceptions of the two groups of respondents on the level of teachers' commitment on the aforecited categories?
6. What is the level of the teacher respondents' performance based on their Individual Performance Commitment and Review Form (IPCRF) results during the school year 2022 – 2023 on the following domains?

6.1 Content Knowledge and Pedagogy
6.2 Learning Environment & Diversity of Learners
6.3 Curriculum and Planning
6.4 Assessment and Reporting
6.5 Personal Growth and Professional Development

7. Is there a significant relationship between the school principals' support practices on the professional development of teachers and the following variables?

7.1 Teachers' commitment
7.2 Teachers' performance

8. Based on the results of the study, what professional development program could be developed and proposed?

METHODOLOGY

This study used a mixed-method approach, specifically a sequential exploratory design. For the quantitative part, the respondents included 37 school principals and 225 teachers from public senior high schools in the Division of Rizal for the school year 2023–2024. For the qualitative part, eight school principals and 14 teachers were selected. The sample size was determined using Slovin's formula with a 5% margin of error. Teachers were chosen through simple random sampling, while school principals were selected using purposive sampling.

The study utilized two sets of data gathering instruments, one set for the qualitative method and another set for the quantitative research. The questionnaire was validated by five school principals and five master teachers who were not part of the study. Part I of the survey questionnaires for the quantitative phase is on the extent of school principals' support practices on the professional development of senior high school teachers in the following aspects: emotional, instrumental, informational, and appraisal support. It consisted of 20 indicators, five for each type of support. It utilized the 4-point Likert rating scale choices that was arbitrarily set by the researcher. Part II of the research instrument was about the level of teachers' commitment based on the following domains: commitment to the school, students, teaching work, profession, and body of knowledge, skills, and attitudes. The 4-point Likert rating scale that was arbitrary set by the researcher was also used. Another separate instrument was also used. This was the Individual Performance and Commitment Review Form (IPCRF) of the teachers for the school year 2022 - 2023

Data collection occurred in two phases. In the first phase, qualitative data was gathered through a structured interview process following the Initiate–Response–Follow-up (IRF) pattern with audio recording and note-taking. In the second phase, quantitative data was collected by administering survey questionnaires to respondents either in person or through Google Forms for those in more remote schools. The Google Forms link was distributed with the help of the school principal and their administrative staff, and the researcher personally retrieved the completed paper questionnaires.

The qualitative data were analyzed using the thematic analysis (Creswell, 2023) of the transcribed interviews. The transcribed and coded data were analyzed by identifying the patterns or themes using Tesch (1990) strategy. Meanwhile, the statistical tools used to treat the quantitative data were the percentage, weighted mean, t-test, Pearson r, and correlated t-test.

RESULTS

PHASE 1: FOR QUALITATIVE DATA

This phase of the study explored the school principals' support practices on the professional development of senior high school teachers. Five females and three male school principals participated in the interview while 12 females and two male teachers joined the focus group discussion.

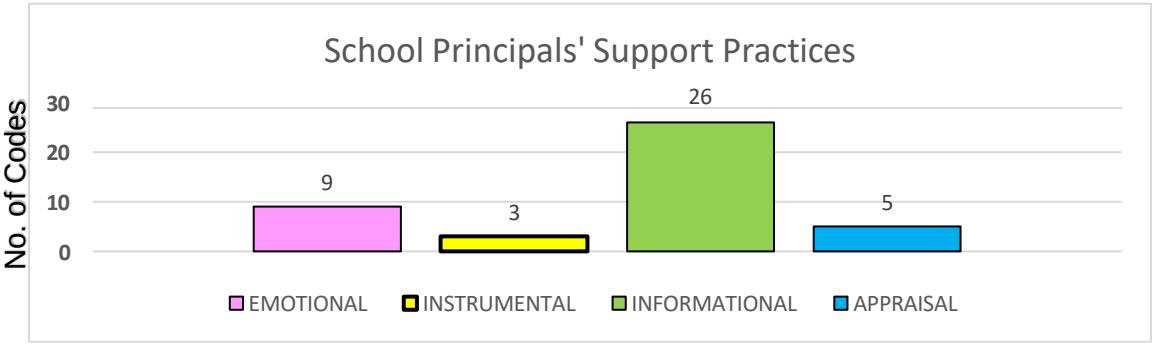


Figure 1. Occurrence of Codes on the Four Types of Support on Teachers' Professional Development based on the Interviews

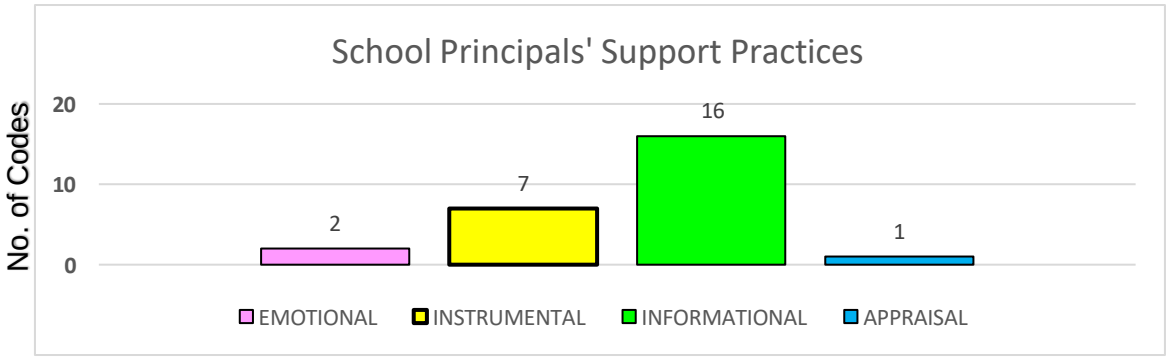


Figure 2. Occurrence of Codes on the Four Types of Support on the Teachers' Professional Development based on the FGD

PHASE 2: FOR QUANTITIVE DATA

This phase of the study is the quantitative component of the Sequential Exploratory Strategy. It deals with the collection of data from the respondents after which the analysis of data followed.

Table 1

Summary of Respondents' Perceptions on the Extent of the School Principals' Support Practices on the Teachers' Professional Development

School Principals' Support Practices	Respondents			
	School Principals		Teachers	
	OWM	VI	OWM	VI
a. Emotional Support	3.65	VHE	3.30	VHE
b. Instrumental Support	3.65	VHE	3.23	HE
c. Informational Support	3.76	VHE	3.30	VHE
d. Appraisal Support	3.69	VHE	3.29	VHE
Grand Weighted Means	**3.69**	**VHE**	**3.28**	**VHE**

Note: 1.00 – 1.75 Very Low Extent (VLE), 1.76 – 2.50 Low Extent (LE), 2.51 – 3.25 High Extent (HE), 3.26 – 4.00 Very High Extent (VHE).

Table 2

Summary of Test of Significant Difference in the Perceptions of the Two Groups of Respondents on the Extent of School Principals' Support Practices on the Teachers' Professional Development

Domains	School Principals		Teachers		Computed z Value	Decision	Interpretation
	OWM	s	OWM	S			
a. Emotional support	3.65	0.43	3.30	0.69	3.06	Reject the Ho	Significant
b. Instrumental support	3.65	0.34	3.23	0.72	3.46	Reject the Ho	Significant
c. Informational support	3.76	0.34	3.30	0.74	3.67	Reject the Ho	Significant
d. Appraisal support	3.69	0.40	3.29	0.73	3.25	Reject the Ho	Significant

Note: $\alpha = 5\%$ *Critical z Value = 1.96*

Table 3

Summary of Respondents' Perceptions on the Level of the Teachers' Commitment on the Five Categories

Level of Teachers' Commitment	Respondents			
	School Principals		Teachers	
	OWM	VI	OWM	VI
a. Commitment to the School	3.67	VHL	3.59	VHL
b. Commitment to the Student	3.61	VHL	3.55	VHL
c. Commitment to the Teaching Work	3.66	VHL	3.58	VHL
d. Commitment to the Profession	3.63	VHL	3.55	VHL
e. Commitment to the Body of Knowledge, Skills, and Attitudes	3.58	VHL	3.58	VHL
Grand Weighted Means	**3.63**	**VHL**	**3.57**	**VHL**

Note: 1.00 – 1.75 Very Low Level (VLL), 1.76 – 2.50 Low Level (LL), 2.51 – 3.25 High Level (HL), 3.26 – 4.00 Very High Level (VHL).

Table 4

Summary of Test of Significant Difference between the Perceptions of the Two Groups of Respondents on the Teachers' Level of Commitment on the Five Categories

Domains	School Principals		Teachers		Computed z Value	Decision	Interpretation
	OWM	Sd	OWM	Sd			
a. Commitment to the School	3.67	0.41	3.59	0.42	1.10	Fail to Reject the H_0	Not Significant
b. Commitment to the Student	3.61	0.38	3.55	0.40	0.83	Fail to Reject the H_0	Not Significant
c. Commitment to the Teaching Work	3.66	0.43	3.61	0.52	0.66	Fail to Reject the H_0	Not Significant
d. Commitment to the Profession	3.63	0.34	3.55	0.41	1.11	Fail to Reject the H_0	Not Significant
e. Commitment to the Body of Knowledge, Attitudes, and Skills	3.58	0.45	3.58	0.41	0.06	Fail to Reject the H_0	Not Significant

Note: $\alpha = 5\%$ *Critical z Value = 1.96*

Table 5

Summary of the Level of the Teachers' Performance Based on the Results of their IPCRF during the School Year 2022 – 2023

Key Result Area (KRA)	OWM	VI
1. Content Knowledge and Pedagogy	4.73	O
2. Learning Environment & Diversity of Learners	4.51	O
3. Curriculum and Planning	4.45	VS
4. Assessment and Reporting	4.39	VS
5. Personal Growth and Professional Development	4.31	VS
Grand Weighted Mean	**4.48**	**VS**

Note: 1.00 – 1.49 Poor (P), 1.50 – 2.49 Unsatisfactory (US), 2.50 – 3.49 Satisfactory (S), 3.50 – 4.49 Very Satisfactory (VS), 4.50 – 5.00 Outstanding (O)

Table 6

Summary of Test of Significant Relationship between the School Principals' Support Practices on the Teachers' Professional Development as Regards Teachers' Commitment and Teachers' Performance

x	y	r	t_{comp} Value	Decision	Interpretation
School Principals' Support Practices on the Teachers' Professional Development	Teachers' Commitment	0.69	6.46	Reject the H_0	Significant
	Teachers' Performance	0.13	1.71	Fail to Reject the H_0	Not Significant

Note: α = 5% *Critical Value = 1.97*

Table 7

Joint Display of the Qualitative Analysis and Quantitative Results

QUALITATIVE THEMES	METAINFERENCES	QUANTITATIVE DATA
Theme 1: Emotional Support	***SHSP4:*** *"Of course, moral support, encouraging them to continue their work that they are doing well and, of course to uplift themselves in terms of teaching and learning process."* ***TP4:*** *"When it comes to support, since I'm not fond of going to the office of the principal, for me, I cannot see and feel any support."*	Overall Weighted Mean School Principals: 3.65 (VHE) Teachers: 3.30 (VHE) **Indicator 2:** The school principals address the emotional needs of the teachers regarding their professional growth. Average Weighted Mean School Principals: 3.59 (VHE) Teachers: 3.25 (HE) **Indicator 3:** The school principals create an environment that fosters emotional support for teachers' professional development. Average Weighted Mean School Principals: 3.62 (VHE) Teachers: 3.26 (VHE)
Theme 2: Instrumental Support	***SHSP4:*** *"Financial support. We need them. That's the most important, number one resource that we*	Overall Weighted Mean School Principals: 3.65 (VHE) Teachers: 3.23 (HE)

	should have to give to our teachers." ***TP4:*** *"Personally, I haven't encountered an instance where they told me that they have financial assistance. But maybe for others. But for me, I haven't experienced that."*	**Indicator 3:** The school principals provide school financial support for teachers to attend conferences, workshops, or pursue advanced degrees. Average Weighted Mean School Principals: 3.57 (VHE) Teachers: 3.07 (HE) **Indicator 4:** The school principals allocate school budget for the professional development opportunities, workshops, and training programs to enhance teachers' skills. Average Weighted Mean School Principals: 3.70 (VHE) Teachers: 3.13 (HE)
Theme 3: Informational Support	***SHSP1:*** *"Ok, Mr. Chua. In our school, I extend my support to the teachers' professional development by conducting In-Service Training."* ***TP7*** *"May dalawa kaming INSET at iilan lang na LAC session pero kalimitan ay hindi masyadong quality."*	Overall Weighted Mean School Principals: 3.76 (VHE) Teachers: 3.30 (VHE) **Indicator 4:** The school principals facilitate collaborative platforms, such as discussion forums or online communities, where teachers can share information and insights about professional development opportunities. Average Weighted Mean School Principals: 3.70 (VHE) Teachers: 3.23 (HE)
Theme 4: Appraisal Support	***SHSP7:*** *"I am also providing constructive feedback on the technical assistance on their professional development."* ***TP9:*** *"Our school principal does the observation and critiquing, that's how she did the support for me."*	Overall Weighted Mean School Principals: 3.69 (VHE) Teachers: 3.29 (VHE) **Indicator 3:** The school principals use mechanisms to evaluate and provide constructive feedback to assist teachers' professional development. Average Weighted Mean School Principals: 3.73 (VHE) Teachers: 3.24 (HE)

		Indicator 4: The school principals use self-assessment as a starting point for goal-setting and professional development discussions. Average Weighted Mean School Principals: 3.62 (VHE) Teachers: 3.25 (HE)

Note: 1.00 – 1.75 Very Low Extent (VLE), 1.76 – 2.50 Low Extent (LE), 2.51 – 3.25 High Extent (HE), 3.26 – 4.00 Very High Extent (VHE).

DISCUSSION

School Principals' Support Practices on the Professional Development of Teachers Based on the Result of the Interview and Focus Group Discussion of the Senior High School Principals and Teachers

From the qualitative data, it could be surmised that four types of support have emerged from the interview and focus group discussion session with the school principal and teacher participants. These are informational, emotional, appraisal, and instrumental support as evidenced by the number of codes for each type of support shown in figure 1 and 2.

Figure 1 gives a clear view of the occurrence of the four types of support extended by the school principal participants on the professional development of the teachers. The bar graph shows that the school principals' biggest support on the teachers' professional development was informational, followed by emotional, appraisal, and instrumental. Meanwhile, figure 2 displays the occurrence of codes on the four types of support on the teachers' professional development based on the FGD. The bar graph shows that the principals' biggest support on the teachers' professional development was informational, followed by instrumental, emotional, and appraisal.

From the results of the qualitative data, the data gathering instrument for the quantitative data was developed. Quantitative data were collected, presented, and interpreted.

Extent of the School Principals' Support Practices on the Teachers' Professional Development as Perceived by the School Principal and the Teacher Respondents

Based on the quantitative data collected, table 1 show that the school principals and the teacher respondents perceived the extent of their support practices on the teachers' professional development as Very High as evidenced by the grand weighted means of 3.69 and 3.28, respectively. However, the teacher respondents perceived the extent of school principals' instrumental support on professional development as High Extent only as evidenced by overall weighted mean of 3.23. These findings implies that as regards

the extent of support practices by the school principals on the teachers‘ professional development, school principals are satisfied with the aspects presented while teachers seek more instrumental support from the principals to enhance their professional aspect.

Significant Difference between the Perceptions of the Two Groups of Respondents on the Extent of School Principals' Support Practices on the Four Aspects of Teachers' Professional Development

Table 2 presents the summary of the test of significant difference in the perceptions of the two groups of respondents on the extent of the school principals' support practices on the teachers' professional development on the four categories. The findings of the study showed that the perceptions of the school principals and teachers differ significantly on the extent of the school principals' support practices on the teachers' professional development in terms of emotional, instrumental, informational, and appraisal which are above the critical z value of 1.96 at 5% level of significance. This means that the respondents' perceptions are not the same in all the four categories. The perceptions of the school principals and the teachers regarding the extent of support practices for teachers' professional development differ significantly. This indicates that there is a variation in how the school principals and the teachers view the support provided.

Level of the Teachers' Commitment According to School, Students, Teaching Work, Profession, and Body of Knowledge, Skills, and Attitudes as Perceived by the School Principals and the Teacher Respondents

Table 3 displays the summary of the respondents' perceptions on the level of the teachers' commitment as regards the five categories, namely: commitment to the school, to the student, to the teaching work, to the profession, and to the body of knowledge, skills, and attitudes. The data in the summary table reveal that the school principals and teacher respondents perceived the level of the teachers' commitment as Very High with grand weighted means of 3.63 and 3.57, respectively. This indicates a strong dedication and loyalty among teachers towards their school, students, teaching work, profession, and the body of knowledge, skills, and attitudes. This finding implies that the teachers invest their time and effort doing their work, even beyond the basic requirements of their profession to ensure the success and well-being of their students. More so, the findings reflect the general qualities of a good teacher worth emulating by the members of the other professions. As the saying goes, “once a teacher, he will always be a teacher.” A teacher is one who inspires, motivates, and instills love for learning that extends beyond the walls of the classroom.

Significant Difference between the Perceptions of the Two Groups of Respondents on the Teachers' Level of Commitment to the School, Students, Teaching Work, Profession, and Body of Knowledge, Skills, and Attitudes

Presented in table 4 the summary of the test of significant difference between the perceptions of the two groups of respondents on the level of the teachers' commitment as regards the five categories, namely: commitment to the school, commitment to the

student, commitment to the teaching work, commitment to the profession, and commitment to the body of knowledge, skills, and attitudes. The perceptions of the school principals and the teacher respondents on the level of the teachers' commitment did not show a significant difference. This is evidenced by the computed z values which are all lower than the critical z value of 1.96. Therefore, it indicates that both groups share similar perceptions across all five categories. This finding means that the school principals and the teachers know each other very well because they are both aware of how they manifest their love for work, for their students, their profession, and even the degree of updating themselves on the new trends in education.

Level of the Teachers' Performance Based on the Results of their Individual Performance Commitment and Review Form (IPCRF) during the School Year 2022 – 2023

The data in table 5 reflect that the level of the teachers' performance is Very Satisfactory as evidenced by the grand weighted mean of 4.48. However, KRA No. 1 and No. 2 both got an Outstanding rating as evidenced by the overall weighted means of 4.73 and 4.51, respectively. The three other variables, Curriculum and Planning, Assessment and Reporting, and Personal Growth and Professional Development were also rated as Very Satisfactory as shown by their respective overall weighted means of 4.45, 4.39, and 4.31. These Outstanding and Very satisfactory ratings are indications that the teachers are doing their responsibilities and duties very well according to the standards of teaching. The findings concur with the study of Bancifra (2022) which found out that the teachers are performing within the Very Satisfactory level based on the result of their IPCRF, which implies a strong indication that the teachers' performance exceeded expectations.

Significant Relationship between the Extent of School Principals' Support Practices on the Teachers' Professional Development and Teachers' Level of Commitment

Based on the data in Table 6, the computed t-value of 6.46 is greater than the critical t-value of 1.97 with 223 degrees of freedom at the 5% level of significance. This indicates a significant relationship between the extent of school principals' support practices for teachers' professional development and teachers' commitment. On the other hand, the test for the significant relationship between school principals' support practices for teachers' professional development and teachers' performance shows that the computed t-value of 1.71 is lower than the critical t-value of 1.97 with 223 degrees of freedom at the 5% level of significance. Thus, there is no significant relationship between the extent of school principals' support practices for teachers' professional development and teachers' performance. This implies that while the support provided by school principals for teachers' professional development can influence teachers' commitment, it does not necessarily affect their performance.

Analysis of the Qualitative Analysis and Quantitative Result

The data in table 7 presents a joint analysis of qualitative data derived from interviews and focus group discussions, compared with the results of the statistical analysis. The identified theme of instrumental support was integrated with aspect 2 of school principals' support for teachers' professional development, specifically indicators 3 and 4, yielding weighted means of 3.07 and 3.14, respectively. Additionally, the lack of connections between teachers, as perceived from school principals, emerged as the theme of emotional support, linked to indicator 2, rated as High Extent (HE) with a weighted mean of 3.25. Furthermore, the inadequacy of evaluation tools for goal setting and constructive feedback in teachers' professional development was identified as a theme connected to indicators 3 and 4 of Appraisal Support, with weighted means of 3.25 and 3.24, respectively. Moreover, facilitating collaborative platforms for professional development opportunities was integrated with informational support, emerging as a theme connected to indicator 4, with a weighted mean of 3.23. These findings underscore the importance of acknowledging teachers' professional development needs, providing tangible support mechanisms, addressing emotional needs, and fostering an environment conducive to emotional support for facilitating their growth and development. The results suggest a pressing need to develop an innovative teachers' professional program aimed at enhancing school principals' support for teachers' professional development.

The joint analysis of both qualitative and quantitative data provides valuable insights into the dynamics of school principal support for teachers' professional development. Qualitatively, themes such as instrumental support, emotional support, and appraisal support emerged, highlighting the multifaceted nature of support provided by school principals. Instrumental support, encompassing tangible resources and assistance, was identified as crucial, while emotional support and appraisal support underscored the importance of addressing teachers' emotional well-being and providing constructive feedback for growth. Quantitatively, statistical analysis further explained these themes by assigning weighted means to specific indicators within each theme. For instance, indicators related to informational support received relatively high weighted means, indicating a perceived adequacy of professional development opportunities such as INSET and Lac sessions provided by school principals. On the other hand, emotional support indicators revealed a gap between perceived and provided support, suggesting room for improvement in addressing teachers' emotional needs.

Conclusions

Based on the findings, the following conclusions are drawn.

1. Codes and themes can be identified from the transcribed quotes of the individual interviewees and focus group discussion participants on school principal support practices on teachers' professional development.
2. School principals extended their support for the professional development of teachers.
3. School principals and teachers have viewed differently the support provided for the teachers' professional development.
4. The school principals and teachers have a similar impression of the teachers' level of commitment.
5. The teachers have developed appropriate competencies in their roles based on the KRA's of the IPCRF.
6. The support provided by school principals for teachers' professional development could influence the teachers' commitment but not their performance.

Recommendations

Based on the findings and conclusions drawn from the analysis, the following recommendations are proposed:

1. The proposed Professional Development Program may be submitted to the Office of the School Superintendent of the Division of Rizal for comments and possible implementation.
2. The proposed Professional Development Program for the school principals should be presented by the researcher during the two-day seminar for the participants' comments.
3. Parallel studies using the mixed method may be conducted by other research enthusiasts to verify if similar results prevail.

Compliance with Ethical Standards

In conducting the research, the researcher initially sought permission from the Schools Division Superintendent of the Division of Rizal through a letter which was forwarded to her office through Electronic Core Application of Rizal Education System v. 1.0. (ECARES). After the request letter was approved by the SDS, the researcher was referred to the school principals for their appropriate action with utmost consideration and strict compliance to DepEd Order No. 9, s. 2005. The school principals assisted the researcher in administering and retrieving the survey questionnaire. The respondents were assured that their participation was voluntary and that they could withdraw at any time without consequence. No coercion was applied to compel the respondents to complete the survey questionnaire or participate in the interview. Confidentiality and

anonymity of the provided information were guaranteed, with respondents' names being optional to maintain anonymity. Proper referencing was employed to acknowledge all sources of information utilized in the study, including journals and research studies cited.

Acknowledgments

The researcher extends heartfelt gratitude to Almighty God for the blessings, guidance, wisdom, and inspiration that made this dissertation possible. Special thanks to his family, particularly his mother, sisters, and brother, for their unwavering moral support throughout the study. Sincere appreciation is also due to the experts who generously contributed their time, effort, and expertise, providing invaluable inputs, constructive feedback, and suggestions that significantly enhanced this research. The researcher is grateful to the School Division Superintendent for supporting and approving the request to conduct this study. Acknowledgement is also due to all the Public School District Supervisors, Senior High School Principals, and Teachers of the Division of Rizal for their wholehearted support, cooperation, and generosity in facilitating the data gathering for this research. Finally, thanks to friends, classmates, and colleagues who contributed to the development of this study and to all those who inspired and motivated the researcher throughout this journey.

REFERENCES

Bancifra, J.J., (2022). Supervisory Practices of Department Heads and Techers' Performance: Towards A Proposed Enhancement Program. Asia Pacific Journal of Advanced Education and Technology / P- ISSN 2815 – 245X / E – ISSN 2815 – 2468 / Retrieved on April 23, 2024 from www.apjaet.com

Bernadine, G.G. (2019). Challenges Faced by Educators in the Implementation of Continuing Professional Teacher Development (CPTD): Gauteng Province. Teacher Education in the 21st Century. Retrieved on April 23, 2024 from https://www.semanticscholar.org/paper/Challenges-Faced-by-Educators-in-the-Implementation-Bernadine/d3f1b3cbd2933b34210fdec8146a0e16 af179ea1

Creswell, J. W., & Creswell, J. D. (2023). Research design: qualitative, quantitative, and mixed methods approaches. Sixth edition. Los Angeles, SAGE

Department of Education (2017). National Adoption and Implementation of the Philippine Professional Standards for Teachers (PPST).

Department of Education (2020). National Adoption and Implementation of the Philippine Professional Standards for School Heads (PPSSH).

Department of Education (2023). Multi-Year Guidelines on the Results-Based Performance Management System – Philippine Professional Standards for Teachers.

Garcia, E. and Weiss E. (2019). The role of early career supports, continuous professional development, and learning communities in the teacher shortage. The fifth report in 'The Perfect Storm in the Teacher Labor Market' series. Economic Analysis and Research Network. Retrieved on May 18, 2024 from https://www.epi.org/publication/teacher-shortage-professional-development-and-learning-communities/

Gonong, G. O. (2018) Addressing Teacher Professional Development Issues: Supporting Teacher Quality. Retrieved on September 18, 2023 from https://www.deped.gov.ph/wpcontent/uploads/2018/07/EducSummitAddressingTeacherProfessionalDevelopmentIssues.Nov2_.pdf

Republic Act 10912 or the Continuing Professional Development Law of 2016
Leithwood, K. A. (2021). Review of Evidence about Equitable School Leadership. Educ. Sci. 2021, 11, 377. Retrieved on September 18, 2023 https://doi.org/10.3390/educsci11080377
Magallanes K, Chung JY and Lee S (2022) The Philippine Teachers Concerns on Educational Reform Using Concern Based Adoption Model. Front. Educ. 7:763991. doi: 10.3389/feduc.2022.763991
Medul, A. P., (2022). School Leadership Behaviors of School Heads in Relation to Teachers' Work Performance and Organizational Commitment in Selected Secondary Schools in the Philippines. American Research Journal of Humanities & Social Science (ARJHSS), E-ISSN: 2378-702X, Volume-05, Issue-03, pp-29-35. Retrieved on May 18, 2024 from https://www.arjhss.com/wp-content/uploads/2022/03/E532935.pdf
Morales, Mark Joel (2023). Practices, Challenges, and Perceived Impact of Professional Development Activities among Senior High School Teachers. figshare. Thesis. https://doi.org/10.6084/m9.figshare.24493708.v1
Mthanti, B. J., & Msiza, P. (2023). The roles of the school principals in the professional development of teachers for 21st century Education. Cogent Education, 10(2). retrieved on April 27, 2024 from https://doi.org/10.1080/2331186X.2023.2267934
Siena, J. A. (2019). Decentralization and Teacher Professional Development in a Large Education System, Quezon City: UP Center for Integrative and Development Studies. Page 3 through Training and Development in Ghana Education Service (A Case Study of Ebenezer Senior High School). Journal of Human Resource Management. Vol. 6, No. 1, 2018, pp. 1-8. Retrieved on April 23, 2024 from doi: 10.11648/j.jhrm.20180601.11
Schleicher, A. (2019). Thoughts on the Future of Teaching. Beijing International Review of Education, 1(2-3), 273-302. https://doi.org/10.1163/25902539-00102002
Tesch, R. (1990). Qualitative Research: Analysis Types & Software Tools. Bristol, PA: Falmer Press.
Tupas, F. P. and Noderama, R. P. (2020). Looking into In-Service Training for Teachers in the Philippines: Are They Gearing towards Education 4.0?. Universal Journal of Educational Research, 8(10), 4651 - 4660. DOI: 10.13189/ujer.2020.081034.
UNESCO (2021). Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Retrieved on November 3, 2023 from https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2021/02/Metadata-4.c.7.pdf

APA Citation:

Chua, R. J. B. (2024). SCHOOL PRINCIPALS' SUPPORT PRACTICES ON TEACHERS' PROFESSIONAL DEVELOPMENT, TEACHERS' COMMITMENT, AND PERFORMANCE: BASIS FOR PROFESSIONAL DEVELOPMENT PROGRAM. Ignatian International Journal for Multidisciplinary Research, 2(8), 1546–1563. https://doi.org/10.5281/zenodo.13372738

raul.chua@deped.gov.ph

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

SCIENCE LABORATORY ASSESSMENT: BASIS FOR AN ACTION PLAN

Dionisio E. Briñosa, Ed.D.

College of Teacher Education, Mindoro State University, Bongabong, Oriental Mindoro, Philippines

https://doi.org/10.5281/zenodo.13329099

ABSTRACT

This study assesses the inventory, handling practices, and management of the Science Laboratory at MinSU Bongabong Campus. It aims to evaluate the availability and condition of lab equipment, safety handling practices, and management strategies in place.The research methodology involves conducting an inventory assessment of lab equipment, categorizing items into safety-related common equipment, basic apparatus, measuring glassware, non-measuring glassware, and heating equipment. This assessment will provide insights into the adequacy and functionality of the equipment. Additionally, the study will evaluate handling practices concerning personal protective equipment, emergency equipment availability, and laboratory housekeeping standards. This evaluation aims to identify areas for improvement to ensure a safe laboratory environment. The research will also examine management practices, including equipment calibration and repair, inspection of new and used equipment, and the organization of lab spaces. This will help assess the effectiveness of current management practices and highlight areas for enhancement. The findings will inform an Action Plan aimed at improving the Science Laboratory's inventory, safety measures, and management practices, ultimately contributing to enhanced functionality, safety, and efficiency in the laboratory.

Keywords: *science laboratory, safety measures, handling practices, inventory, assessment*

INTRODUCTION

This study focuses on conducting a comprehensive assessment of the science laboratories at Mindoro State University (MinSU) Bongabong Campus, specifically analyzing the variables of science laboratory inventory, handling practices, and management practices. The aim is to evaluate the current state of these variables within the laboratories at the campus, including the availability and adequacy of lab equipment, the efficiency of the handling process, as will as the effectiveness of the managing process. The assessment will provide valuable insights into the strengths and weaknesses of these variables, identifying areas that require improvement or enhancement within the specific context of MinSU Bongabong Campus. The findings will then be used as a basis for formulating and implementing an Action Plan, tailored to address the identified areas of improvement and enhance the overall functionality and productivity of the science laboratories at MinSU Bongabong Campus. The Action Plan will serve a map to improve the science laboratory of MinSU Bongabong Campus.

Science educators have suggested that using laboratory activities has numerous educational advantages, and the laboratory has been given a central and distinctive role in science education (Konstam et al., 2018).The statement highlights the educational benefits of laboratory activities in science instruction and acknowledges the laboratory's central and unique role in fostering effective learning experiences. By integrating laboratory activities into science instruction, educators can improve students' understanding, critical thinking skills, inquiry abilities, collaboration, and motivation in science.

Science laboratory is a place for conducting experiments and practicum activities. Students will better understand the subject matter if they are actively involved in the learning process. Laboratory works increases learning motivation of students. Laboratory practices play a vital role to reach out the gap between theory and practice (Cullin et.al., 2017). Laboratory applications have been stated to help students define the concepts of science in a more comprehensive and meaningful manner (Harman et al., 2016). Laboratories have long been regarded as an important component in science education (Kwok, 2015). The main purpose of teaching science is to develop the skills of learners, mainly to adapt the dynamic world. The teacher has a great role to reach out this purpose. Science laboratory influence the quality of education and the learning implementation of the teachers and the activities of the students inside the classroom particularly in science. Therefore, the immediate action for updating and improving the science laboratory must be emphasized.

Conducting a science laboratory needs assessment will help the school gain a deeper understanding on science laboratory, prioritize its resources, appeal to stakeholders for donors, and activate linkages with other related agencies.

A science laboratory needs assessment will help to learn about the inventory, handling of material and equipment, and management practices in the laboratory. The

assessment can reveal both a laboratory most pressing needs and leverageable resources so that university can direct funding and resources to produce a well-equipped and knowledgeable student. Nonprofit organizations and related agencies must often make the case for their programs to garner support. A science laboratory needs assessment report, signals that their services and decisions are well-informed and necessary.

Efficient inventory management enhances lab productivity and reduces costs. Managing inventory is essential for the smooth operation of any laboratory, regardless of its size. It can be challenging to monitor consumable supplies, reagents, lab equipment, and instruments. However, implementing efficient inventory management practices can greatly improve productivity and reduce costs. By using simple and creative strategies, you can maximize your lab budget and enhance overall efficiency.

This research focuses on assessing the inventory, handling practices, and management practices of the Science Laboratory at MinSU Bongabong Campus. The study aims to evaluate the availability and condition of lab equipment, assess the handling practices related to safety measures, and examine the management practices implemented in the laboratory.

The research methodology includes conducting an inventory assessment of the lab equipment, categorizing them into common equipment for safety purposes, basic apparatus, glassware apparatus used for measuring, glassware apparatus not used for measuring, and common equipment for heating. The assessment will provide insights into the adequacy and functionality of the lab equipment.

Furthermore, the study will assess the handling practices in terms of personal protective equipment and clothing, availability of emergency equipment, and the level of housekeeping in the laboratory. This assessment will help identify areas for improvement in ensuring a safe and secure laboratory environment.

Lastly, the research will evaluate the management practices in the laboratory, including the calibration and repair of equipment, checking of new and used laboratory equipment, and the cleaning and organization of equipment and countertops. This assessment will shed light on the effectiveness of current management practices and identify areas for enhancement.

The findings of this research will be the basis for formulating an action plan, that provide valuable information for improving the Science Laboratory at MinSU Bongabong Campus. The results will guide the implementation of necessary measures to enhance the inventory, handling practices, and management practices in the laboratory. It is expected that the research outcomes will contribute to the overall improvement of the laboratory's functionality, safety, and efficiency.

Research Questions

This study aims to analyze the inventory, handling and management practices of Science Laboratory of Mindoro State University (MinSU). Bongabong Campus
Specific Questions:

1. What is Inventory assessment of science laboratory of MinSU Bongabong Campus in terms of:
    - 1.1 Common Lab Equipment
    - 1.2 Glassware- Used For Measurement
    - 1.3 Equipment Often Used In Titrations
    - 1.4 Basic Laboratory Equipment

2. What is the extent of satisfaction of the respondents in Handling practices assessment of Science Laboratory of MinSU Bongabong Campus in terms of:
    - 2.1 personal protective equipment and clothing,
    - 2.2 emergency equipment, and
    - 2.3 housekeeping

3. What is the extent of satisfaction of the respondents in \Management Practices assessment of Science Laboratory of MinSU Bongabong Campus in terms of:
    - 3.1 calibration of laboratory equipment
    - 3.2 repairing of Laboratory equipment
    - 3.3 checking of new and used laboratory equipment

4. What specific Action Plan could be proposed based on the findings?

METHODOLOGY

This section presents the research design used to answer the specific research questions as well as the research setting, participants, sampling, and the detailed data gathering procedures, and analysis, and ethical considerations.

Research Design. The research used the descriptive method to conduct this study. Descriptive research employed to describe the status of the laboratory materials, apparatus and equipment in Science Laboratory through inventory assessment. It is also used in describing the Handling practices and Management Practices of Science Laboratory of MinSU Bongabong Campus.

Research Participants and Sampling. Sixty Bachelor of Secondary Education major in Science took part in the study. These number of respondents were selected from the three year level with a total population of 85 students, There were 20 student from second, third, and fourth year respectively and eight faculty members teaching science involved as respondents with a total number 68.

Data Collection. A written request duly noted by the Program Chair (PC) to conduct a study and to distribute the questionnaire to the students and faculty respondents was sent to the Campus Executive Director (CED) for approval. Upon approval the questionnaire was distributed personally to the respondents. Retrieval of the questionnaire was made after one day. The data gathered were tabulated, analyzed and interpreted.

Instruments. To gather the data from respondents, a self-made questionnaire was used as instrument. The questionnaire focused on the handling practices and management practices of science laboratory of MinSU Bongabong Campus. Meanwhile, another source of data was the inventory records of the laboratory equipment from the supply office.

Data Analysis. The quantitative data gathered were treated using Descriptive Statistics such as mean. On the other hand, the inventory records from the Supply Office were also used to described the status of the different science laboratory apparatus and equipment.

RESULTS

This section presents the results of the data analysis done by the researchers. The results were presented in a way that answers the research questions which were previously stated.

Table 1. Inventory assessment of science laboratory of MinSU Bongabong Campus

Common Lab Equipment	Quantity	Good Condition (GC)	Not Good Condition (NGC)	None (N)
Fire extinguisher		/		
Safety goggles		/		
Safety gloves		/		
Lab coats/gown		/		
First aid kit				/
Emergency shower				/
Erlenmeyer Flask		/		
Beaker		/		
Test Tube		/		
Vial With Cap				/
	Glassware- Used For Measurement			
1. Volumetric Flask			/	
2. Graduated Cylinder		/		

3. Pipet			/	
4. Buret			/	
Equipment Often Used In Titrations				
1. Ring Stand			/	
2. Buret Clamp			/	
3. Utility Clamp			/	

Basic Laboratory Equipment				
1. Funnel		/		
2. Watch Glass			/	
3. Crucible Tongs				/
4. Glass Stir Bar			/	
5. Centrifuge			/	
6. Bunsen Burner			/	
7. Magnetic Stir Bar			/	
8. Disposable Pipet				/
9. Wash Bottle				/
10. Pipet Bulb				/
11. Desiccator			/	

Magnifying Instrument					
Magnifying glass			/		
Compound Microscope			/		
Electronic Microscope				/	
	Weighing Balance				
Gram Balance Scale				/	
Analytical Weighing Balance			/		
Electronic Weighing Balance				/	

Legend for Inventory Process ***Good Condition (GC) Not Good Condition (NGC) None (N)***

Table 1 shows the inventory assessment of science laboratory of MinSU Bongabong Campus.

Based on the inventory of the science laboratory equipment and materials, it appears that some items were not present, and some were not functioning properly. Additionally, only a few items were found to be in working condition.

Part II. The handling practices assessment of the Science Laboratory at MinSU Bongabong Campus in terms of;

Table 2. Personal Protective Equipment (PPE) and Clothing

Indicator	Mean	Rank	Description
1. Laboratory personnel/instructor/students consistently wear the appropriate PPE (e.g., lab coats, gloves, safety goggles) during all laboratory activities	2.62	2.5	Often
2. Laboratory personnel/instructor provided with proper training on the correct usage and disposal of PPE	2.54	4	Often
3. there is a designated area or facilities for storing and changing into/out of PPE within the laboratory	2.62	2.5	Often

4. There is a clear policy or guideline in place regarding the use of PPE in the laboratory	2.68	1	Often
5. Regular inspections or assessments conducted to ensure compliance with PPE usage among laboratory personnel and instructor	2.47	5	Often
Overall Mean	2.79		Often

Table 2 presents the mean on handling practices assessment of the Science Laboratory at MinSU Bongabong Campus in terms of PPE and clothing. As seen in the table, item 4, there is a clear policy or guideline in place regarding the use of PPE in the laboratory have mean score of 2.68, ranked 1st and with often as verbal description. This implies that a clear policy regarding the use of PPE is essential to properly guided the laboratory users.

It can also be observed from the table that regular inspections or assessments conducted to ensure compliance with PPE usage among laboratory personnel and instructor got a mean score of 2.47, ranked last with often as verbal description. The results revealed that regular inspections or assessments must be conducted for meaningful practices.

Table 3. Emergency Equipment

Indicator	Mean	Rank	Description
1. Emergency equipment, such as fire extinguishers, readily accessible and properly maintained within the laboratory	2.78	2	Often
2. There is a clear procedure or protocol in place for using emergency equipment in case of an emergency situation	2.65	3	Often
3. Laboratory personnel/instructor trained on the proper usage of emergency equipment, such as fire extinguishers or emergency eyewash stations	2.59	5	Often
4. Emergency equipment regularly inspected and tested to ensure they are in good working condition	2.90	1	Often

5. Emergency equipment clearly labeled and their locations prominently displayed within the laboratory	2.62	4	Often
Overall Mean	2.71		often

Table 3 presents the mean on handling practices assessment of the Science Laboratory at MinSU Bongabong Campus in terms of emergency equipment. Emergency equipment regularly inspected and tested to ensure they are in good working condition ranked 1st, described as often which gained mean value of 2.90. Regular inspections and tests on emergency equipment indicate a proactive approach to maintenance and safety.

On the other hand, item number 3 received the mean score of 2.59 with verbal description of often and ranked last. However, there is room for improvement in terms of training laboratory personnel and instructors on the proper usage of emergency equipment.

The overall mean is 2.71 with verbal description of often was achieved. According to Becerik-Gerber et al., (2012) emergency supplies should focus on ensuring ongoing readiness and safety in crisis situations. To analyze the overall results, it can be noted that handling practices in terms of emergency equipment should give attention to ensure continuous preparedness and safety in emergency situations.

Table 4. Housekeeping

Indicator	**Mean**	**Rank**	**Description**
1. The laboratory is maintained in terms of cleanliness and tidiness	2.62	2	Often
2. The laboratory personnel trained on proper housekeeping practices, such as cleaning spills and maintaining a clutter-free workspace	2.54	3	Often
3. There are designated areas or containers for waste disposal within the laboratory	2.21	4	Often
4. The chemicals and hazardous materials properly stored and labeled in the laboratory	2.65	1	Often
5. The laboratory countertops and workspaces are cleaned and sanitized	2.09	5	Rarely
Overall Mean	2.42		Rarely

Table 3 presents the mean on handling practices assessment of the Science Laboratory at MinSU Bongabong Campus in terms of housekeeping.

As seen in the table, item 4, the chemicals and hazardous materials properly stored and labeled in the laboratory have mean score of 2.65 ranked 1st and with often as verbal description. The item implies that the chemical and hazardous materials mus properly stored and labeled in the laboratory to avoid any unnecessary incidents.

It can also be observed from the table that the laboratory countertop and workspace are cleaned and sanitized got a mean score of 2.09, ranked last with rarely as verbal interpretation. The result revealed that the laboratory should prioritize regular cleaning and sanitization to ensure a safe and healthy working environment

However, the overall mean is 2.42 with verbal description of rarely. The results implies that laboratory housekeeping needed more attention of cleaning and sanitation to maintain quality services of the laboratory. Cleaning and sanitation in the lab needed to be prioritized in order to maintain the level of quality services provided by the facility (Housekeeping, 2021).

Table 5. Summary of the mean on the handling practices assessment of the Science Laboratory at MinSU Bongabong Campus

Indicator	Mean	Rank	Description
1. Personal Protective Equipment (PPE) and Clothing	2.79	1	Often
2. Emergency Equipment	2.71	2	Often
3. Housekeeping	2.42	3	Rarely
Overall Mean	**2.64**		**Often**

Table 5 the presents summary of the mean on the handling practices assessment of the Science Laboratory at MinSU Bongabong Campus.

The result shown in the table implies that participants were generally dissatisfied with the variable housekeeping, as it obtained the lowest mean score of 2.42 and was ranked three.

Despite receiving often verbal descriptions, both Personal Protective Equipment (PPE) and Clothing, as well as Emergency Equipment, obtained relatively low mean scores of 2.79 and 2.71 respectively. This suggests that participants were not fully satisfied with these variables. The verbal descriptions often may have been insufficient in addressing any concerns or difficulties related to the use or availability of PPE and Clothing, as well as Emergency Equipment. The overall mean score of 2.64, with a verbal description of often, indicates a generally low level of satisfaction across all variables.

Based on these results, it is evident that there are areas for improvement in terms of housekeeping, as well as the provision and understanding of Personal Protective

Equipment (PPE) and Clothing, and Emergency Equipment. Emergency equipment, such as fire extinguishers, eyewash stations, and emergency showers, plays a critical role in ensuring the safety of personnel and mitigating potential hazards in a laboratory and should be regularly inspected, maintained, and easily accessible to effectively respond to any emergency situation (Kronick et al., 2015).

Part III: The management practices assessment of the Science Laboratory at MinSU Bongabong Campus in terms of:

Table 6. Calibration of Laboratory Equipment

Indicator	Mean	Rank	Description
1. There is a documented calibration schedule for laboratory equipment in place	3.46	3	Often
2. There are trained and qualified personnel responsible for conducting equipment calibration	1.40	4	Never
3. The calibration records maintained and updated for each laboratory equipment	3.39	1	Often
4. The calibration results reviewed and acted upon in a timely manner	3.32	5	Often
5. There are procedures in place for addressing any deviations or issues identified during equipment calibration	3.47	2	Often
Overall Mean	**3.03**		**Often**

Table 6 portrays the mean on management practices assessment of the science laboratory at MinSU Bongabong Campus in terms of calibration of laboratory equipment.

The table described that item 3 the calibration records maintained and updated for each laboratory equipment ranked 1st with the mean value 3.39 with often verbal description. This result asserts that maintaining and updating calibration record of the laboratory equipment manifest a systematic approach in keeping records.

Likewise, item 4, the calibration results reviewed and acted upon in a timely manner have mean value of 3.32, ranked last have often verbal description. This manifest that commitment to review calibration results is commendable.

Generally, table 6 has an overall mean of 3.03 with verbal description of often. The

results implies that the laboratory should continue to prioritize equipment calibration and invest in training personnel to enhance their expertise in this area. This result is supported by Madu (2012) that laboratory should keep placing a high priority on equipment calibration and spend money on staff training to increase their knowledge in this area.

Table 7. Repairing of laboratory equipment

Indicator	Mean	Rank	Description
1. There is a designated process or system in place for reporting and documenting equipment issues or malfunctions	3.56	2	Always
2. There is a trained and qualified personnel responsible for conducting equipment repairs	3.53	3	Always
3. There are established timelines or response times for addressing equipment repairs	3.59	1	Always
4. The equipment repair records maintained and updated for each repair conducted	2.65	4	Often
5. There are procedures in place for prioritizing and scheduling equipment repairs based on urgency and impact on laboratory operations	2.59	5	Often
Overall Mean	**3.18**		**Often**

Table 7 present the mean on managing practicess assessment in terms of repairing of laboratory equipment.

Item 3, there are established timelines or response times for addressing equipment repairs ranked 1st as always which gained 3.59. The result implies that timeline or response timeline indicate a structured and timely approached to equipment repairs.

On the other hand, the item 5, there are procedures in place for prioritizing and scheduling equipment repairs based on urgency and impact on laboratory operation, received the mean score of 2.59 with verbal description of often and ranked last. The results shows that there is a need for prioritizing and scheduling equipment repairs based on urgency and impact.

Furthermore, the table also shows an overall mean of 3.18 with a verbal description of often. The results shows an evident that the laboratory should continue to prioritize equipment maintenance and repairs to minimize downtime and ensure smooth laboratory operations. As an evidence to this statement Bento and Fontes (2015), mentioned that the laboratory should keep giving equipment maintenance and repairs top priority in order

to minimize downtime and ensure effective laboratory operations.

Table 8. Checking New and Used Laboratory Equipment

Indicator	Mean	Rank	Description
1. There is a documented process in place for checking new laboratory equipment before it is put into use	3.56	4	Always
2. The trained and qualified personnel are responsible for conducting checks on new laboratory equipment	3.59	2	Always
3. There are established criteria or standards for checking the functionality and safety of new laboratory equipment	3.60	1	Always
4. There is a process in place for checking and assessing the condition of used laboratory equipment before it is used or acquired	3.57	3	Always
5. There are criteria or standards for evaluating the condition and functionality of used laboratory equipment	3.51	5	Always
Overall Mean	3.57		Always

Table 8 presents the mean on the management practices assessment of the Science Laboratory at MinSU Bongabong CampusCheckingin terms of New and Used Laboratory Equipment.

As show in the table, item 3, there are established criteria or standards for checking the functionality and safety of new laboratory equipment received 3.60 mean score, ranked 1st and verbal description of always. This implies that there is systematic and thorough approach to equipment checks.

Meanwhile, item 5, there are criteria or standards for evaluating the condition and functionality of used laboratory equipment received the 3.51 mean score, which ranked last and with always verbal description. The results manifest that in the laboratory should consider the evaluation of the condition and functionaly of the used laboratory equipment to minimize the risk of using faulty and unsafe equipment.

Finally, the table shows the overall mean score of 3.57, the always verbal description. The result implies that the laboratory should continue to prioritize equipment

checks to ensure the quality and reliability of the equipment used in laboratory operations. According to Asia (2011) that to ensure the quality and dependability of the equipment used in laboratory operations, laboratories should continue to prioritize equipment checks.

Table 9. Summary of the mean on the management practices assessment of the Science Laboratory at MinSU Bongabong Campus

Indicator	Mean	Rank	Description
1. Calibration of Laboratory Equipment	3.03	3	Often
2. **Repairing of laboratory equipment**	3.18	2	Often
3. Checking New and Used Laboratory Equipment	3.57	1	always
Overall Mean	**3.26**		**Often**

Table 9 shows summary of the mean on the management practices assessment of the Science Laboratory at MinSU Bongabong Campus

The results showed in the table is the summary of the mean responses of the participants which generally implied that they more satisfied with the indicator checking new and used laboratory equipment, which received the highest mean score of 3.57 and was ranked as one. The provision of a verbal description always seems to have implied a significant role in improving this aspect. On the other hand, the variable of repairing laboratory equipment received a slightly lower mean score of 3.18 and was ranked as two.

The variable calibration of laboratory equipment received the lowest mean score of 3.03 and was ranked as three. This suggests that participants were relatively less satisfied with this variable. Despite the verbal description often, it may not have been sufficient to adequately address any concerns or difficulties associated with the calibration process of the laboratory equipment. Overall, the mean score of 3.26, with a verbal description of often, indicates a moderate level of satisfaction across all variables.

What specific SciLab Training-Workshop could be proposed based on the findings?

The Proposed Action Plan

Title: Enhancing Science Laboratory Inventory, Handling Practices, and Management Practices Action Plan

Activity	Responsible Parties	Timeline	Resources Required

Assess current inventory system	Laboratory Personnel	Week 1	Inventory records, observation checklist
Update inventory records	Inventory Team	Week 2	Digital inventory management software, labeling materials
Conduct a thorough inventory audit	Inventory Team	Week 3	Physical inventory count, disposal guidelines
Implement a standardized labeling system	Lab Personnel, Inventory Team	Week 4	Labeling materials, labeling guidelines
Establish storage guidelines	Lab Personnel, electrician	Week 5	Storage guidelines, segregation materials
Train staff on handling procedures	Lab Personnel, Training Department	Week 6	Training materials, PPE, handling protocols
Develop safety protocols	Lab Personnel, Maintenance Officer	Week 7	SOP templates, safety guidelines
Implement regular safety inspections	Electrician and Maintenance Officer	Week 8	Implement regular safety inspections
Conduct staff training on safety practices	Lab Personnel, Training Department	Week 9	Training materials, safety equipment
Monitor and Establish a maintenance schedule	Lab Personnel, Maintenance Team	Week 10	Maintenance schedule, equipment checklist
Evaluate and adapt	Lab Personnel , Stakeholders	Ongoing	Feedback forms, improvement plan

DISCUSSION

On table 1, shows several implications. Firstly, the absence of certain equipment means that students and researchers may not have access to all the necessary tools for conducting experiments or carrying out their work effectively. This can hinder their

progress and limit the scope of their scientific investigations. According to the study of Cossa, et.al (2015), laboratory equipment and learning materials are in short supply due to the lack of funds. In connection to the problem of scarcity of laboratory materials the university must identify the most critical items needed for hands-on science activities and prioritize their acquisition. Focus on acquiring equipment and materials that are necessary for fundamental experiments and activities that align with the curriculum.

Secondly, the presence of non-functioning equipment poses a challenge as it may lead to inaccurate results or unreliable data. This can negatively impact the quality of research and experimentation conducted in the laboratory. Always remember that science is an experimental discipline, laboratory becomes an essential part in enhancing students' scientific skills (Suleiman, 2013). This will not be materialized if the laboratory materials are not in good condition or not functioning.

Lastly, the limited number of functioning items can result in a bottleneck, where multiple individuals or groups have to share the available equipment. This can lead to delays, decreased productivity, and potential conflicts over resource allocation. According to Ngozi & Halima (2015) inadequate laboratory facilities hinder effective teaching and learning and may contribute to the poor performance of students.

These are the reason why university and other educational institution must address the inadequacy of laboratory materials to avoid delay and hider laboratory works and activities. A thorough assessment of the inventory should be conducted to identify missing items and repair or replace non-functioning equipment. Adequate funding and resources should be allocated to ensure that the laboratory is well-equipped and maintained to support scientific research and educational activities effectively.

Meanwhile on table 2, the results manifest that the laboratory has a slightly good level of compliance with PPE usage. However, there may be room for improvement, particularly in providing more comprehensive training on PPE usage and disposal and conducting more frequent inspections or assessments to ensure ongoing compliance. The results is supported with Ranney et al.,(2020) that laboratory must provide with Personal Protective Equipment (PPE), includes items like gloves, goggles, lab coats, and respirators, should be worn correctly and consistently to reduce the risk of exposure to chemicals, biological agents, or physical hazards, is crucial in a laboratory setting to safeguard individuals from potential hazards and ensure their safety.

However, on table 3 got an overall mean is 2.71 with verbal description of often was achieved. According to Becerik-Gerber et al., (2012) emergency supplies should focus on ensuring ongoing readiness and safety in crisis situations. To analyze the overall results, it can be noted that handling practices in terms of emergency equipment should give attention to ensure continuous preparedness and safety in emergency situations.

On table 4, the results implies that laboratory housekeeping needed more attention of cleaning and sanitation to maintain quality services of the laboratory. Cleaning and sanitation in the lab needed to be prioritized in order to maintain the level of quality

services provided by the facility (Housekeeping, 2021).

Based from the result on table 5, it is evident that there are areas for improvement in terms of housekeeping, as well as the provision and understanding of Personal Protective Equipment (PPE) and Clothing, and Emergency Equipment. Emergency equipment, such as fire extinguishers, eyewash stations, and emergency showers, plays a critical role in ensuring the safety of personnel and mitigating potential hazards in a laboratory and should be regularly inspected, maintained, and easily accessible to effectively respond to any emergency situation (Kronick et al., 2015).

However, table 6 has an overall mean of 3.03 with verbal description of often. The results implies that the laboratory should continue to prioritize equipment calibration and invest in training personnel to enhance their expertise in this area. This result supported by Madu (2012) that laboratory should keep placing a high priority on equipment calibration and spend money on staff training to increase their knowledge in this area.

Furthermore, the table 7 shows an overall mean of 3.18 with a verbal description of often. The results shows an evident that the laboratory should continue to prioritize equipment maintenance and repairs to minimize downtime and ensure smooth laboratory operations. As an evidence to this statement Bento and Fontes (2015), mentioned that the laboratory should keep giving equipment maintenance and repairs top priority in order to minimize downtime and ensure effective laboratory operations.

Looking on the table 8, it shows the overall mean score of 3.57, the always verbal description. The result implies that the laboratory should continue to prioritize equipment checks to ensure the quality and reliability of the equipment used in laboratory operations. According to Asia (2011) that to ensure the quality and dependability of the equipment used in laboratory operations, laboratories should continue to prioritize equipment checks.

Table 8 states that timely repairs help to reduce downtime, ensure accurate results, and prolong the lifespan of equipment, enabling uninterrupted scientific research and experimentation. Maintaining the functionality and dependability of laboratory equipment is crucial for keeping scientific instruments reliable and functional (De Moraes Ramos et al., 2017). Calibration of science laboratory equipment is a critical process that ensures reliable and consistent results, enabling researchers and students to trust the data obtained from their experiments. It involves ensuring the accuracy and precision of measurement instruments by comparing their readings to known standards (WHO, 2011).

The results also indicates a moderate level of satisfaction across all variables. This suggests that the verbal descriptions often were generally helpful in facilitating understanding and satisfaction, but there may be room for improvement in particular to the said variables.

Conclusions

1. From the findings there are several issues with the science laboratory equipment and materials, including missing items, non-functioning equipment, and a limited number of functioning items.
2. The respondents expressed dissatisfaction with the variables of housekeeping, Personal Protective Equipment (PPE) and Clothing, and Emergency Equipment.
3. The participants were most satisfied with the indicator of checking new and used laboratory equipment, while repairing laboratory equipment received a slightly lower level of satisfaction.

Recommendations

1. The university may conduct a thorough assessment of the inventory to identify missing items and repair or replace non-functioning equipment. Adequate funding should be allocated to ensure the laboratory is well-equipped and maintained.

2. The institution should emphasize the important to improve the provision and understanding of housekeeping, PPE and Clothing, and Emergency Equipment. This can be achieved through regular training and orientation on proper use and availability of PPE and Clothing, as well as ensuring cleanliness and organization in the laboratory for better housekeeping.

3. The university should improve the repair process by addressing any delays or difficulties. This can be done by implementing a system for timely repairs, providing clear communication and updates to participants on the status of repairs, and addressing any concerns or difficulties related to the repair process.

4. The university should adopt the proposed **Enhancing Science Laboratory Inventory, Handling Practices, and Management Practices Action Plan**

Compliance With Ethical Standards

Throughout the conduct of the study, research ethics were considered by the researcher. Aside from the permission secured from the CED, the proposal was presented to the institutional review committee to make sure it would not violate any research ethics and that it would serve its purpose. Voluntary participation was observed right during sampling. The respondents were asked to sign the informed consent. They are assured of the confidentiality, anonymity of their identities and their responses, and were informed of their right to withdraw their participation in the study.

Acknowledgments

I would like to express my heartfelt gratitude to Mindoro State University for providing the resources and support necessary for this study. I extend my sincere appreciation to my co-teachers for their invaluable guidance and encouragement throughout this research process. A special thank you to the student respondents for their willingness to participate and share their insights, which were crucial to the success of this study. Lastly, I would like to acknowledge the supply officer for their assistance in facilitating the necessary materials and equipment. Your contributions have been instrumental in the completion of this work.

REFERENCES

Bento, N., & Fontes, M. (2015). The construction of a new technological innovation system in a follower country: Wind energy in Portugal. Technological Forecasting and Social Change, 99, 197–210. https://doi.org/10.1016/j.techfore.2015.06.037

Becerik-Gerber, B., Jazizadeh, F., Li, N., & Calis, G. (2012). Application areas and data requirements for BIM-Enabled Facilities management. Journal of the Construction Division and Management, 138(3), 431–442. https://doi.org/10.1061/(asce)co.1943-7862.0000433

Cossa, Eugénia Flora Rosa, & Uamusse, Amália Alexandre. (2015). Effects of an In-service Program in Biology and Chemistry Teachers" Perception of the Role of Laboratory Work. Procedia - Social and Behavioral Sciences, 167, 152-160. doi: 10.1016/j.sbspro.2014.12.656.

Cullin, M., Hailu, G., Kupilik , M. & Petersen, T. (2017). The Effect of an Open- Ended Design Experience on Student Achievement in an Engineering Laboratory Course. International

Harman, G. Cokelez, A. Dal, B. & Alper, U. (2016). Pre-service Science Teachers' Views on Applications in Science Education: The Effect of a Two-semester Course. Universal Journal of Educational Research 4(1): 12-25.

De Moraes Ramos, R. T., Bezerra, I. C. F., Ferreira, M. R. A., & Soares, L. a. L. (2017). Spectrophotometric quantification of flavonoids in herbal material, crude extract, and fractions from leaves of Eugenia uniflora Linn. Pharmacognosy Research, 9(3), 253. https://doi.org/10.4103/pr.pr_143_16

Housekeeping, G. (2021). Good housekeeping amazing science: 83 Hands-on S.T.E.A.M Experiments for Curious Kids! Hearst Home & Hearst Home Kids.

Konstam, M. A., Kiernan, M. S., Bernstein, D., Bozkurt, B., Jacob, M., Kapur, N. K., Kociol, R. D., Lewis, E. F., Mehra, M. R., Pagani, F. D., Raval, A. N., & Ward, C. (2018). Evaluation and Management of Right-Sided Heart Failure: A scientific statement from the American Heart Association. Circulation, 137(20). https://doi.org/10.1161/cir.0000000000000560

Kronick, S. L., Kurz, M. C., Lin, S., Edelson, D. P., Berg, R. A., Billi, J. E., Cabanas, J. G., Cone, D. C., Diercks, D. B., Foster, J. A., Meeks, R. A., Travers, A., &

Welsford, M. (2015). Part 4: Systems of care and continuous quality improvement.Circulation,132 (18_suppl_2).https://doi.org/10.1161/cir.0000000000000258
Kwok, P.W. (2015). Science Laboratory Learning Environments in Junior Secondary Schools. Asia-Pacific Forum on Science Learning and Teaching. 16(1), 1-28.
Madu, C. N. (2012). Handbook of Total Quality Management. Springer Science & Business Media.
Ngozi, D., & Halima, S. (2015). Inadequate Laboratory Facilities and Utilization: Pedagogical Hindrance to Students' Academic Performance in Biology in Senior Secondary Certificate Examination in Zaria Metropolis, Kaduna State, Nigeria. International Business Research, 8(9). https://doi.org/10.5539/ibr.v8n9p124
Ranney, M. L., Griffeth, V. E. M., & Jha, A. K. (2020). Critical Supply Shortages — The Need for Ventilators and Personal Protective Equipment during the Covid-19
Pandemic. The New England Journal of Medicine, 382(18), e41. https://doi.org/10.1056/nejmp2006141
Suleiman, M.M. (2013). Exploring Science Teachers' Experiences of Teaching Science with Limited Laboratory Resources: A Case Study of Community Secondary School in Lindi, Tanzania. (Master's Dissertation)
World Health Organization (2011). Laboratory Quality Management System: Handbook.
World Health Organization, (2011). Asia, W. R. O. F. S., Laboratory Quality Standards and their Implementation: Handbook

APA Citation:

Briñosa, D. E. (2024). SCIENCE LABORATORY ASSESSMENT: BASIS FOR AN ACTION PLAN. Ignatian International Journal for Multidisciplinary Research, 2(8), 879–898. https://doi.org/10.5281/zenodo.13329099

asonirb2272@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

SECOND LANGUAGE TEACHING ANXIETY, EFFICACY BELIEFS AND MOTIVATION AMONG K-12 ENGLISH TEACHERS

Ericson Macatangay Macapuno, Ph.D.
Dolores D. Borras, DCOMM

Lyceum of the Philippines University- Batangas, Batangas City, Philippines

https://doi.org/10.5281/zenodo.13160562

ABSTRACT

This quantitative research investigated Second language teaching anxiety, efficacy beliefs, and motivation among 386 English teachers in Batangas City Division, sampled from a larger population of 1100. The participants were mainly female elementary school teachers with master's degrees and 11 to 20 years of teaching experience. They reported experiencing anxiety related to self-perceived language proficiency, student engagement, and time management during second language instruction but expressed confidence in their teaching abilities. Notably, they did not feel anxious about their teaching experience or fear negative evaluations. The study employed statistical analyses, including ANOVA and t-tests, revealing no significant differences in teaching anxiety based on demographic profiles. However, significant variations in efficacy beliefs emerged when grouped by educational attainment, particularly concerning classroom proficiency and instructional strategies. External motivation also showed significant differences based on the teachers' highest educational level. Moreover, significant relationships were identified through Pearson correlation analysis, linking various factors in second language teaching. Key correlations included those between teaching anxiety and self-efficacy, self-perception of proficiency and classroom effectiveness, and various challenges faced in teaching. Based on these findings, an English language teacher improvement plan was developed, and recommendations for future research were made, emphasizing the importance of replicating and referencing this study to further explore these significant relationships and enhance teacher development in second language teaching.

Keywords: *Second Language Teaching Anxiety, Efficacy Beliefs, Motivation, English Teacher Improvement Plan*

INTRODUCTION

Learning a language is an essential part to be able to communicate and to understand the messages a human being wants to convey. Through language, human beings can perform duties and responsibilities, obtain needs and wants, survive day-to-day living, and enjoy entertainment and leisure. All of these are enjoyed in the context of a specific and the same language community. Equally important and capacitating is the ability to learn and utilize a second language (L2), which in turn, expands the opportunities and horizons of an individual. Learning a second language enables a person to transact with people who belong to the speech community that speaks that language.

The significance of language extends beyond individual communities, functioning in global interactions and understanding. Learning a second language does not only broaden one's personal horizons but also fosters intercultural communication and cooperation. In an increasingly interconnected world, proficiency in multiple languages is a valuable skill that opens doors to new opportunities and perspectives.

Today, English as a language, spoken widely all over the world, opens an array of opportunities –communication for business, academia and travel, wide access to online and offline information stored in English medium, wider educational opportunities, better understanding of technological advancements, better chances to learn culture of English-speaking countries, and global citizenship to name a few. The widespread use of English as a language transcends boundaries, making it an essential and required tool for communication and access to opportunities. Whether individuals acquire English as a second language, foreign language, or native tongue, its benefits are unfathomable. To illustrate, its role in facilitating global communication, particularly in business, academia, and travel is important.

In connection to this line of ideas, teaching a second language is challenging as second language teachers play a crucial role as facilitators and conversation partners for second language learners, creating a communicative environment for practice. Various factors such as instructional strategies, L2 proficiency, and feedback techniques impact language learning. Effective L2 teachers must be proficient in the target language to model correct pronunciation and grammar. Their instructional strategies and motivational skills greatly influence learner engagement and progress in language acquisition, highlighting the diverse set of skills and considerations needed to address the unique challenges of teaching a second language.

Establishing on the grounds of the previous situations, it could be deduced that various factors post difficulties in teaching a second or foreign language. More so, these factors accumulate and thus induce second language teaching anxieties that affect the quality of teaching and learning experiences students may get from these language teachers. Second, Language Teaching Anxiety refers to the feelings of unease, nervousness, or stress experienced by language teachers when instructing students in a second language. This type of anxiety can manifest in various forms, such as fear of making mistakes, concerns about students' comprehension, or worries about meeting

educational expectations. Second Language Teaching Anxiety can impact a teacher's confidence, teaching effectiveness, and overall well-being in the classroom (Zhang and Rahimi, 2021).

Previous studies have shown that anxiety in teaching a second or foreign language could lead to domino effects, opening the doors for various educational problems. Teaching anxiety could reduce instructional quality, because anxious teachers may struggle with delivering clear and effective lessons (Horwitz, 2019) and anxious teachers are less likely to implement innovative teaching strategies, opting instead for safer, more traditional methods that may not be as effective in promoting language acquisition (Tsiplakides and Keramida, 2020).

Second language teaching anxiety could also create an emotionally unstable classroom atmosphere which could negatively impact student motivation and engagement (Gkonou et al., 2020) because emotional states of teachers could often be mirrored by their students and could lead to a cyclical effect where anxiety is perpetuated within the classroom (Dewaele and MacIntyre, 2019). The relationship between teacher anxiety and student performance is further supported by studies indicating that high levels of teacher anxiety correlate with lower student achievement in language learning (Khajavy, Ghonsooly, Fatemi, and Choi, 2018).

As built by the foregoing arguments and citations, it can be said that building programs that could support second language teachers in terms of their challenges and difficulties could build initial and foundational steps toward improving teaching and learning English as a second language. Thus, there is a need for teacher training programs and stress management techniques to better prepare educators for the emotional demands of their profession (Gregersen & MacIntyre, 2021) and for ongoing professional development and support that could help teachers manage anxiety and improve their instructional practices (Tran, Baldauf, & Moni, 2019). This is to understand and address anxiety in ESL teaching which is essential for creating a conducive learning environment that could promote teacher well-being and student success (Oxford, 2020; Brown & White, 2020).

While second language teaching anxiety poses threats and difficulties in language teaching, efficacy beliefs of second language teachers could also make or break the teaching and learning outcomes. Soland (2019), defines second language teaching efficacy beliefs as teacher's confidence in their ability to effectively teach a second language to students. It involves the belief that one can successfully plan and execute language lessons, manage classroom activities, and support students in their language learning journey. Teachers with high Second Language Teaching Self-Efficacy Beliefs are more likely to persist in the face of challenges, utilize innovative teaching strategies, and positively impact student outcomes in language acquisition.

In the context of second language teaching efficacy beliefs, Kim and Elder (2021), emphasized the importance of teachers' confidence in their ability to effectively teach a second language. According to them, teachers with high efficacy beliefs are more likely

to implement innovative teaching strategies, persevere through challenges, and positively impact their students' language learning outcomes. They enumerated some key points regarding second language teaching efficacy beliefs including the impact of teachers' beliefs on student performance and motivation in learning a language, various strategies to improve teacher's self-efficacy in second language instruction, different roles of professional support and development in enhancing teachers' efficacy beliefs, the essential connection between teachers' efficacy beliefs and how these affect classroom management in second language classrooms, and finally, some research-based practices for encouraging optimistic efficacy beliefs among second language teachers. Overall, they underscore the significance of empowering teachers with the skills and confidence needed to create a motivating, engaging and effective language learning environment.

On the other hand, teachers could also demonstrate efficacy in providing constructive feedback and assessments which could help second language teachers guide student progress effectively, foster a positive classroom culture collaborating with colleagues for professional growth and improved teaching practices, keep up with current pedagogical research and apply it in the classroom is crucial for staying (Zhang and Rahimi, 2021).

MacIntyre (2018) also discussed about the important roles that teachers' self-efficacy beliefs play in second language learning process. He emphasizes that the confidence of teachers to effectively teach a second language directly influences their instructional routines and practices, and consequently, student outcomes. He added how self-efficacy beliefs results to positive teachers' grit, motivation and positive attitude to adopt innovative teaching strategies in a language classroom. He delves into effective strategies for enhancing self-efficacy in second language instruction, and the importance of professional development, support systems and coaching in improving teachers' confidence to teach and manage classes of second language learners, and to cultivate positive self-efficacy beliefs in the realm of second language teaching. Furthermore, he clearly emphasizes the connection between teachers' self-efficacy beliefs and classroom dynamics, highlighting how confident teachers are more that equipped to manage diverse learning situations and take a lead in fostering positive student learning experiences and engagement in learning a second language.

With the possession of different self-efficacy beliefs on second language teaching, it is also worth taking note of motivation and its role to language teaching and learning. While it has been established in language learning, it is also important to study and describe how it influence the way second language teachers perform their roles in language acquisition and learning. Language teaching motivation refers to the drive, interest, and enthusiasm that a teacher could possess, in inspiring and engaging students in learning a new language, thus could significantly impact teaching effectiveness and student outcomes (Dörnyei & Ryan, 2020).

Various instances inside and outside classroom teaching could manifest motivation in teaching a second language. First is external motivation that plays a crucial role in shaping teachers' involvement, performance, and professional development in

context of teaching a second language. Mercer and Kostoulas (2018) explain that acknowledgement of second language teachers from co-workers, supervisors, and educational institutions for their teaching practices, enthusiasm, innovations, and contributions to language education can uplift teachers' motivation and morale to excel in their teaching roles and responsibilities. In addition, workshops, training programs and professional development opportunities are considered external motivators too, which play a vital role in improving teachers' motivation in second language instruction. Access to these kinds of learning opportunities and resources, inspires and equips second language teachers with positive perspective, fostering their growth and effectiveness in teaching a second language.

On the other hand, Kubanyiova (2020) discussed about the introjected motivation which is a form of internalize drive that affects teachers' performance and attitudes in teaching a second language. This kind of motivation in the context of language learning refers to internal expectations, pressures and standards that teachers carry out on themselves to achieve professional and personal goals in their respective teaching practices. He emphasized that teachers who are well-driven by introjected motivation in second language teaching often present work ethics like perfectionism, self-discipline and strong sense of responsibility. They set optimum standards for themselves, striving to top personal benchmarks of achievement and excellence in facilitating language learning experiences for their students.

Identified motivation, as described by Assor (2019), is a significant factor in second language teaching that enhances teachers' commitment, engagement, and effectiveness. This type of motivation occurs when teachers' personal goals, values, and beliefs align with the objectives of teaching a second language. Teachers motivated by identified factors demonstrate a meaningful connection to their roles, feeling a genuine sense of purpose and relevance in language education. This passion is driven by their recognition of the transformative impact language learning can have on students' lives.

Meanwhile Gao and Lamb (2021), explained that teachers who are intrinsically motivated in second language teaching demonstrate a genuine love for language learning, a deep interest in cultural exchange, and a sincere desire to foster communication skills in their students. Their enthusiasm for the subject matter and joy in witnessing students' progress and growth fuel their commitment to creating dynamic and engaging language learning environments. Aligned with their natural curiosity, creativity, and love for language, intrinsically motivated teachers often seek out innovative teaching methods, incorporate authentic materials, and design interactive activities that inspire student engagement and promote linguistic proficiency. Their intrinsic passion for language education drives them to continually explore new approaches, adapt to diverse learner needs, and cultivate a love for language learning in their students.

It is in these preceding contexts that the study entitled "Second Language Teaching Anxiety, Efficacy Beliefs and Motivation among K-12 English Teachers" was conducted. With the end goal of providing a proposed English language teacher improvement plan, this research investigated the interaction between and among teacher

anxiety, efficacy beliefs, and motivation in the context of English language teaching across different profile variables.

This study could be considered significant to the following: First are the K-12 teachers who teach English as a second language. They will benefit from a better understanding of how anxiety, efficacy beliefs, and motivation impact their teaching practices. This study can provide insights that help teachers improve their well-being, teaching effectiveness, and job satisfaction. Second are the school administrators who could gain insights into the factors that influence the performance and well-being of K-12 English teachers. Understanding teacher anxiety, efficacy beliefs, and motivation can help administrators in creating supportive environments, offering targeted professional development, and enhancing teacher retention.

Teacher educators could also benefit from this study, as they can use the insights to tailor their training programs to address issues related to anxiety, efficacy beliefs, and motivation among pre-service teachers, ensuring they are better prepared for the challenges of teaching English as a second language. Next are the students learning English as a second language in K-12 settings . Teachers who are less anxious, more confident in their teaching abilities, and highly motivated are likely to create more engaging and effective learning environments, leading to improved student outcomes and language proficiency. Finally, are the researchers in the field of education, specifically those interested in second language teaching and teacher well-being. The findings can add to the existing body of knowledge on second language teaching anxiety, efficacy beliefs, and motivation, guiding future research directions and informing best practices in teacher support and development.

Research Objectives

This study aims to determine the second language teaching anxiety, efficacy beliefs, and motivation among K-12 English teachers in Batangas City Division.

Specifically, this research aims to achieve the following objectives:

1. describe the profile of the respondents in terms of sex, educational attainment, teaching position, and years of English language teaching experience;

2. determine foreign language teaching anxiety of the respondents as ***to*** self-perception of language proficiency, teaching inexperience, lack of student interest, fear of negative evaluation, and difficulties with time management;

3. identify the English language self-efficacy beliefs as regards to classroom proficiency, learner-focused instruction, assessment, language instruction, culture, and materials;

4. assess the second language teaching motivation of the respondents as to external motivation, introjected motivation, identified motivation, and intrinsic motivation;

5. test the significant difference in second language teaching anxiety, efficacy beliefs and motivation, when respondents are grouped according to profile variables;

6. test the significant relationship among the three variables; and

7. propose an English language teacher improvement plan.

METHODOLOGY

Research Design

This research study employed a descriptive quantitative design to achieve its objectives, focusing on examining current situations and identifying the attributes of specific phenomena through observation and exploration of correlations among them. It involved gathering descriptive information about events, which facilitated activities such as arranging, tabulating, illustrating, and explaining the collected data (Gay, 2020). This study quantitatively described the English teaching anxiety, efficacy beliefs, and second language teaching motivation among K-12 English teachers in Batangas City Division. In this study, responses of the teachers to the adopted questionnaires were quantified through relevant descriptive scales. Moreover, data that were obtained undergone statistical tests or analysis to examine the significant differences of responses when profile variables were considered. Consequently, relationships between and among these variables were determined. Based on the aforementioned conditions, descriptive quantitative was the most suitable and appropriate design to use.

Participants of the Study

The participants of the study were the 386 basic education English teachers from the Division of Batangas City. These respondents were selected from the 1100 total English teachers from the aforementioned research locale. These respondents were sampled through stratified non-proportional allocation sampling method. In this sampling method, the size of the sample that was drawn from a particular stratum does not proportionate the relative size of that stratum. The total population was divided into different strata or subgroups, then the sample size for each stratum was decided. Finally, respondents were randomly selected from each stratum according to the allocated sample size.

Data Gathering Instrument

Based on literature review, a data-gathering instrument that quantitatively described the teachers' responses was used. This adopted research questionnaire quantitatively gathered data as regards second language teaching anxiety, efficacy beliefs, and second language teaching motivation. Validation from experts and approval from the research adviser were sought. As a result, after incorporating the suggestions of the expert validator, the finalized instrument was then distributed to 30 participants for pilot testing.

Table 1 presents the reliability test results summary based on the pilot testing of the research questionnaire. Adapted from Aydin (2020), the first variable focused on Second Language Teaching Anxiety and outlined the various subdomains that highlighted the anxieties experienced by English Language teachers. The main objective was to create an instrument to assess Foreign Language Teaching Anxiety (FLTA). The subdomains included self-perception of language proficiency, teaching inexperience, lack of student interest, fear of negative evaluation, and difficulties with time management, each with corresponding reliability test results ranging from acceptable to good ratings based on Cronbach alpha values.

Table 1
Summary of Reliability Test Results

Indicators	Cronbach Alpha	Remarks
Self-perception of language proficiency	0.808	Good
Teaching inexperience	0.795	Acceptable
Lack of student interest	0707	Acceptable
Fear of negative evaluation	0.844	Good
Difficulties with time management	0.850	Good
Classroom Proficiency	0.828	Good
Learner-Focused Instruction	0.949	Excellent
Assessment	0.918	Excellent
Language Instruction	0.942	Excellent
Culture	0.789	Excellent
Materials	0.893	Good
External Motivation	0.897	Good
Introjected Motivation	0.930	Excellent
Identified Motivation	0.892	Good
Intrinsic Motivation	0.907	Excellent

George and Mallery (2003) provide the following rules of thumb:
"_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable"

Second language teaching efficacy beliefs consisted of six components: classroom proficiency, learner-focused instruction, assessment, language instruction,

culture, and materials, each with varying levels of reliability ranging from good to excellent based on their Cronbach alpha values. These components were derived from a study by Karas (2019).

The last part of the questionnaire focused on second language teaching motivation, four subdomains are explored: external motivation with a Cronbach alpha value of 0.897, introjected motivation with a value of 0.930, identified motivation with a value of 0.892, and intrinsic motivation with a value of 0.907. These subdomains were rated as either good or excellent and are based on the research by Sato et al. (2022).

Parts II-III of the questionnaire utilized the following scale to describe and quantify the responses of the participants towards survey items.

Option	Range	Verbal Interpretation	Description
4	3.5-4.00	Strongly Agree	High
3	2.50-3.49	Agree	Average
2	1.50-2.49	Disagree	Low
1	1.00-1.49	Strongly Disagree	Very Low

Data Gathering Procedure

Once the adviser and the panel approved the research topic, the research instrument was developed based on the research objectives and literature review. Moreover, it was improved based on the comments and suggestions of the statistician and the validator. This research instrument was transformed into electronic copy, using Google Forms, to easily send it to the respondents and retrieved it thereafter. It also facilitated automation of the collection, tallying, and tabulation of the responses.

Upon approval of the commencement of the study, necessary permits for conducting were pursued and requests on data such as number of respondents were sought. Request letters were sent to the Schools Division Superintendent of Batangas City. As soon as the Schools Division superintendent approved the administration of the research questionnaire, the survey instrument was sent to the respondents through Google Forms. This platform allowed the researcher to harvest the results online, which were tabulated and sent to the statistician for processing and statistical treatment. The researcher then, started to analyze each table of the study, which was validated by the university statistician. Ample interpretations were written and literature reviews were cited to support the researcher's analysis and interpretations.

Data Analysis

In attaining the objectives of the study, descriptive statistics and inferential statistics were utilized. In generating percentage and frequency distribution as related to the demographic profile, such as sex, educational attainment, and teaching position, and years of experience, descriptive statistics was used. In expressing the proportion or part of the sample or variable as compared to its whole, percentage was used. Weighted mean was used to compute the average of the different weights of the indicators/parameters in the questionnaire.

Inferential statistics such as Independent Samples t-Test and Analysis of Variance (ANOVA), Levene's test, and Scheffe's Test were used to determine and describe the significant differences that were present in the variables when the respondents were grouped according to the expressed profile variables. The Independent Samples t Test was used to compare means of independent groups to determine statistical evidence that the population means were significantly different.

ANOVA was used to evaluate the difference between the means of the different groups respective to profile variables. Meanwhile, Levene's Test was used to check the assumption of equal variances before running the ANOVA. Finally, Scheffe Test is a post-hoc test used in Analysis of Variance used to find out which pairs of means are significant. While for the relationship between and among the three variables, namely: work tasks motivation, self-efficacy, and effectiveness, Pearson correlation coefficient (r) was used.

Ethical Consideration

Various ethical considerations were ensured in this study. Before the research questionnaire was disseminated to 386 respondents, the study had been approved by the LPU-B-Research Ethics Review Committee. In consideration of the research protocols, data collection was properly observed in accordance to Data Privacy Act of 2012. This was primarily done using informed consent that was included in the beginning or first part of the questionnaire. This explained to the respondents that all data collected would be used academically, for research purposes, and would be treated with utmost confidentiality.

In the collection of data through the questionnaire, providing of name was optional and was never used to attribute to their responses. No part of the research attributed names or any identifying information to the data they provided. The respondents were asked to provide their school affiliation for monitoring purposes. These pieces of information were not included in the tabulation of data for analysis and interpretation. These raw data were kept secured and confidential in the google drive of the researcher and would be deleted after five years of the completion of this study.

RESULTS AND DISCUSSION

Table 2
Percentage Distribution of the Respondents Profile

Sex	Frequency	Percentage %
Male	18	4.7
Female	368	95.3
Highest Educational Attainment		
Bachelor's Degree	162	42.0
Master's Degree	217	56.2
Doctorate Degree	7	1.8
Teaching Position		
Elementary Teacher (K-6th)	357	92.5
Junior High School Teacher (7th-10th)	24	6.2
Senior High School Teacher (11th-12th)	5	1.3
Years of Teaching Experience		
10 years and below	135	35.0
11-20 years	142	36.8
21-30 years	76	19.7
31 years and above	33	8.5

Table 2 presents the respondent profiles into four categories: sex, level of education, teaching role, and years of teaching experience. These profiles furnish crucial contextual details about the sample population. By comprehending the demographic traits of the respondents, the researcher can evaluate the content validity of the results, ensuring their faithful reflection of the target population.

The data reveals that females represent a significant majority among respondents, accounting for 95.3% (368 individuals), while males comprise only 4.7% (18 individuals) out of a total of 386 respondents. This observation is consistent with findings from Bongco and Abenes (2019), which reference the Philippine Commission on Women data from 2008–2009, showing that 89.58% of public elementary and 77.06% of public secondary school teachers are female. Additionally, Banate and Saquin (2022) noted that in 2019, 87.35% of elementary teachers in the Philippines were female.

One significant reason for the prevalence of female English teachers over male teachers is that teaching, particularly at the primary and secondary levels, is often perceived as a more nurturing profession, which aligns with traditional gender roles that associate women with caregiving and nurturing responsibilities. This perception can attract more women to the profession from an early age. For instance, a study by Thornton and Bricheno (2021) suggested that societal expectations and cultural norms heavily influence career choices, with teaching viewed as a suitable career for women due to its perceived alignment with maternal roles.

Teaching could be typically characterized by relatively lower salaries compared to other professions requiring similar levels of education, which may deter men who often prioritize higher earning potential in their career choices. A report by the National Education Association (2020) highlighted that lower salaries in the teaching profession contribute to the gender imbalance, as women are more likely to accept lower wages due to historically entrenched wage disparities and societal norms regarding women's work.

Moreover, teaching profession is often seen as offering a better work-life balance, with more predictable hours and extended holidays, which can be particularly appealing to women who may bear a disproportionate share of domestic responsibilities. Research by Johnson and Johnson (2022), indicated that many women opt for teaching because it allowed for a manageable balance between professional and personal life, especially for those who plan to have or already have children.

In terms of educational attainment, individuals holding master's degrees dominate, comprising 56.2 percent with 217 respondents. Bachelor's degree holders follow at 42.0 percent, totaling 162 out of 386 respondents, and with doctorate holders representing 1.8 percent, comprising 7 respondents. Pursuing a master's degree is a common avenue for teachers to enhance their expertise in curriculum development and subsequently improve student performance. Obtaining a master's degree allows teachers to specialize, conduct research, and introduce innovative methodologies, thus enriching the education sector, as noted by Nucum (2019).

Many school districts and educational institutions have implemented policies that either require or strongly encourage teachers to pursue advanced degrees. These policies are often tied to teacher certification and continuing education mandates designed to ensure that educators are equipped with the latest pedagogical skills and knowledge. According to Darling-Hammond et al. (2021), the push for higher educational standards among teachers is a direct response to the need for improved student outcomes and accountability in education systems.

Moreover, obtaining a master's degree often opens up career advancement opportunities and higher salary potential for teachers. Many educational systems offer significant salary increments and promotions for teachers who have earned advanced degrees, recognizing the additional expertise and dedication these qualifications represent. A study by Podolsky et al. (2020) found that teachers with master's degrees tend to have higher earning potential and are more likely to be considered for leadership roles such as department heads or administrative positions, making the pursuit of a master's degree an attractive professional investment.

The evolving demands of the educational landscape, including the integration of technology in the classroom and the need for specialized knowledge in areas such as special education and English as a Second Language (ESL), have made advanced degrees more valuable. Teachers with master's degrees are better prepared to meet these challenges and implement innovative teaching strategies that enhance student learning. Research by Kraft et al. (2021) highlighted that advanced education equips

teachers with critical skills in data analysis, curriculum development, and educational research, which are essential in today's complex educational environment.

Among teaching positions, elementary teachers hold the largest share, with 357 respondents, or 92.5 percent, followed by junior teachers at 6.2 percent with 24 respondents, senior high school teachers form the smallest group, with 5 respondents, or 1.3 percent. Republic Act No. 10533, mandating basic education completion for Filipino children aged 5 to 18, comprising six years of elementary and six years of secondary education, influences this distribution. Consequently, the higher number of elementary teachers is driven by legal requirements, with a proportional decrease in higher levels.

Early literacy is crucial for academic success, leading to a higher demand for elementary English teachers who specialize in teaching fundamental reading and writing skills. According to Cunningham and Zibulsky (2020), the early years of education are pivotal for developing literacy skills, making the role of elementary English teachers essential for laying the groundwork for students' future academic achievements.

Secondly, the structure of elementary education typically involves a single teacher responsible for teaching multiple subjects, including English, to a single class of students throughout the day. This model increases the number of teachers needed at the elementary level compared to middle or high school, where teachers usually specialize in one subject and teach multiple classes. Research by the National Center for Education Statistics (2021) indicated that the generalist nature of elementary teaching necessitates a higher number of teachers who are proficient in teaching English as part of a broader curriculum.

Demographic trends show higher enrollment numbers in elementary schools compared to secondary schools, partly due to population growth and compulsory education laws that mandate school attendance at younger ages. As a result, there is a greater demand for elementary teachers to accommodate the larger student populations in the early grades. A report by the U.S. Department of Education (2020) highlighted that the consistent influx of young students requires more elementary teachers to maintain optimal student-teacher ratios, thereby increasing the overall number of elementary English teachers.

Regarding teaching experience, those with 11 to 20 years of experience comprise the majority, representing 36.8 percent, or 142 out of 386 respondents. The bracket of 10 years and below is represented by 35 percent with 135 respondents, followed by 19.7 percent with 76 respondents having 21 to 30 years of experience, and 8.5 percent with 31 years or more, totaling 33 respondents.

The proliferation of teachers with 20 and below years teaching experience could be attributed to several factors, including high turnover rates, especially among newer teachers who may leave the profession within their first few years, may be due to challenges such as workload, insufficient support, and job dissatisfaction. This turnover contributes to a constant entry of new teachers who replace those who are leaving.

Additionally, educational policies and initiatives aimed at reducing student-to-teacher ratios and enhancing educational quality have led to increased hiring, bringing more novice teachers into the system. Retirement of more seasoned teachers also plays a significant role, as it opens up positions that are often filled by those with fewer years of experience. The growing recognition of the need for diverse teaching approaches and the integration of technology in classrooms have driven a demand for younger, more technologically adept teachers.

The increase in teachers with 11-20 years of experience is corroborated by DepEd Data Bits (2022), showing a consistent rise in teacher numbers across all levels from School Year (SY) 2016-2017 to SY 2020-2021, with an overall increase of 21.1 percent. This increase is further detailed with a 14.2% rise for elementary, 21.8% for junior high school, and 101.3% for senior high school levels.

Some school systems have implemented retention policies aimed at supporting and retaining experienced teachers. These policies often include professional development opportunities, mentorship programs, and financial incentives such as higher salaries and retirement benefits for more experienced teachers. According to Sutcher, Darling-Hammond, and Carver-Thomas (2019), retention strategies ensured that teachers remain in the profession, particularly those who have surpassed the early career attrition phase.

Teachers with 11-20 years of experience have accumulated substantial pedagogical expertise and classroom management skills, making them valuable assets to their schools. Their extensive experience allows them to adapt to diverse classroom situations, implement effective teaching strategies, and mentor less experienced colleagues. A study by Kraft and Papay (2020) highlighted that teacher effectiveness improves significantly during the first decade of teaching, stabilizing after about 10 years, which contributes to the higher numbers of teachers remaining in the profession during this period.

Job satisfaction and career commitment often stabilize after the initial years of teaching, leading to increased retention rates among mid-career teachers. Teachers in the 11–20-year range typically have a more stable work-life balance, a deeper sense of professional identity, and stronger connections with their school communities, all of which contribute to their continued presence in the field. Research by Ingersoll, Merrill, and Stuckey (2021) showed that mid-career teachers report higher levels of job satisfaction and a greater likelihood of remaining in the profession compared to their early-career counterparts.

Table 3
Second Language Teaching Anxiety
as to Self-perception of Language Proficiency

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I feel embarrassed when I make mistakes while I am speaking.	2.95	Agree	1
2. I feel tensed when I have difficulties teaching grammar	2.95	Agree	2
3. I feel pressured when students bring unexpected questions.	2.57	Agree	4
4. I feel nervous when I commit mistakes in pronouncing words.	2.67	Agree	3
5. I feel embarrassed when some students speak English better than me	2.50	Agree	5
Composite Mean	**2.73**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 3 presents the respondent's assessment of teaching anxiety as to self-perception of language proficiency. The composite mean of 2.73 indicates that the respondents agreed that they have second language teaching anxiety as to self-perception of language proficiency. The items on embarrassment when making mistakes while speaking and feeling tensed when having difficulties in teaching grammar both got the highest mean score of 2.95. It was followed by feeling nervous when committing mistakes in pronouncing words with 2.67 mean. All three item were verbally interpreted with agree. Meanwhile, feeling pressured when students bring unexpected questions (2.57) and feeling embarrassed when some students speak English better (2.50) were rated the least but still interpreted as agree.

Second language teaching anxiety affects teachers' self-perception of their language proficiency, which can impact their classroom experiences and effectiveness. Key manifestations include embarrassment from making mistakes while speaking and tension when teaching grammar. High anxiety, particularly during speaking activities, can lead to self-doubt and hinder effective communication. This apprehension is often exacerbated when teachers face unexpected student questions, reflecting their concerns about adequately conveying complex language concepts. Aydin (2020) emphasizes how these feelings can negatively influence teachers' language proficiency and overall teaching performance.

Additionally, ESL teachers frequently experience tension and anxiety when teaching complex grammatical concepts. Grammar is often perceived as a particularly challenging area, both for learners and instructors, because it requires precise knowledge and the ability to explain intricate rules and exceptions. Kim and Elder (2021) found that ESL teachers reported higher levels of anxiety when tasked with teaching grammar, as they feared being unable to provide clear and accurate explanations, which could undermine their credibility in the eyes of students.

The third in rank, nervousness regarding pronunciation mistakes indicates anxiety related to oral production. Fear of making pronunciation errors can affect self-perceived language competence. Moreover, teachers may experience nervousness when they make pronunciation mistakes, which can stem from concerns about their perceived linguistic accuracy and credibility as language instructors.

The last indicator, feelings of embarrassment may arise when some students speak English better than the teacher, highlighting the comparison between the teacher's language proficiency and that of their students. Teachers of English as a Second Language (ESL) might experience Second Language Teaching Anxiety (SLTA) related to self-perception of language proficiency. One factor is the fear of making mistakes while speaking, which can lead to feelings of embarrassment. This anxiety is rooted in the high expectations placed on language teachers to model perfect language use. According to Horwitz (2020), teachers often feel pressured to demonstrate language proficiency, and any deviation from this standard can lead to self-doubt and anxiety, impacting their teaching performance and self-esteem.

The self-perception of language proficiency also is involved in SLTA. Teachers who doubt their language abilities are more likely to experience anxiety, particularly when they compare themselves to native speakers or other proficient individuals. This comparison can lead to a heightened awareness of their own linguistic shortcomings, worsening feelings of inadequacy and stress. Faez and Valeo (2021) highlighted that non-native English-speaking teachers often struggle with confidence issues, fearing judgment from students and peers, leading to a heightened state of anxiety in teaching situations. Moreover, institutions often expect ESL teachers to not only teach language but also to serve as cultural intermediaries, which adds an additional layer of responsibility and pressure. This can be overwhelming, particularly for those who are still grappling with their own language proficiency and cultural adaptation. According to Mercer and Kostoulas (2021), these expectations can create a significant emotional burden, leading to increased levels of stress and anxiety.

Table 4 outlines the respondent's evaluations regarding teaching anxiety, specifically concerning teaching inexperience and language proficiency. The composite mean of 2.08 suggests a general disagreement among respondents. Fear in making mistakes while teaching in the classroom obtained the highest mean score of 2.46, followed by, being nervous due to lack of teaching experience with a score of 2.31, both interpreted as disagreement. Conversely, items on feeling worried before entering the classroom and feeling anxious when teaching in the classroom both garnered a weighted mean of 1.90. Finally, feeling tense when in the classroom received a mean score of 1.82. All these criteria were verbally interpreted as disagree.

Table 4
Second Language Teaching Anxiety as to Teaching Inexperience

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I think my lack of teaching experience makes me nervous	2.31	Disagree	2
2. I fear making mistakes while I am teaching in the classroom	2.46	Disagree	1
3. I feel worried before entering the classroom	1.90	Disagree	4
4. I feel anxious when I teach in the classroom	1.90	Disagree	3
5. I feel tensed when I am in the classroom	1.82	Disagree	5
Composite Mean	**2.08**	**Disagree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Of all the indicators, fear in making mistakes while teaching in the classroom obtained the highest mean score. Apprehensions about making mistakes during classroom instruction could be mitigated by regarding errors as integral to the learning process, as highlighted by Dewaele et al. (2019), emphasizing the importance of resilience in diminishing language teaching anxiety. Furthermore, feelings of pre-classroom apprehension and the experience of anxiety or tension while teaching may not solely originate from teaching inexperience but could also be influenced by factors such as lesson preparation and classroom management skills. This viewpoint was substantiated by Zhang's (2022) research, which demonstrated that adept preparation and effective classroom management strategies have the potential to alleviate anxiety among novice language instructors.

Second in rank is being nervous due to lack of teaching experience. When examining the indicators associated with teaching inexperience and second language teaching anxiety from a perspective of disagreement, it suggests a certain level of ease or confidence despite the lack of teaching background. Initially, the notion that a deficiency in teaching experience induces nervousness may not apply to individuals who view their inexperience as an opportunity for personal and professional growth rather than a cause for anxiety. This perspective finds support in a study conducted by Zhang and Rahimi (2020), revealing that novice educators who embraced their lack of experience as a chance for learning exhibited reduced levels of anxiety.

Teaching ESL requires specialized skills and knowledge that go beyond general teaching methods, thus teachers may feel inadequately prepared to address educational needs of ESL students. For instance, a study on pre-service ESL teachers highlighted the challenges they face, such as a lack of self-confidence in their teaching abilities and difficulties in managing the specific requirements of ESL instruction (Ugalingan, Edjan, & Valdez, 2021) Moreover, the pressure to facilitate effective communication in a language

that students are not fluent in adds to the anxiety. Beginning teachers might lack confidence in their ability to create supportive language learning environment. They may also worry about their capacity to assess and track progress accurately, provide constructive feedback, and address the varied proficiency levels within a single classroom. Additionally, the emotional experiences and responses of ESL teachers, including feelings of anxiety and uncertainty, are significant factors that impact their teaching effectiveness (Golombek & Johnson, 2021). These challenges underscore the importance of targeted professional development and support for teachers new to ESL instruction to build their confidence and competence in this specialized field.

Table 5 summarizes the respondents' assessment of teaching anxiety in relation to lack of interest. The composite mean score of 2.66 indicates a general agreement among the respondents. Of all the indicators, respondents agreed most that they feeling stressed when students do not participate in the activities, and it received the highest mean score. This suggests that respondents commonly experience stress when student participation is lacking, because it got the highest mean score of 2.80. It was followed by feeling of discouragement when students lose interest in different macro-skill activities and feeling upset when students are bad at learning the English language because these items got computed weighted mean scores of 2.69 and 2.66, respectively. Respondents agreed to all these statements, as second language teaching anxieties in terms of lack of interest as evinced by their means. Meanwhile, the feeling of tense when students are not interested in the activities (2.36) and feeling of discouragement when my students show disappointment when teaching language (2.52) were still rated as second language teaching anxieties in terms of to lack of interest but got the lowest means. Overall, the respondents' teaching anxiety related to lack of interest appears to be a common experience, with varying degrees of intensity.

Table 5
Second Language Teaching Anxiety as to Lack of Interest

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I feel discouraged when students lose interest in different macro-skill activities	2.69	Agree	2
2. I feel tensed when students are not interested in the activities	2.63	Agree	4
3. I feel stressed when students do not participate in the activities	2.80	Agree	1
4. I feel upset because my students are bad at learning English language	2.66	Agree	3
5. I feel discouraged when my students show disappointment when I teach language.	2.52	Agree	5
Composite Mean	**2.66**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

As mentioned, the respondents feel stressed when students do not participate in activities, thus may reflect a concern about one's ability to engage and motivate learners, which a perceived lack of proficiency can worsen. This most rated cause of teaching anxiety as related to student interest provided highlight a strong connection between self-perception of language proficiency and second language teaching anxiety. According to research, teachers' ability to regulate emotions and build positive relationships with students significantly impacts engagement and motivation (Greenier et al., 2021). Moreover, studies have shown that teacher empathy positively influences student engagement and motivation by creating a supportive and understanding classroom atmosphere (Zhang, 2022). When students do not participate, it can lead to teachers doubting their capacity to connect with and inspire their students, further exacerbating their stress levels. Additionally, the stress experienced by teachers can be linked to broader concerns about maintaining classroom discipline and achieving educational goals (Öztürk, 2021).

ESL teachers might frequently feel stressed when students do not participate in classroom activities. Active participation is crucial for language acquisition, and when students are disengaged, teachers may question their teaching methods and feel a sense of failure. According to a study by Dewaele and MacIntyre (2020), student participation is a key factor influencing teacher emotions, and lack of engagement can lead to significant stress and anxiety for teachers who strive to create interactive and dynamic learning environments.

It can be deduced also that the second cause of teaching anxiety as regards student interest is the feeling of discouragement when students lose interest in different macro-skill activities. It could suggest a personal sense of inadequacy in maintaining student engagement, especially in activities related to different language skills. Additionally, ESL teachers may feel discouraged when students lose interest in different macro-skill activities such as listening, speaking, reading, and writing. These activities are essential for comprehensive language development, and a lack of interest can hinder students' progress. Teachers often invest considerable effort in designing engaging and varied activities, and when these efforts do not result in student enthusiasm, it can be demoralizing. Kim and Kim (2021) found that ESL teachers frequently experience feelings of discouragement and helplessness when their carefully planned activities fail to capture students' interest, contributing to higher levels of teaching anxiety.

Furthermore, teachers can feel particularly upset when students struggle with learning the English language. This situation, and the third indicator can be challenging because it could reflect issues. Teachers may feel that they are not adequately equipped to address these issues, leading to frustration and anxiety. According to Gkonou and Mercer (2022), the inability to effectively support struggling students is a significant source of anxiety for ESL teachers, who may internalize these challenges as personal failures. The pressure to meet educational standards and student expectations further exacerbates this anxiety. ESL teachers are often evaluated based on their students'

performance, and when students do not perform well, teachers may feel that their professional competence is being questioned. This pressure can lead to a constant state of anxiety and self-doubt. A study by Liu and Huang (2020) indicates that performance-related stress is a significant factor contributing to SLTA among ESL teachers, particularly when dealing with unmotivated or struggling students.

The fourth indicator, feeling tense when students show disinterest in activities, may stem from a fear of being unable to meet students' learning needs or expectations, thus reflecting a perceived deficiency in language proficiency. Feeling discouraged when students express disappointment in teaching efforts may exacerbate feelings of inadequacy and self-doubt, particularly if these reactions are interpreted as reflections of the teacher's language proficiency. This association is supported by Liu (2019), who emphasized the role of student feedback in shaping teacher emotions and anxiety in language teaching contexts, and Piniel and Albert (2018), who underscored the importance of managing teacher emotions in the language classroom.

Lastly, the emotional labor involved in teaching can take a toll on ESL teachers' mental health. Constantly trying to engage uninterested students and address their diverse needs requires significant emotional energy. When students do not respond positively, teachers can experience burnout and emotional exhaustion. Mercer and Gregersen (2020) highlighted that the emotional demands of teaching, especially in challenging environments, can lead to chronic stress and anxiety, impacting teachers' overall well-being.

Table 6
Second Language Teaching Anxiety as to Fear of Negative Evaluation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I feel nervous and uneasy when my mentor-teacher/supervisor observes me teaching English.	2.64	Agree	1
2. I frequently commit mistakes and stutter when I know I am being observed and evaluated.	2.41	Disagree	4
3. I feel nervous about students' negative comments about my teaching performance.	2.33	Disagree	5
4. I feel anxious about my students telling their parents and other people about my mistakes and other negative/poor performance.	2.45	Disagree	3
5. I feel pressured to prepare more than the usual preparations, such as macro skill activities, language	2.57	Agree	2

materials, etc. when I have been scheduled for observation or evaluation.		
Composite Mean	**2.48**	**Disagree**

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

It could be gleaned from Table 6 above the different assessment of the respondents towards teaching anxiety as to fear of negative evaluation. The composite mean of 2.48 indicates that most of the respondents disagreed in general. Of all the indicators, respondents rated the following items most: feeling of nervousness and uneasiness when mentor-teacher/supervisor observes in teaching English, as supported by the mean score of 2.64, followed by the feeling of pressure to prepare more than the usual preparations, such as macro skill activities, language materials, etc., when scheduled for observation or evaluation with a weighted mean of 2.57. Respondents declared that these two are second language teaching anxiety as to fear of negative evaluation.

As evinced by the most-rated indicator, second language teachers might experience nervousness and uneasiness when their mentor-teacher or supervisor observes their teaching. This anxiety stems from the high stakes associated with evaluations, which can impact their professional reputation, job security, and career advancement. According to Kim and Kim (2021), the presence of an evaluator in the classroom heightens teachers' self-consciousness and fear of making mistakes, leading to increased stress and anxiety. The agreement with the criterion above suggests a significant fear of negative evaluation among language teachers, contributing to their experience of second language teaching anxiety. When language teachers experience nervousness and unease during observations by their mentor-teachers or supervisors, it reflects a form of anxiety related to their teaching performance. This anxiety may stem from the fear of being negatively evaluated or judged by others.

The fear of negative evaluation is also linked to the broader implications of evaluations on teachers' self-efficacy and confidence. Negative feedback or perceived criticism can undermine a teacher's belief in their own teaching abilities, leading to long-term anxiety and reduced job satisfaction. A study by Dewaele et al. (2020) found that ESL teachers who receive critical evaluations often experience lingering self-doubt, which can negatively affect their overall teaching performance and well-being.

Moreover, the anxiety associated with evaluations can impact the teacher-student dynamic. Teachers may feel pressured to prioritize performance over authentic teaching practices, which can lead to a less natural and more rigid classroom environment. This shift in focus can hinder the development of a supportive and engaging learning atmosphere. According to Farrell (2021), the stress of evaluations can cause teachers to adopt a more performative approach, which may not align with their usual teaching style and can reduce the effectiveness of their instruction.

Additionally, as suggested by the second most-rated indicator, language teachers often feel compelled to go beyond their usual preparations when they know they will be observed or evaluated. This heightened preparation pressure arises from the fear of negative evaluation. Teachers want to ensure that their lesson plans, materials, and activities are flawless to avoid any criticism. This fear-driven preparation can lead to stress and anxiety (Papi & Khajavy, 2021). This interpretation resonates with research by Malini and Janakavalli (2018) who identified a correlation between fear of negative evaluation and increased preparation efforts among language teachers. The pressure to perform well during observations leads second language teachers to invest significantly more time and effort in preparing for these sessions compared to regular classes. This includes creating detailed lesson plans, preparing extensive macro-skill activities (listening, speaking, reading, and writing), and developing high-quality language materials. The additional workload can be overwhelming and exacerbate feelings of anxiety. As highlighted by Tsui (2020), the preparation for observed lessons often involves an excessive focus on perfection, which can be mentally and physically exhausting for teachers.

Furthermore, the competitive nature of evaluations, where teachers are often compared to their peers, can create additional pressure. This comparison can foster a sense of inadequacy and fear of falling short of expectations, both from supervisors and colleagues. Research by Horwitz (2021) suggested that the competitive aspect of evaluations contributes significantly to SLTA, as teachers strive to meet or exceed the standards set by others in their profession.

On the other hand, the respondents disagreed that the feeling of anxiousness when students tell their parents and other people about teacher's mistakes and other negative/poor performance. (2.45), frequently committing mistakes and stutter when being observed and evaluated (2.41), and feeling nervous about students' negative comments about teaching performance (2.33) are second language teaching anxiety as to fear of negative evaluation.

The respondents' disagreement with the provided indicators suggests a variation in their experience of fear of negative evaluation within the context of second language teaching. Firstly, the lack of anxiety about students disclosing mistakes or negative performance to their parents or others may indicate a level of confidence or trust in their teaching abilities, despite the potential for scrutiny. Similarly, the absence of frequent mistakes or stuttering when being observed and evaluated may reflect a sense of composure or competence in managing performance anxiety, contrary to the expectations of fear-driven reactions. Additionally, the lack of nervousness regarding negative comments from students about teaching performance may suggest resilience or detachment from external judgments, indicating a lessened fear of negative evaluation. This interpretation is consistent with research by Dewaele and Dewaele (2019), who identified coping strategies that mitigate the impact of negative feedback on language teacher anxiety.

Table 7
Second Language Teaching Anxiety
as to Difficulties with Time Management

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I feel tensed when I am not prepared for class.	2.86	Agree	1
2. I am nervous when I finish the activities before the class ends	2.17	Disagree	5
3. I feel panicked when I cannot finish the class on time	2.22	Disagree	4
4. I feel that the allotted time for language activities is not enough for language learning or acquisition to happen.	2.70	Agree	3
5. I experience controlling time limits in activities, such as limiting students' response time, capsulating student group activities, restricting reading time, etc.	2.78	Agree	2
Composite Mean	**2.55**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 7 presents the respondent's assessment of teaching anxiety as to time management. It could be seen that the composite mean of 2.55 indicates that most of the respondents agreed in general. Based on the table, it could be gleaned that the respondents are tensed when not prepared for class (highest mean score of 2.86), experience controlling time limits in activities, such as limiting students' response time, capsulating student group activities, restricting reading time, etc. (next highest mean of 2.78)" and feel that the allotted time for language activities is not enough for language learning or acquisition to happen (with 2.70 mean).

The top indicator of teaching anxiety as related to time management is when language teachers feel tense or anxious due to a lack of preparation for their classes. This anxiety may arise from concerns about delivering quality lessons, meeting students' expectations, or managing unexpected situations. The respondents' agreement with the provided indicators suggests that difficulties with time management contribute to their experience of second language teaching anxiety.

Research by Liu (2019) emphasizes that effective time management is vital for reducing stress among language teachers, as anxiety can negatively impact their motivation, behavior, and performance. Unpreparedness can worsen this anxiety, resulting in less effective teaching. Proper preparation is essential, and failures in this area can diminish confidence and increase anxiety levels. Kim and Kim (2021) also note

that ESL teachers often feel overwhelmed by lesson planning demands alongside other responsibilities, leading to inadequate preparation and heightened anxiety.

The second-rated indicator shows that teachers are anxious when they experience difficulties in controlling time. This observation resonates with the findings by Borg (2020), who highlighted the impact of time constraints on language teaching practices and teacher well-being. Teachers may worry about covering all content within the allotted time, leading to stress and potentially affecting their teaching quality. Feeling that the allocated time for language activities is insufficient can create anxiety for language teachers. Managing time limits is crucial for maintaining a productive learning environment. While setting deadlines for student responses or structuring group activities is necessary, excessive time pressure can contribute to anxiety.

Some teachers reported not feeling panicked when they could not complete their class within the allocated time. While this may be attributed to effective lesson planning, flexibility, or experience, it is essential to recognize that time pressure can still affect teaching quality and student engagement (Papi and Khajavy, 2021).

Moreover, the challenge of controlling time limits in classroom activities adds to this anxiety. ESL teachers often need to balance various activities such as listening, speaking, reading, and writing within a limited time frame. Effective time management is essential to ensure that all learning objectives are met, but it can be challenging to achieve, particularly with diverse student needs and unpredictable classroom dynamics. A study by Richards and Lockhart (2020) found that ESL teachers often struggle with pacing their lessons and managing transitions between activities, which can lead to feelings of inadequacy and stress. Furthermore, the pressure to create engaging and interactive lessons can add to the time management challenges faced by ESL teachers. Developing creative and effective language activities requires significant time and effort, and the fear of not being able to execute these activities within the allotted time can lead to anxiety. According to Tsui (2020), the expectation to deliver high-quality, student-centered lessons can create additional stress for teachers, particularly when they feel they do not have enough time to prepare or implement these activities effectively.

Additionally, unexpected disruptions or deviations from the lesson plan can exacerbate time management difficulties. Teachers may find it challenging to adapt on the fly while still covering the required material, leading to anxiety about falling behind or not meeting curriculum standards. Farrell (2021) highlighted that the ability to adapt and manage time effectively is a skill that develops with experience, and novice teachers, in particular, may experience higher levels of anxiety due to their inexperience in handling such situations.

The diverse proficiency levels and learning paces of students in ESL classrooms can complicate time management further. Teachers need to differentiate instruction and provide additional support to some students, which can disrupt planned time allocations for activities. Dewaele and MacIntyre (2020) found that managing a classroom with

varying levels of English proficiency requires careful time management and flexibility, adding to the overall stress and anxiety experienced by teachers.

Ranking in third is when teachers feel anxious about insufficiency of time for language acquisition activities. Guvendir (2021) emphasized the importance of understanding second language anxiety and its impact on learners. Language teachers may experience anxiety when they perceive time limitations hindering effective language learning or acquisition. This interpretation is supported by research by Gao and Zhang (2019), who discussed the challenges of time constraints in language teaching and its implications for teacher stress. Teachers who feel that time constraints prevent meaningful interactions or comprehensive language practice may struggle to create engaging lessons.

On the other hand, respondents disagreed that feeling panicked when they cannot finish the class on time and being nervous when finishing the activities before the class ends (with weighted means of 2.22 and 2.17 respectively) as indicators of their second language teaching anxiety with respect to time management.

In a study examining Second Language Teaching Anxiety (SLTA) and its correlation with difficulties in time management, it was found that respondents exhibited disagreement with certain indicators related to time management (Aydin, 2018). Respondents disagreed that they feel panicked when I cannot finish the class on time. This disagreement suggests that the respondents did not experience a sense of panic or overwhelming stress when faced with time constraints in the classroom setting.

Additionally, respondents disagreed that they feel nervous when they finish the activities before the class ends. This interpretation aligns with research by Gkonou, Daubney, and Dewaele (2019) that found that language teachers' anxiety levels could vary based on individual factors such as experience, teaching context, and coping strategies. Furthermore, the agreement with this indicator underscores the dynamic nature of SLTA and its interaction with time management skills in language teaching contexts. By understanding teachers' perceptions and experiences related to time management, educators and stakeholders can develop targeted interventions and support mechanisms to enhance teaching effectiveness and alleviate anxiety-related challenges.

Table 8
Summary Table on Second Language Teaching Anxiety

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Self-perception of language proficiency	2.73	Agree	1
2. Teaching Inexperience	2.08	Disagree	5
3. Lack of Interest	2.66	Agree	2
4. Fear of negative evaluation	2.48	Disagree	4

5. Difficulties with time management	2.55	Agree	3
Composite Mean	**2.50**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 8 displays the summary indicators of Second Language Teaching Anxiety. It can be gleaned from the table above that the composite mean is at 2.50 with verbal interpretation agreement. Though some indicators fell under the category disagree, most of the indicators were under the agreement category, which led to the total mean of 2.50, leading to general agreement.

Table 8 above illustrates that self-perception of language proficiency was at the topmost position, followed by lack of Interest, then difficulties with time management. The computed weighted means were 2.73, 2.66, and 2.55 respectively, with verbal interpretation of agree. The last two indicators were fear of negative evaluation (2.48) and teaching inexperience (2.08), both were interpreted as disagree.

In analyzing the indicators under Table 8, it becomes evident that respondents share similar perceptions regarding their self-perception of language proficiency, lack of interest, and difficulties with time management. Firstly, regarding self-perception of language proficiency, the respondents agree that their self-perceived language proficiency contributes to anxiety in second language teaching. This suggests that teachers who feel less confident in their language abilities may experience anxiety when teaching a second language (Gkonou, Daubney, & Dewaele, 2019). ESL teachers grapple with their self-perception of language proficiency. Teachers who perceive their language skills as inadequate may experience heightened anxiety, particularly when they compare themselves to native speakers or more proficient colleagues. According to Dewaele and MacIntyre (2019), this comparison can lead to feelings of inferiority and self-doubt, which are detrimental to a teacher's confidence and performance in the classroom. Teachers might worry about making mistakes or being unable to provide clear and accurate explanations, which can undermine their authority and credibility. Additionally, cultural and institutional factors can influence these anxieties.

Secondly rated, respondents also agree that a lack of interest is associated with anxiety in language teaching. When teachers are not passionate or interested in the subject matter, it can lead to feelings of anxiety and stress in the classroom (Papi & Khajavy, 2021). The respondents perceive that time management challenges contribute to anxiety. Lack of student interest significantly contributes to teacher anxiety. When students are disengaged or indifferent, teachers may feel that their efforts are unappreciated and ineffective. This sense of futility can lead to discouragement and a lack of motivation, as noted by Kim and Kim (2021). Teachers might feel responsible for their students' lack of engagement, which can lead to self-blame and increased anxiety. The constant struggle to capture and maintain student interest can be exhausting and demoralizing, especially when teachers have put significant effort into lesson planning and activity design.

Student engagement and self-perceived proficiency creates a compounding effect on anxiety. For example, a teacher who is already anxious about their language proficiency might feel even more stressed when students are unresponsive or disinterested. This lack of feedback can reinforce the teacher's negative self-perception, leading to a vicious cycle of anxiety and self-doubt. Farrell (2021) highlighted that this cycle can be particularly damaging for novice teachers who are still building their confidence and teaching skills.

Interestingly, the respondents disagree that fear of negative evaluation contributes to their anxiety. This contrasts with findings from Cheng and Cheng (2010), who emphasized the impact of fear of negative evaluation on language teacher anxiety. Similarly, respondents also disagree on teaching inexperience, indicating a range of experiences among participants. This finding contrasts with research by Botes et al. (2018), which underscored the role of teaching inexperience as a potential trigger for anxiety among language instructors. Overall, the analysis of these indicators provides insights into the complex interplay of factors contributing to second language teaching anxiety among respondents.

Moreover, the pressure to meet educational standards and perform well in evaluations can further exacerbate these anxieties. ESL teachers often face high expectations from supervisors, colleagues, and themselves to deliver effective and engaging lessons. When faced with disinterested students or doubts about their language abilities, the fear of negative evaluation can become overwhelming. Horwitz (2021) pointed out that the pressure to perform can lead teachers to overprepare and second-guess their teaching methods, adding to their stress and anxiety.

Table 9
English Language Self-Efficacy in terms of Classroom Proficiency

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. ***I can use English as the medium of instruction.***	3.37	Agree	1
2. ***I can use English for all classroom functions and interactions.***	3.15	Agree	5
3. ***I can use English to provide spoken and written feedback in class.***	3.20	Agree	3
4. ***I can model natural English use.***	3.18	Agree	4
5. ***I can use common phrases/words that frequently occur in English language classrooms.***	3.34	Agree	2
Composite Mean	**3.25**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 9 presents the respondent's assessment of English Language Self-Efficacy in terms of Classroom Proficiency. It could be gleaned that the composite mean of 3.25 indicates that most of the respondents agreed in general. Respondents agreed that all items are indicators of English language self-efficacy in terms of classroom proficiency. They can use English as the medium of instruction (weighted mean of 3.37), can use common phrases/words that frequently occur in English language classrooms (with 3.34 weighted mean) can use English to provide spoken and written feedback in class (with 3.20), and lastly they can model natural English use and can use English for all classroom functions and interactions (with 3.18 and 3.15 weighted means respectively).

The first indicator, wherein the respondents asserted that they can use English as the medium of instruction, underscores the importance of teachers' confidence in their language proficiency for delivering lessons effectively. Analyzing the indicators of English language self-efficacy in terms of classroom proficiency reveals key insights into teachers' perceptions of their language abilities and their impact on classroom dynamics. Under this indicator, it involves using English as the primary language for teaching various subjects, even in non-native English-speaking countries. Wang (2021) found a strong positive relationship between English medium instruction (EMI) teachers' classroom English proficiency and their teaching self-efficacy. EMI teachers who can effectively use English as the medium of instruction tend to have higher self-efficacy in their teaching roles.

According to Richards and Farrell (2020), comprehensive training helps teachers develop a strong foundation in both language proficiency and pedagogical techniques, enabling them to use English confidently and effectively in the classroom. Additionally, continuous professional development plays a significant role in enhancing ESL teachers' efficacy. Regular workshops, seminars, and courses keep teachers updated with the latest teaching strategies and language trends, further boosting their confidence. Kim and Elder (2021) highlighted that ongoing professional development allows teachers to refine their skills and adapt to new teaching contexts, ensuring they remain proficient and effective in using English as the medium of instruction.

Additionally, the second-most rated indicator is using common phrases/words in English language classrooms indicator. This could reflect the teacher's ability to employ everyday language commonly used in English language classrooms. It includes phrases related to classroom management, instructions, and interactions. The frequent use of common phrases and words in English language classrooms contributes to teachers' sense of efficacy. These commonly used linguistic tools help establish clear and consistent communication patterns, making it easier for teachers to manage the classroom and convey instructions effectively. Research by Dewaele and MacIntyre (2019) indicated that the repetitive use of these phrases helps both teachers and students become familiar with classroom routines, reducing misunderstandings and enhancing overall classroom management.

The third most rated indicator is providing spoken and written feedback in English indicator. This highlights the teacher's confidence in giving feedback to students in spoken and written form using English. The positive feedback and progress of students also reinforce teachers' belief in their efficacy. When students demonstrate improvement in their English language skills, it validates the teachers' methods and use of English as the medium of instruction. According to Faez and Valeo (2021), observing students' progress provides teachers with tangible evidence of their effectiveness, boosting their confidence and sense of accomplishment.

Modeling natural English use indicator refers to the teacher's ability to demonstrate natural and authentic English language use. Modeling helps students learn proper pronunciation, intonation, and language structures. When a teacher models natural English, they demonstrate the rhythm and flow of the language, helping students grasp how native speakers use stress and intonation to convey meaning and emotion. This can significantly improve students' listening skills and their ability to mimic these patterns in their own speech. Research has shown that exposure to authentic language use can enhance learners' phonological awareness and pronunciation skills (Darling-Hammond, et.al., 2021).

Using English for all classroom functions enhances students' listening and speaking skills through immersive activities like discussions and explanations, rather than isolated lessons. Hoang (2021) emphasizes that consistent exposure to the target language in meaningful contexts is vital for language acquisition, allowing learners to internalize vocabulary and linguistic structures. This approach models real-life English use in various scenarios, such as giving instructions and conducting discussions, which helps students develop practical language skills. Additionally, teachers' proficiency in classroom English reflects their confidence and can boost their self-efficacy, suggesting that prioritizing language training in instruction is beneficial for both teachers and students.

Table 10
English Language Self-Efficacy
in terms of Learner-focused Instruction

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. ***I can appropriately use the first language skills of the learners.***	3.32	Agree	5
2. ***I can apply my knowledge of the native language(s) spoken by students when teaching.***	3.35	Agree	1
3. ***I can use my knowledge about learner communities to guide instruction.***	3.35	Agree	2
4. ***I can gauge the language proficiency of the learner to make***	3.33	Agree	4

it a starting point for language instruction.			
5. ***I build up upon what the learners can provide during writing or speaking activities.***	3.34	Agree	3
Composite Mean	**3.34**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 10 presents the respondent's assessment of English language self-efficacy in terms of learner-focused instruction. The composite mean of 3.34 indicates that most of the respondents agreed in general. Based on the table, it can be deduced that the respondents perceived in their skills to apply knowledge of the native language(s) spoken by students when teaching and use knowledge about learner communities to guide instruction, which both gathered a 3.35 weighted mean. The remaining criteria that exhibit their ability to build up upon what the learners can provide during writing or speaking activities (3.34), gauge the language proficiency of the learner to make it a starting point for language instruction (3.33), and appropriately use the first language skills of the learners. (3.32) were also decided as English language self-efficacy in terms of learner-focused instruction.

The indicators showed a strong focus on learner-centered instruction within English Language Self-Efficacy, primarily applying the utilizing teacher's knowledge of students' native language. When teaching English language learners (ELLs), instructors can leverage their understanding of the native languages students speak. This knowledge allows teachers to make connections between the student's first language and English, facilitating comprehension and language acquisition. Soland (2019) discussed the challenges faced by ELLs and the importance of considering their native languages in the teaching process. Teachers can draw on their awareness of learner communities to guide instruction effectively. Understanding students' cultural backgrounds, experiences, and social contexts helps tailor teaching methods and materials to meet their specific needs.

Research by Mills (2020) highlighted the positive relationship between English language proficiency (ELP) and self-efficacy, emphasizing the importance of considering cultural variations in this relationship. Effective instruction involves building upon what learners can provide during writing or speaking activities. Encouraging student participation and valuing their contributions fosters a positive learning environment. Wyatt and Faez (2024) explored self-efficacy beliefs in English language learners and emphasize the significance of empowering students to actively engage in the learning process. Gauging the language proficiency of learners is crucial. Teachers can use this assessment as a starting point for language instruction, tailoring content and activities to address specific language needs.

Understanding students' native languages allows ESL teachers to make meaningful connections between the students' first language (L1) and English. This comparative approach helps in explaining complex grammar rules, vocabulary, and

pronunciation, making the learning process smoother for students. According to Kim and Elder (2021), teachers who utilize their knowledge of students' native languages can effectively scaffold learning, leading to better comprehension and retention of English. Using the native language can lessen students' anxiety and create a more inclusive learning environment. When students see that their teacher respects and incorporates their linguistic background, it boosts their confidence and motivation. Dewaele and MacIntyre (2020) found that students' affective filters are lowered when their L1 is acknowledged and used appropriately, resulting in a more conducive learning atmosphere.

Furthermore, teachers who understand the cultural and linguistic backgrounds of their students can tailor their instruction to meet diverse needs. This cultural competence allows teachers to design lessons that are culturally relevant and engaging, thus enhancing student participation and interest. According to Faez and Valeo (2021), culturally responsive teaching practices are linked to higher levels of student engagement and academic success in ESL classrooms.

Using knowledge about learner communities also enables teachers to create more relevant learning experiences. Teachers can draw on familiar contexts, interests, and experiences of their students, making lessons more relatable and meaningful. Farrell (2022) emphasized that when instruction is connected to students' real-life contexts, it enhanced their engagement and the applicability of language skills.

Exhibited also by the results in the table that teachers are efficacious in using knowledge of learners' communities in crafting language instructions. ESL teachers who are familiar with their students' communities can better address the unique challenges and barriers their students face. This understanding allows teachers to provide targeted support and resources, helping students overcome obstacles to their language learning. Borg (2020) highlights that awareness of socio-cultural factors affecting students' lives can lead to more empathetic and effective teaching strategies.

Collaboration with the learner community also fosters a supportive learning environment. When teachers engage with parents, community leaders, and local organizations, they can create a network of support that reinforces language learning both inside and outside the classroom. Kim and Kim (2021) argue that community involvement is crucial in sustaining student motivation and providing practical language practice opportunities. Teachers' ability to adapt their instructional strategies based on learner feedback and community input reflects their commitment to learner-centered education. This adaptability demonstrates that teachers value their students' perspectives and are willing to modify their approaches to better serve their needs. Richards and Farrell (2020) noted that reflective teaching practices that incorporate learner feedback are essential for continuous improvement and effective instruction.

Table 11
English Language Self-Efficacy in terms of Assessment

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. ***I can design appropriate assessment tasks tests to assess learners.***	3.35	Agree	5
2. I can assess students' oral and written performances and provide immediate feedback.	3.36	Agree	4
3. ***I can connect assessments to stated learning objectives.***	3.39	Agree	3
4. ***I can make appropriate use of assessment results when teaching.***	3.40	Agree	2
5. ***I can use various assessment techniques (e.g. performance-based, portfolios, observation checklists, self-, peer- etc.).***	3.43	Agree	1
Composite Mean	**3.39**	**Agree**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Table 11 shows the respondent's assessment of English language self-efficacy in terms of assessment. The composite mean of 3.39 indicates that most of the respondents agreed in general. All indicators were verbally interpreted as agree. Respondents state that they can use various assessment techniques which gained a weighted mean of 3.43, followed by making appropriate use of assessment results when teaching with 3.40. Next in line is connecting assessments to stated learning objectives with 3.39, and lastly assessing students' oral and written performances and providing immediate feedback and designing appropriate assessment tasks and tests to assess learners, with 3.36 and 3.35 respectively.

Based on this table, it could be deduced that the most rated self-efficacy beliefs of English language teachers in terms of assessment is utilizing various language assessment methods. English language self-efficacy in assessing outcomes encompasses different aspects, including proficiency in employing diverse assessment techniques. Research by Getie and Popescu (2020) highlighted the significance of utilizing various assessment methods, such as performance-based assessments, portfolios, observation checklists, and self- and peer-assessment, to gauge learners' language skills effectively. Teachers who make appropriate use of assessment results enhance their instructional practices. By analyzing assessment data, teachers can identify areas where students need additional support, adjust teaching strategies, and provide targeted feedback.

ESL teachers employ a diverse range of assessment methods, including formative and summative assessments, to gauge student progress and understanding. This variety ensures a comprehensive evaluation of students' language abilities. According to Bailey and Damerow (2020), the ability to use multiple assessment techniques allows teachers to obtain a holistic view of student performance, which is crucial for identifying strengths and areas for improvement.

Additionally, formative assessments, such as quizzes, oral presentations, and interactive activities, provide immediate feedback, enabling teachers to adjust their instruction in real-time. This adaptability helps address student needs more effectively. Richards and Farrell (2020) highlighted that continuous assessment and timely feedback are integral to effective language teaching, as they help teachers to refine their teaching strategies and improve student outcomes.

Summative assessments, such as standardized tests and final exams, offer a broader measure of student proficiency and learning outcomes. Teachers use these results to evaluate the overall effectiveness of their instruction and to make data-driven decisions about curriculum adjustments. According to Borg (2020), using a combination of formative and summative assessments allows teachers to balance immediate instructional needs with long-term educational goals.

Additionally, we can delineate that participants believe that language teachers could be efficacious when they could use results of assessments for instructional decision making. Mills (2020) emphasized the relationship between English language proficiency (ELP) and self-efficacy, highlighting the role of assessment data in shaping instructional approaches. Effective assessment practices align with stated learning objectives. Teachers might design assessments that directly measure the skills and knowledge outlined in their instructional goals. Wyatt and Faez (2024) explored self-efficacy beliefs in English language learners and discuss the importance of aligning assessments with learning objectives. This alignment ensures that assessments serve as meaningful tools for both learners and instructors. Teachers proficient in English Language Self-Efficacy assess both oral and written performances. ESL teachers are adept at interpreting assessment results to inform their teaching practices. This involves analyzing data to identify trends, gaps, and individual student needs. Farrell (2022) emphasized that the ability to interpret assessment data accurately is critical for making informed instructional decisions that enhance student learning.

Providing immediate feedback allows learners to understand their strengths and areas for improvement. Constructive feedback enhances self-efficacy and motivates students to continue learning. More so, effective assessment tasks are carefully designed to evaluate learners' language abilities. Teachers create tasks that align with instructional objectives, consider language proficiency levels, and provide a fair representation of students' skills. Educators' adept in designing such assessments not only assess learners' language skills accurately but also instill confidence in learners by providing fair and relevant evaluation methods.

Teachers also use assessment results to provide personalized feedback and support to students, tailoring their instruction to meet diverse learning needs. This personalized approach helps students to set achievable goals and track their progress. Kim and Kim (2021) noted that effective use of assessment data enables teachers to create individualized learning plans that motivate and engage students. Assessment results help teachers to identify and address language proficiency issues, such as specific grammar or vocabulary weaknesses. By targeting these areas, teachers can provide focused instruction that directly improves student performance. Tsui (2020) pointed out that targeted interventions based on assessment results are essential for addressing specific language challenges and enhancing overall language proficiency.

Workshops, training sessions, and collaborative planning meetings provide teachers with the latest assessment techniques and best practices. Faez and Valeo (2021) argued that ongoing professional development helps teachers stay current with assessment trends and improves their ability to use assessment results effectively.

Collaboration with colleagues and participation in professional learning communities further support teachers' assessment efficacy. Sharing strategies and insights with peers allows teachers to refine their assessment practices and learn from others' experiences. According to Kim and Elder (2021), collaborative professional environments foster continuous improvement and innovation in assessment techniques.

The increasing use of technology in the assessment and evaluation of learning outcomes offers new tools and platforms for ESL teachers to evaluate and track student progress. Digital assessments and online platforms provide immediate feedback and detailed analytics—those which could be helpful for instructional decision making, helping teachers to make more informed decisions. Dewaele and MacIntyre (2020) highlighted that technology-enhanced assessments can enhance the accuracy and efficiency of language evaluations, providing valuable insights into student learning. In this line, assessment as part of the teaching and learning cycle becomes easier not only for language teachers, but as well as with other subject-area teachers.

Table 12
English Language Self-Efficacy in terms of Language Instruction

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. ***I can apply my knowledge of the structure of words (morphology) when teaching.***	3.32	Agree	4
2. ***I can apply my knowledge of sentence and phrase structure (syntax) when teaching.***	3.34	Agree	3

3. ***I can apply my knowledge of word and sentence meaning (semantics) when teaching.***	3.35	Agree	2
4. ***I can apply my knowledge of the sound system of English (phonology) when teaching***	3.41	Agree	1
5. ***I can take into consideration my knowledge about discourse and pragmatics when delivering language instructions.***	3.31	Agree	5
Composite Mean	**3.35**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 12 presents the respondent's assessment of their English Language Self-Efficacy in terms of Language Instruction. The composite mean of 3.35 indicates that most of the respondents agreed in general that they are efficacious when it comes to implementing language curriculum.

With the verbal interpretation of Agree, all items were indicated as English language self-efficacy in terms of language instruction. The topmost criterion is applying knowledge of the sound system of English (phonology) when teaching gained a weighted mean of 3.41, followed by applying knowledge of word and sentence meaning (semantics), with 3.35. Next in line is applying knowledge of sentence and phrase structure (syntax) with 3.34, then applying knowledge of the structure of words (morphology). Finally is taking into consideration the knowledge about discourse and pragmatics with 3.36 and 3.35 respectively.

English Language Self-Efficacy, particularly in the context of language instruction, is often gauged through various indicators that reflect a teacher's confidence in their ability to effectively teach different aspects of the English language. The provided indicators encompass fundamental linguistic components and instructional strategies crucial for language teaching. Applying knowledge of the sound system of English (phonology) when teaching**,** reflects a teachers' confidence in utilizing their understanding of English phonology—the sound system—when teaching. Phonology encompasses aspects such as pronunciation, stress patterns, intonation, and phonemic awareness. Wang, Kim, Sun, and Liu (2021) have explored self-efficacy measures for English language learners (ELLs) and developed the Questionnaire of English Language Self-Efficacy (QESE) specifically for ELLs. Their research sheds light on the importance of self-efficacy beliefs in language instruction. Teachers who feel self-efficacious in this area are likely to provide accurate pronunciation guidance, help learners recognize stress patterns, and enhance overall language fluency.

According to Celce-Murcia et al. (2020), teachers who are well-versed in phonological concepts can provide clear and precise instruction, helping students overcome common pronunciation challenges. Furthermore, teachers use a variety of phonological teaching techniques, such as minimal pairs, phonetic drills, and visual aids,

to enhance students' pronunciation skills. These techniques allow students to practice and internalize the sound patterns of English in a structured and supportive environment. Research by Levis and Moyer (2021) indicated that such targeted phonological instruction significantly improves students' pronunciation and listening comprehension, reinforcing teachers' sense of efficacy.

In addition to phonology, ESL teachers are adept at applying their knowledge of semantics to teach vocabulary and sentence meaning. Understanding the nuances of word meanings, idiomatic expressions, and contextual usage helps teachers provide more accurate and detailed explanations to students. As noted by Schmitt (2020), teachers who are proficient in semantics can effectively address students' questions about word meanings and usage, thereby enhancing their vocabulary acquisition.

Applying knowledge of word and sentence meaning (semantics) when teaching is an indicator that reflects teachers' confidence in effectively utilizing their understanding of word meanings and sentence semantics during language instruction. Semantics includes the study of word definitions, connotations, and how sentences convey meaning. Teachers who possess strong self-efficacy in this area are likely to facilitate vocabulary acquisition, enhance comprehension, and guide learners in using words and sentences appropriately.

Teachers employ various semantic teaching strategies, such as semantic mapping, contextual analysis, and synonym-antonym exercises, to deepen students' understanding of words and sentences. These strategies help students connect new vocabulary to their existing knowledge, making it easier to retain and apply in different contexts. According to Nation and Webb (2020), effective semantic instruction leads to better vocabulary retention and overall language proficiency, further boosting teachers' confidence in their instructional abilities.

The ability to integrate phonological and semantic knowledge also allows teachers to create more engaging and meaningful lessons. By combining pronunciation practice with vocabulary learning, teachers can provide a holistic language learning experience that addresses multiple aspects of language proficiency. According to Richards and Rodgers (2021), this integrated approach enhances student engagement and motivation, as it makes the learning process more relevant and dynamic.

Additionally, ESL teachers' efficacy in phonology and semantics is reinforced by their continuous professional development. Workshops, courses, and collaborative planning sessions keep teachers updated with the latest research and best practices in language instruction. This ongoing learning helps teachers refine their instructional techniques and stay confident in their ability to teach complex linguistic concepts. As highlighted by Farrell (2022), professional development is essential for maintaining high levels of teaching efficacy and staying current with advancements in language education.

The positive feedback and progress of students validate teachers' instructional methods and reinforce their belief in their efficacy. When students demonstrate improved

pronunciation, vocabulary, and overall language comprehension, it provides tangible evidence of the effectiveness of the teachers' phonological and semantic instruction. According to Bailey and Damerow (2020), observing student success is a powerful motivator for teachers and a key factor in their sense of professional efficacy.

Applying knowledge of sentence and phrase structure (syntax) when teaching is an indicator that reflects teacher's confidence in effectively utilizing their understanding of English syntax—the rules governing sentence and phrase structure—when teaching. Syntax covers grammar rules, sentence patterns, and syntactic variations. Derakhshan, Wang, and Sun (2023) conducted a study on Chinese EFL students' academic engagement and psychological well-being, emphasizing the roles of language teachers' affective scaffolding. While not exclusively focused on syntax, their research sheds light on the importance of teacher-student interactions in language learning. Teachers who feel self-efficacious in this area are likely to guide learners in constructing grammatically accurate sentences, identifying syntactic errors, and enhancing overall language proficiency.

Applying knowledge of the structure of words (morphology) when teaching, reflects teachers' confidence in effectively utilizing their understanding of word structure (morphology) during language instruction. Morphology involves analyzing word forms, prefixes, suffixes, and roots. Teachers who feel self-efficacious in this area are likely to guide learners in deciphering word meanings, recognizing word families, and understanding how words are constructed.

Considering knowledge about discourse and pragmatics when delivering language instructions, indicates teachers' confidence in taking into account their understanding of discourse (how language functions in context) and pragmatics (appropriate language use) during language instruction. Discourse involves understanding conversational conventions, narrative structures, and genre-specific language use. Pragmatics, on the other hand, focuses on using language effectively in different social and cultural situations. Mark Wyatt's review of LTSE beliefs (2018), while not exclusively focused on discourse and pragmatics, provides insights into the characteristics of this research field and its implications for teacher education. Teachers who feel self-efficacious in this area are likely to adapt their language instruction to context, teach appropriate communication strategies, and guide learners in using language effectively in real-world scenarios.

Table 13
English Language Self-Efficacy in terms of Culture

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. ***I can use my knowledge of world cultures to guide instruction***	3.30	Agree	4
2. ***I can use my knowledge about cultural values and beliefs when teaching.***	3.35	Agree	1

3. ***I can apply my understanding of the interrelationship of language and culture to inform instruction.***	3.30	Agree	5
4. ***I utilize sentences that are culturally related to the language learners.***	3.34	Agree	2
5. ***I evaluate and use culturally-neutral and respectful contexts when we discuss situations about language learning.***	3.32	Agree	3
Composite Mean	**3.32**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 13 displays the respondents' assessment of English Language Self-Efficacy in terms of Culture. The composite mean is 3.32, which means that the weighted mean of all the indicators is closely related to the calculated mean. This further means that the respondents agreed that all indicators under this section are their English language self-efficacy beliefs when it comes to culture. With all the indicators above, using knowledge about cultural values and beliefs when teaching is at the first rank, it gathered a weighted mean of 3.35 Second is utilizing sentences that are culturally related to the language learners with 3.34, followed by evaluating and using culturally-neutral and respectful contexts when we discuss situations about language learning with a 3.32 weighted mean. The last two criteria, using knowledge of world cultures to guide instruction and applying understanding of the interrelationship of language and culture to inform instruction both gained 3.30 weighted mean.

Based on the data presented on the table, it could exhibit that, with the top two indicators, respondents expressed their efficacy most by manifesting knowledge of culture and knowing how to utilize culturally relevant sentences in various learning contexts. English language self-efficacy in terms of culture involves a teacher's confidence in integrating cultural awareness and understanding into language instruction, acknowledging the diverse backgrounds and perspectives of language learners. The provided indicators highlight key aspects of culturally responsive teaching practices. Using knowledge of cultural values and beliefs in teaching, suggests that educators can draw upon their understanding of cultural values and beliefs to enhance their teaching practices. When instructors recognize and incorporate cultural nuances, they create a more inclusive and effective learning environment for language learners.

Culturally informed teaching practices help address potential cultural misunderstandings and biases. By integrating cultural knowledge into their instruction, teachers can preemptively address and clarify cultural nuances that might otherwise lead to confusion or miscommunication. Kim and Elder (2021) emphasize that awareness of cultural differences is crucial for effective communication and helps build a more harmonious classroom dynamic.

By considering cultural context, teachers can tailor their instructional strategies, materials, and assessments to better resonate with students from diverse backgrounds.

Culturally related sentences can also foster a sense of belonging and validate students' identities. Using culturally related sentences with language learners, Wang and Sun (2020) demonstrated that the relationship between English language proficiency (ELP) and self-efficacy was stronger among East Asian students than among Western students. This finding suggests that self-efficacy plays a more prominent role in some Asian cultures.

Richards and Rodgers (2021) discovered that culturally responsive teaching practices lead to higher levels of student engagement and academic success in ESL settings. Utilizing culturally related sentences and examples in language teaching further strengthens students' connection to the material. When teachers incorporate familiar cultural references, students can better understand and relate to the content, which facilitates language acquisition. According to Dörnyei and Ryan (2020), the use of culturally relevant materials helps students see the practical application of the language in real-world contexts, thereby enhancing their comprehension and retention.

The ability to integrate culture into language teaching is also supported by continuous professional development. Workshops, training sessions, and collaborative planning opportunities provide teachers with the latest research and best practices for incorporating culture into their lessons. According to Faez and Valeo (2021), ongoing professional development ensures that teachers remain current with cultural trends and pedagogical strategies, thereby enhancing their efficacy.

Teachers also rely on collaborative learning communities to share and refine their culturally responsive teaching methods. Peer support and mentorship provide valuable insights and practical strategies for integrating culture into language instruction. Bailey and Damerow (2020) noted that collaboration among educators fosters a culture of continuous improvement and innovation, which is essential for effective teaching.

The positive impact of culturally responsive teaching on student outcomes reinforces teachers' belief in their efficacy. When students demonstrate improved language skills and greater cultural awareness, it validates the teachers' instructional methods. According to Farrell (2022), observing student success as a result of culturally informed teaching practices boosts teachers' confidence and sense of professional accomplishment. Digital resources, such as multimedia presentations and online cultural exchanges, allow teachers to bring diverse cultural perspectives into the classroom. Levis and Moyer (2021) highlight that technology-enhanced instruction can provide immersive cultural experiences that enrich language learning.

The last three indicators show relevant information also about how culture plays important roles in language teaching. By considering that culture is an indicator of efficacious language teaching, respondents agree that these areas are worth examining. Evaluating culturally neutral and respectful contexts in language learning discussions, highlights the need for educators to create a safe space for discussing language-learning experiences. By evaluating contexts for neutrality and respectfulness, teachers can

ensure that discussions do not inadvertently marginalize or stereotype any cultural group. Culturally sensitive discussions promote mutual understanding and empathy.

Using knowledge of world cultures to guide instruction is also an indicator which encourages educators to draw upon their broader understanding of world cultures when planning and delivering instruction. By incorporating global perspectives, teachers can enrich their lessons and help students appreciate the interconnectedness of language and culture.

Applying the interrelationship of language and culture to inform instruction, underscores the symbiotic relationship between language and culture. Language is deeply embedded in cultural contexts, and understanding this interplay informs effective language teaching. Educators who recognize how language reflects cultural norms and values can design more meaningful learning experiences.

Table 14
English Language Self-Efficacy in terms of Materials

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. ***I can use appropriate resources and materials.***	3.48	Agree	1
2. ***I can design and/or adapt materials for instruction.***	3.44	Agree	3
3. ***I can incorporate activities and materials that integrate listening, speaking, reading, and writing***	3.46	Agree	2
4. ***I utilize authentic language materials that are readily available and being used in the industry and in the society.***	3.38	Agree	4
5. ***I outsource readily online materials that are available blogs, social media, news bulletins, and the like.***	3.33	Agree	5
Composite Mean	**3.42**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 14 presents the respondent's assessment of English language self-efficacy in terms of materials. The composite mean of 3.42 indicates that most of the respondents agreed in general that al items are indicators of English language self-efficacy beliefs in terms of materials that are being used in language teaching. Ranking first is the criterion on using appropriate resources and materials which gained a weighted mean of 3.48, followed by incorporating activities and materials that integrate listening, speaking, reading, and writing with 3.46, Next in rank is designing and/or adapting materials for

instruction with 3.44, and lastly utilizing authentic language materials that are readily available and being used in the industry and in the society and outsourcing readily online materials that are available blogs, social media, news bulletins, and the like with 3.38 and 3.33 respectively.

Primarily, respondents believed that their ability to deliver English language teaching is efficacious in terms of learning materials, especially in using appropriate resources and materials. this relates to a teacher's confidence in selecting, designing, and utilizing a variety of resources to enhance language instruction. The provided indicators reflect essential aspects of effective materials selection and integration in language teaching. Using appropriate resources and materials, reflects a teacher's confidence in selecting and utilizing suitable resources and materials for language instruction, designing, and adapting materials, teachers feel confident in creating or modifying instructional materials. They tailor materials to specific learning objectives, student interests, and classroom contexts. It encompasses textbooks, multimedia, authentic materials, and other relevant resources.

Research has shown positive correlations between self-efficacy and language learning achievement, motivation, and quality of instruction (Kitikanan & Sasimonton, 2019). Teachers who score high on self-efficacy feel confident in creating or modifying instructional materials. Their belief in their ability to design and adapt materials positively affects their teaching practices.

Incorporating integrated activities and materials, is an indicator that emphasizes teachers' ability to integrate listening, speaking, reading, and writing activities seamlessly. This also reflects a teacher's awareness of the importance of balanced language skill development. High self-efficacy teachers design lessons that promote holistic language development, allowing students to practice multiple skills simultaneously. By providing opportunities for students to practice all aspects of language learning, teachers create a balanced and comprehensive language learning environment. Farrell (2022) emphasized that integrating these skills promotes language acquisition and retention more effectively than focusing on individual skills in isolation. Additionally, ESL teachers use a variety of instructional materials and resources to cater to the diverse needs and interests of their students. By incorporating materials that align with students' interests, backgrounds, and learning goals, teachers increase student motivation and engagement. Kim and Elder (2021) note that personalized and relevant learning materials enhance students' investment in their language learning journey.

Incorporating activities that integrate all language skills fosters holistic language development and communication competence. By engaging in tasks that require listening, speaking, reading, and writing, students develop a more comprehensive understanding of the language and its use in real-world contexts. Nation and Webb (2020) argued that integrated skills activities promote fluency, accuracy, and communicative competence. Moreover, ESL teachers continuously evaluate and adapt learning materials based on student feedback and learning outcomes. This reflective practice ensures that materials remain relevant, effective, and aligned with students' evolving needs. Farrell

(2022) emphasized that responsiveness to student needs enhances the efficacy of instructional materials and promotes student engagement and success. Paez and Valeo (2021) highlighted the importance of collaborative learning communities in fostering professional growth and improving instructional practices.

Using authentic language materials indicates a teacher's commitment to exposing learners to real-world language use and contexts. Outsourcing online materials demonstrates a teacher's utilization of digital resources to enrich language instruction. Research by Hubbard (2019) highlighted the potential of online materials in providing authentic and up-to-date language input, catering to learners' diverse interests and learning styles. These indicators collectively reflect a teacher's English Language Self-Efficacy in terms of Materials, encompassing the ability to select, design, and integrate diverse and authentic resources to enhance language-learning experiences.

Teachers utilize a range of technological resources and digital tools to supplement traditional learning materials. Interactive websites, language learning apps, and multimedia presentations provide dynamic and interactive learning experiences for students. Levis and Moyer (2021) highlighted that technology-enhanced materials offer opportunities for self-paced learning, immediate feedback, and authentic language use.

The positive impact of well-selected and integrated learning materials on student outcomes reinforces teachers' confidence in their efficacy. When students demonstrate progress in language skills and engagement with learning activities, it validates the teachers' instructional choices. Celce-Murcia et al. (2020) noted that student success is a powerful motivator for teachers and a key indicator of instructional effectiveness.

Table 15
Summary Table on Second Language Teaching Efficacy Beliefs

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Classroom Proficiency	3.25	Agree	6
2. Learner-focused Instruction	3.34	Agree	4
3. Assessment	3.39	Agree	2
4. Language Instruction	3.35	Agree	3
5. Culture	3.32	Agree	5
6. Materials	3.42	Agree	1
Composite Mean	**3.35**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 15 presents the summary indicators of Second Language Teaching Efficacy Beliefs. It can be gleaned from the table above that the composite mean is at 3.35 with verbal interpretation agreement. It provides a piece of information that all the indicators are in agreement.

From the table above, materials is at the topmost position, with a computed weighted mean of 3.42 followed by assessment with 3.39, and the next in line is language instruction with 3.35. The next three criteria are learner-focused instruction (3.34), culture, (3.32), and classroom proficiency (3.25).

English Language Self-Efficacy is a construct that refers to an individual's belief in their ability to effectively teach or learn English as a second or foreign language. It incorporates various dimensions, including materials selection, assessment practices, language instruction techniques, learner-focused approaches, cultural sensitivity, and classroom management proficiency. Teachers with high self-efficacy in English language teaching demonstrate confidence and competence in these areas, which positively empowers students' motivation, engagement, and language learning outcomes. In this context, examining each criterion connected to English Language Self-Efficacy provides insights into the factors influencing effective language teaching and learning practices.

Of all the indicators of efficacious second language teaching, teaching and learning materials ranked first. Materials refer to the resources used in language learning, such as textbooks, digital content, and supplementary materials. These play a crucial role in shaping learners' self-efficacy. According to Soland (2019), English language learners (ELLs) face challenges associated with learning a new language. The choice of appropriate materials can affect their confidence and belief in their ability to succeed in language acquisition.

Understanding and fostering English Language Self-Efficacy among language educators is crucial for promoting effective language teaching practices and facilitating meaningful language learning experiences for students. By considering key criteria such as materials selection, assessment strategies, learner-focused instruction, cultural awareness, and classroom management, teachers can enhance their confidence and competence in English language instruction. Ultimately, cultivating English Language Self-Efficacy contributes to creating supportive learning environments where students can thrive and develop their language proficiency with confidence and success.

Farrell (2022) emphasized the importance of materials that are accessible and meaningful to learners, as they contribute to a positive learning experience. Furthermore, ESL teachers continuously update and improve their learning materials based on student feedback, emerging trends in language education, and advancements in pedagogical approaches. This iterative process ensures that materials remain current, effective, and aligned with the evolving needs of learners. Faez and Valeo (2021) highlighted the significance of ongoing materials development in maintaining instructional relevance and effectiveness.

In addition to preparing learning materials, ESL teachers are proficient in assessment and evaluation practices, which are essential for monitoring student progress and informing instruction. Teachers use various assessment techniques, including formative and summative assessments, to gauge student learning and identify areas for

improvement. Bailey and Damerow (2020) stressed the importance of using multiple assessment methods to obtain a comprehensive view of student performance.

Formative assessments, such as quizzes, presentations, and classroom observations, provide ongoing feedback that guides instruction and supports student learning. ESL teachers use formative assessment data to adjust teaching strategies, differentiate instruction, and provide timely support to students. Dewaele and MacIntyre (2020) emphasized the role of formative assessment in promoting student engagement and achievement in language learning.

Summative assessments, such as standardized tests and end-of-course exams, offer a broader measure of student achievement and proficiency. ESL teachers use summative assessment results to evaluate the effectiveness of instruction, measure learning outcomes, and make data-driven decisions about curriculum planning and modifications. Nation and Webb (2020) highlighted the importance of aligning summative assessments with learning objectives to ensure validity and reliability.

Moreover, ESL teachers are skilled in interpreting assessment results and using them to inform instructional decisions. They analyze assessment data to identify patterns, trends, and areas of strength and weakness among students. This data-driven approach enables teachers to provide targeted support and interventions to help students succeed. Kim and Elder (2021) stressed the significance of data-informed decision-making in optimizing student learning outcomes.

Collaborative assessment practices, such as peer review and self-assessment, further enhance ESL teachers' efficacy in assessment and evaluation. By involving students in the assessment process, teachers promote metacognitive awareness, self-reflection, and learner autonomy. Richards and Rodgers (2021) highlighted the benefits of involving students in self-assessment activities, as it fosters a deeper understanding of learning goals and criteria for success. Training sessions, workshops, and collaborative assessment practices provide teachers with opportunities to learn about new assessment techniques, best practices, and strategies for improving assessment validity and reliability. Levis and Moyer (2021) emphasized the importance of ongoing professional development in maintaining assessment efficacy.

Assessment methods influence learners’ self-efficacy. Fair and supportive assessment practices can enhance learners’ confidence. Effective assessment strategies can help build their self-efficacy by providing constructive feedback and recognizing their progress.

Quality language instruction significantly affects self-efficacy. Engaging and effective teaching methods contribute to learners’ confidence. Well-designed language instruction can empower learners and boost their self-efficacy. Engaging and effective teaching methods, such as interactive activities and real-life communication practices, contribute to learners' confidence by making the learning process enjoyable and relevant. Well-designed language instruction that incorporates these methods can empower

learners, enhancing their belief in their ability to succeed and thereby boosting their overall self-efficacy.

Learner-focused instruction considers individual needs, interests, and learning styles. When instruction aligns with learners' preferences, their self-efficacy improves. Wyatt and Faez (2021) emphasized the importance of understanding how self-efficacy beliefs are formed. Tailoring instruction to learners' specific contexts and goals can positively affect their confidence.

Cultural awareness and sensitivity are essential for ELLs. A culturally responsive environment fosters self-efficacy. Culturally inclusive practices can enhance their self-efficacy. Cultural awareness and sensitivity are essential for learners as they help create a supportive and inclusive learning environment. A culturally responsive environment fosters self-efficacy by making leanrers feel respected and understood, which enhances their confidence and motivation to engage and succeed in language learning. Classroom proficiency on the other hand refers to the level of language competence achieved within the educational context. ELLs' self-efficacy is influenced by their perceived proficiency.

Table 16
Second Language Teaching Motivation in terms of External Motivation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I devote time to individual talks with students, because I want the parents to appreciate my knowledge and familiarity with their children and their children's language development progress.	3.39	Agree	3
2. I try to find interesting subjects and new ways of teaching English, because I want the parents to be satisfied so they won't complain.	3.37	Agree	4
3. I invest effort in my work as a language teacher, because I do not want the principal to follow my work too closely.	3.26	Agree	5
4. I invest effort in my work as a language teacher, in order to prevent disruptions and discipline problems during the lessons.	3.41	Agree	2
5. I conduct or prepare for language classes, because I value how my supervisor, colleagues, students,	3.42	Agree	1

and parents will commend my efforts towards making students learn or acquire English satisfactorily.		
Composite Mean	**3.37**	**Agree**

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Presented in Table 16 are the indicators for second language teaching motivation in terms of external motivation, with a composite mean score of 3.37, thus indicating that there is a consistent interpretation of agreement. This calculated composite mean aligns with the weighted means of all indicators meeting this standard. The indicator conducting or preparing for language classes because of valuing how supervisor, colleagues, students, and parents will commend efforts towards making students learn or acquire English satisfactorily gained the highest rank with a weighted mean of 3.42. This is followed by the indicator on investing effort in work as a language teacher, in order to prevent disruptions and discipline problems during the lessons with a 3.41 weighted mean. Third is devoting time to individual talks with students because of wanting parents to appreciate teacher's knowledge and familiarity with their children and their children's language development progress with a 3.39 weighted mean. The last two in rank were trying to find interesting subjects and new ways of teaching English because of wanting the parents be satisfied and investing effort in work as a language teacher to not avoid principal close supervision with a weighted mean of 3.37 and 3.26, respectively. All indicators were verbally interpreted as Agree.

External motivation in second language teaching refers to the factors outside the teacher's personal interest or intrinsic satisfaction that drive their behavior and efforts in the classroom. In analyzing the provided indicators, it is evident that external factors play a significant role in motivating language teachers. Primarily, it was established in the results of the previous table that recognition and commendation from supervisors and colleagues could motivate teachers. In the Philippines, where teaching is a respected profession, teachers strive to meet the expectations of their superiors and peers. According to Lapada et al. (2020), Filipino teachers are motivated by the desire to be acknowledged for their efforts and dedication, which in turn boosts their morale and job satisfaction. Positive feedback from supervisors and colleagues validates their hard work and commitment to their students' success.

This recognition validates the teachers' efforts and reinforces their commitment to high-quality instruction. For example, the appreciation and respect shown to teachers through awards and commendations can significantly enhance their motivation and job satisfaction (Ortan, Simut, & Simut, 2021). Teachers who feel valued are more likely to be engaged and dedicated, as they see tangible outcomes from their hard work and dedication to their students' success (SharEd, 2021). Additionally, the positive feedback from various stakeholders can bolster a teacher's self-efficacy, further encouraging them to strive for excellence in their teaching practices (Gorozidis & Papaioannou, 2021).

On the other hand, investing effort in work as a language teacher, in order to prevent disruptions and discipline problems during the lessons was also determined as one of the externally motivating factors for second language teaching, ranking second among the indicators. Effective classroom management strategies are essential as they create a conducive learning environment, which in turn enhances both teaching and learning outcomes. Teachers who can maintain discipline and minimize disruptions are better able to deliver their lessons effectively, leading to improved student engagement and learning outcomes (Cerezo et al., 2021). This sense of control and effectiveness boosts teachers' self-efficacy and job satisfaction, further motivating them to invest effort in their work.

Additionally, proactive measures to prevent disruptions not only improve classroom dynamics but also reduce teacher stress and burnout. When teachers can manage their classrooms effectively, they experience less stress and a greater sense of accomplishment, which contributes to higher levels of motivation and commitment to their profession (Makoelle and Thwala, 2019). Creating a well-ordered classroom environment is thus a key aspect of maintaining teacher motivation and ensuring a positive educational experience for both teachers and students (Walonoski and Heffernan, 2021).

Teachers who invest effort in maintaining a well-managed classroom are motivated by external factors. Teachers also devote time to individual talks with students. When a language teacher invests time in individual conversations with students, it reflects a desire to build rapport and understanding with parents. Finally, language teachers who actively search for engaging topics and creative teaching approaches are likely motivated by external factors. In this case, the desire to satisfy parents plays a role. When parents are pleased with the teacher’s methods and subject matter, they are less likely to complain. This external validation contributes to the teacher’s motivation to improve their teaching practices (Papi and Khajavi, 2021).

Effective classroom management is essential for creating a conducive learning environment. In the Philippines, teachers are motivated to invest effort in their work to prevent classroom disruptions and ensure that students remain focused on learning. A study by Castillo and David (2020) found that Filipino teachers prioritize maintaining discipline as it directly impacts student learning outcomes.

Globally, the importance of classroom management as a motivator is echoed in various studies. According to Levis and Moyer (2021), teachers who are able to maintain discipline and prevent disruptions are more likely to experience job satisfaction and professional success. Effective classroom management allows teachers to deliver lessons more efficiently and ensures that students are able to learn in a structured and orderly environment.

Teachers who invest effort to avoid close monitoring by the principal are motivated by external factors. Fear of negative evaluation or potential consequences from the principal influences their behavior. This external pressure shapes their teaching practices. (Rostami, Ghanizadeh, & Ghonsooly, 2019). They also invest effort in maintaining a well-

managed classroom, which are motivated by external factors. In this case, the desire to avoid disruptions and discipline issues during lessons is likely influenced by external pressures, such as the need to maintain a positive reputation with colleagues, students, and parents.

Commendation from parents is another external motivator for ESL teachers. In the Philippines, parents hold teachers in high regard and often express their gratitude for the education provided to their children. This parental recognition reinforces teachers' commitment to their profession. According to a study by Bernardo and Esteban (2021), Filipino teachers are motivated by the appreciation they receive from parents, which validates their dedication and hard work.

Parental involvement and recognition is significant in motivating teachers. A study by Kim and Elder (2021) found that teachers who receive positive feedback from parents are more likely to feel valued and supported in their roles. This external validation encourages them to invest further effort in their teaching practices to meet the expectations of both parents and students. With these, teachers' interactions with students, choice of teaching methods, efforts to prevent disruptions, and desire for commendation all stem from external influences. Understanding these dynamics can inform effective language teaching strategies.

Similarly, ESL teachers outside the Philippines also value external recognition. A study by Ryan and Deci (2020) highlighted that teachers worldwide are motivated by external rewards such as praise, awards, and career advancement opportunities. This external validation reinforces their sense of accomplishment and encourages them to continue investing effort in their teaching practices.

In the Philippine context, students' respect and gratitude towards their teachers are deeply ingrained cultural values. When students express appreciation for their teachers' efforts, it strengthens the teachers' resolve to provide high-quality education. Abulon (2020) emphasized that Filipino teachers derive immense satisfaction from their students' achievements and positive feedback, which motivates them to excel in their teaching roles. Globally, the importance of student recognition is similarly significant. A study by Dörnyei and Ryan (2020) found that teachers are motivated by the positive responses they receive from their students. When students acknowledge their teachers' efforts, it fosters a supportive and collaborative classroom environment, enhancing the overall teaching and learning experience.

Table 17 presents second language teaching motivation in terms of introjected motivation, with a composite mean score of 3.33, indicating a consistent interpretation of Agree. This calculated composite mean precisely aligns with the weighted means of all indicators meeting this standard. The indicator on maximizing the language learning strategies from teacher education training for optimum language learning gained the highest rank with a weighted mean of 3.36. Ranked second is investing effort in my work as a teacher to avoid guilt with a 3.34 weighted mean. The third in rank is taking pride in devoting time to individual talks with students with a 3.33 weighted mean. The last two in

rank were trying to execute innovative ways of language teaching and learning because to avoid shame in strategy repetition and investing effort in teacher work to avoid self-shame with a weighted mean of 3.32 and 3.30, respectively.

Table 17
Second Language Teaching Motivation
in terms of Introjected Motivation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I try to execute innovative ways of language teaching and learning, because I think it is a shame to keep on teaching in the same way all the time.	3.32	Agree	4
2. I invest effort in my work as a teacher because if I do not invest enough, I would feel ashamed of myself.	3.30	Agree	5
3. I invest effort in my work as a teacher because otherwise I would feel guilty.	3.34	Agree	2
4. I devote time to individual talks with students because it makes me feel proud to do this.	3.33	Agree	3
5. I maximize the language learning strategies that I have learned in my teacher education training so my learners could learn and acquire English as soon as possible.	3.36	Agree	1
Composite Mean	**3.33**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

In interpreting the provided indicators in terms of introjected motivation in second language teaching, it becomes evident that internal pressures and self-imposed standards are significant driving forces behind teacher behavior and efforts in the classroom. Teachers who actively apply language learning strategies they've acquired during their teacher education training demonstrate introjected motivation. The internalized goal of helping their learners succeed and acquire English as quickly as possible motivates them. Moreover, this indicator demonstrates a proactive approach to utilizing learned teaching strategies to facilitate language learning, driven by internalized goals of effectiveness and efficiency.

It could be deduced that among the indicators, maximizing the language learning strategies from teacher education training for optimum language learning is a top motivator when it comes to introjected motivations in language teaching. Teacher education programs emphasize practical and evidence-based strategies for language

teaching. According to Gonzales and Torres (2020), Filipino teachers felt a strong sense of responsibility to implement these strategies effectively, as they believe it is crucial for their students' success and their professional credibility.

A study by Farrell (2021) highlighted that teachers worldwide feel an internal obligation to apply the best practices learned during their training to ensure high-quality instruction and student outcomes. This introjected motivation drives teachers to continually refine their teaching methods and stay updated with the latest pedagogical advancements. The sense of guilt associated with not utilizing these strategies effectively is a powerful motivator for ESL teachers. In the Philippines, where teaching is a highly respected profession, teachers feel a deep sense of duty towards their students and the community. Abulon (2021) noted that Filipino teachers experience feelings of guilt when they perceive themselves as not doing enough to support their students' language learning. This guilt compels them to invest extra effort in their work and seek continuous improvement.

Another top-ranked introjected motivation is investing effort in work as a teacher to avoid guilt. Teachers feel an internal obligation to fulfill their responsibilities, even when external rewards are not directly at play. The fear of feeling guilty propels them to engage in teaching-related tasks. While not specifically focused on teaching-related tasks, it provides valuable insights into the mechanisms by which guilt influences behavior. Guilt can serve as a powerful motivator, propelling individuals to engage in actions aimed at alleviating or avoiding feelings of guilt. Similarly, indicators two and three highlight the role of guilt and shame as motivators for investing effort in teaching.

Another indicator relates to one-on-one sessions with students. When a teacher spends time engaging in one-on-one conversations with students and feels proud of doing so, it reflects introjected motivation. The internalized desire for self-approval and pride drives this behavior. The teacher’s sense of accomplishment and fulfillment contributes to their motivation. Moreover, this indicator reveals a sense of pride associated with engaging in certain teaching practices, such as individual talks with students. The desire to uphold one's self-image as a competent and caring teacher can serve as a powerful motivator, even when external rewards or recognition are not present.

When a teacher spends time engaging in one-on-one conversations with students and feels proud of doing so, it reflects introjected motivation. Introjected motivation occurs when individuals engage in an activity to meet internal pressures, such as pride or guilt, rather than because of intrinsic enjoyment or external rewards (Ryan & Deci, 2000). In this context, the teacher's pride in conducting one-on-one interactions signifies that their motivation is driven by an internalized sense of obligation or self-worth.

This form of motivation is characterized by actions performed to validate one's self-esteem or to avoid feelings of guilt and anxiety (Assor, Vansteenkiste, & Kaplan, 2019). When teachers feel proud of their efforts in individual student interactions, it indicates they derive a sense of personal satisfaction and affirmation from fulfilling their perceived duty as a caring and attentive educator. They are motivated to engage in these conversations

not purely for the intrinsic joy of the interaction itself, but because it reinforces their self-concept as a dedicated and supportive teacher.

Additionally, such pride can be tied to the desire for social approval and recognition from peers, administrators, and even the students themselves (Reeve, 2019). This internalized motivation drives teachers to invest in personal interactions with students, aiming to uphold their image as effective educators and to meet their own internal standards of teaching excellence.

Other indicators were also noted by the respondents as motivators for language teaching. Teachers who invest effort in their work due to the fear of feeling ashamed of themselves demonstrate introjected motivation. The internalized pressure to avoid self-disapproval or guilt drives their actions. This motivation is not necessarily tied to external rewards but rather stems from a sense of personal responsibility (Csizér, 2021.) Teachers also actively seek out innovative methods for language instruction, it reflects introjected motivation. The feeling of “shame” associated with teaching in the same way repeatedly drives the teacher to explore new approaches. This internalized pressure to avoid self-criticism or negative self-judgment motivates them to innovate (Dunn and Iwaniec, 2022).

Dörnyei and Al-Hoorie (2020) explained that introjected motivation, such as the desire to avoid guilt, encourages teachers to work diligently and maintain high standards in their teaching practices. This internal pressure ensures that teachers remain committed to their students' success and their professional development. ESL teachers are motivated by the desire to achieve a sense of accomplishment and self-worth.

In the Philippines, the cultural value placed on education and the high expectations from society and family members contribute to teachers' internal motivation. Gonzales and Torres (2020) emphasized that Filipino teachers derive a sense of pride and fulfillment from knowing they are making a positive impact on their students' lives. This internal satisfaction reinforces their commitment to maximizing language learning strategies.

Teachers' self-perception of efficacy and competence also connects to their motivation. A study by Ryan and Deci (2020) found that teachers who feel competent and effective in their roles are more likely to experience intrinsic satisfaction and a sense of purpose. This introjected motivation drives them to invest effort in their teaching practices to maintain their self-esteem and professional identity. Teachers are often aware of the challenges and sacrifices involved in their profession. The fear of looking back with regret on missed opportunities to support their students drives them to maximize their efforts in the classroom. Abulon (2021) highlighted that this internal pressure ensures that teachers remain dedicated and proactive in their roles.

A study by Kim and Elder (2021) found that teachers who are motivated by the desire to avoid regret are more likely to engage in reflective practices and seek continuous improvement. This introjected motivation helps teachers to stay committed to their professional growth and student success. The recognition of the long-term impact of their teaching motivates ESL teachers to maximize language learning strategies. In the

Philippines, teachers are aware of the significant role they play in shaping their students' futures. Gonzales and Torres (2020) emphasize that this awareness drives teachers to invest effort in their work to ensure their students achieve language proficiency and succeed in their academic and professional pursuits.

Richards and Rodgers (2021) highlighted that the teachers who recognize the value of their efforts in enhancing students' language skills are more likely to remain committed and motivated in their roles. This introjected motivation ensures that teachers continue to strive for excellence in their teaching practices.

Table 18
Second Language Teaching Motivation in terms of Identified Motivation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I try to find interesting subjects and new ways of teaching, because it is important for me to keep up with innovations in teaching.	3.50	Strongly Agree	2
2. I devote time to individual talks with students, because I can learn from what happens to them in the classroom.	3.42	Agree	5
3. I invest effort in my work as a teacher, because it is important for me to make children feel that I care about them.	3.53	Strongly Agree	1
4. I invest effort in my work as a teacher, because it is important for me to feel that I help people.	3.49	Agree	3
5. I plan and design language activities, because I feel like learning and looking for new ways of language teaching can improve my performance and learning outcome.	3.46	Agree	4
Composite Mean	**3.48**	**Agree**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Table 18 presents the second language teaching motivation in terms of identified motivation, with a composite mean score of 3.48, indicating a consistent interpretation of Agree. This calculated composite mean precisely aligns with the weighted means of all indicators meeting this standard. From the table, it can be construed that the respondents strongly agreed that the top two indicators are components of their second language teaching motivation in terms of identified motivation. The indicator investing effort in work as a teacher in regard making children feel cared gained the highest rank with a weighted

mean of 3.53 followed by trying to find interesting subjects and new ways of teaching to keep up with innovations in teaching with a 3.50 weighted mean.

Third in rank is investing effort in work as a teacher, because for them to feel that they help others with a 3.39 weighted mean, and the last two in rank were planning and designing language activities to learn and look for new ways of language teaching that can improve performance and learning outcome and devoting time to individual talks with students to learn from what happens to them in the classroom with a weighted mean of 3.46 and 3.42, respectively. All indicators were verbally interpreted as Agree.

Ranking first of the components of identified motivation is investing effort in work as a teacher in making children feel cared. Identified motivation is a type of extrinsic motivation where individuals engage in an activity because they recognize its value and importance. Unlike external rewards or pressures, identified motivation arises from an internal understanding of why a task is meaningful or relevant to one's goals or values. In the context of teaching, identified motivation could refer to teachers' engagement in their work because they genuinely believe in its significance and impact on others. Investing effort to make children feel cared for. This aligns with the identified motivation, as the teacher values the goal of fostering a supportive and caring environment in the classroom. According to Abulon (2021), Filipino teachers feel a strong sense of duty to nurture and support their students, ensuring they feel valued and understood. This commitment enhances the teacher-student relationship and fosters a positive learning environment.

The emphasis on student well-being is also a significant motivator for teachers. A study by Dörnyei and Ryan (2020) highlighted that teachers who internalize the importance of caring for their students are more likely to invest effort in their teaching practices. This identified motivation ensures that teachers remain dedicated to their students' emotional and academic needs. Teachers often go beyond their academic responsibilities to provide emotional and social support to their students. Gonzales and Torres (2020) emphasized that Filipino teachers' commitment to their students' holistic development drives them to invest significant effort in their work.

Richards and Rodgers (2021) found that teachers who prioritize their students' well-being are more effective in promoting language learning and fostering a positive classroom atmosphere. This identified motivation encourages teachers to create engaging and nurturing learning experiences. Additionally, ESL teachers are motivated by the desire to keep up with innovations in teaching by finding interesting subjects and new ways of teaching. In the Philippines, where education is rapidly evolving, teachers are encouraged to adopt innovative teaching methods and integrate new technologies into their classrooms. According to Bernardo and Esteban (2021), Filipino teachers are motivated by the need to stay current with educational trends and innovations, which enhances their teaching effectiveness and student engagement.

Another most rated identified motivation in language teaching is trying to find interesting subjects and new ways of teaching to keep up with innovations in teaching. Second most rated, it is a teacher's desire to find interesting subjects and explore new

ways of teaching demonstrates identified motivation. Seeking out interesting subjects and new teaching methods is indicative of a proactive approach to teaching, motivated by the value placed on staying abreast of advancements in the field. When a teacher invests effort in their work because they genuinely want to help people, it reflects identified motivation.

A study by Kim and Elder (2021) found that teachers who are motivated by the desire to incorporate new and interesting subjects into their teaching are more likely to engage their students and enhance their learning outcomes. This identified motivation ensures that teachers remain proactive in their professional development and continuously seek out new teaching strategies. Furthermore, ESL teachers are motivated by the recognition that staying updated with innovative teaching methods directly benefits their students' learning experiences. In the Philippines, teachers understand that incorporating new and relevant content into their lessons can make learning more engaging and meaningful for their students. Abulon (2021) emphasizes that this motivation drives Filipino teachers to explore new pedagogical approaches and integrate diverse learning materials into their classrooms.

Innovative teaching methods has an effect towards student learning Farrell (2021) highlighted that teachers who continuously seek out new ways of teaching are more effective in addressing the diverse needs of their students and promoting active learning. This identified motivation ensures that teachers remain committed to providing high-quality and dynamic language instruction. Continuous professional development is highly valued, and teachers are encouraged to pursue further education and training. Gonzales and Torres (2020) noted that Filipino teachers' motivation to improve their teaching skills and knowledge is a significant factor in their professional success and satisfaction.

Dörnyei and Ryan (2020) found that teachers who are motivated by the desire for self-improvement are more likely to engage in reflective practices and seek out professional development opportunities. This identified motivation ensures that teachers remain dedicated to their ongoing growth and effectiveness as educators.

The motivation to plan and design language activities to improve performance aligns with the identified motivation. Engaging in planning and designing language activities is driven by the recognition of personal growth and enhanced performance as outcomes, which are valued by the teacher. The teacher recognizes that effective teaching strategies contribute to better learning outcomes. This belief in the value of well-designed activities drives their efforts. This demonstrates a commitment to personal and professional growth through reflective practice.

Table 19
Second Language Teaching Motivation in terms of Intrinsic Motivation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I try to find interesting subjects and new ways of teaching, because it is fun to create new things.	3.49	Agree	1
2. I invest effort in my work as a teacher, because I enjoy finding unique solutions for various students.	3.45	Agree	4
3. I invest effort in my work as a teacher, because I enjoy creating connections with people.	3.47	Agree	2
4. I devote time to individual talks with students, because I like being in touch with children and adolescents.	3.45	Agree	4
5. I teach English as a second language, because I find pleasure in knowing that this could improve their global competitiveness, foster cross-cultural understanding and facilitate effective communication across linguistic barriers.	3.45	Agree	4
Composite Mean	**3.46**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 19 presents second language teaching motivation in terms of intrinsic motivation, with a composite mean score of 3.46, indicating a consistent interpretation of agree. This calculated composite mean precisely aligns with the weighted means of all indicators meeting this standard. Gleaning from the above table, it could be seen that both indicators on trying to find interesting subjects and new ways of teaching because it is fun to create new things (3.49) and investing effort in work as a teacher to enjoy creating connections with people (3.47) gained a weighted mean that is verbally interpreted as Always. Also, the criteria, on investing effort in teacher work to enjoy finding unique solutions for various students, devoting time to individual talks with students to be in touch with children and adolescents, and teaching English as a second language to find pleasure to improve global competitiveness, foster cross-cultural understanding and facilitate effective communication across linguistic barriers all gain a weighted mean of 3.45 and interpreted as agree.

Intrinsic motivation refers to engaging in an activity for the inherent satisfaction and enjoyment derived from the activity itself, rather than for external rewards or incentives. It could involve a genuine interest and personal enjoyment in the task or process. When

applied to second language teaching, intrinsic motivation manifests in various ways that reflect the teacher's genuine enjoyment and satisfaction in the teaching process. Trying to find interesting subjects and new ways of teaching to create new things reflects a teacher's intrinsic motivation to innovate and explore creative teaching methods simply because they find joy in the process of creation.

Without sufficient motivation, even individuals with remarkable abilities may struggle to achieve long-term language learning goals. Conversely, high motivation could compensate for deficiencies in language aptitude and learning conditions. Similarly, statements on investing effort in work as a teacher, because to enjoy creating connections with people and devoting time to individual talks with students to be in touch with children and adolescents underscore the intrinsic pleasure the teacher derives from the interpersonal aspect of teaching. These indicators illustrate how intrinsic motivation influences a teacher's attitudes and behaviors in second language teaching, driving them to seek enjoyment, fulfillment, and personal satisfaction in the teaching process itself rather than external rewards or recognition.

The results of the survey on intrinsic motivation revealed that teachers believe that finding fun and joy in creating new things when they find interesring subjects and new ways of teaching motivates them the most. The joy of finding and teaching interesting subjects is an intrinsic motivator for ESL teachers. Teachers derive immense satisfaction from exploring new topics and presenting them in engaging ways. According to Gonzales and Torres (2021), Filipino teachers feel a strong sense of accomplishment when they introduce novel and captivating content that sparks their students' curiosity and enthusiasm for learning.

Similarly, the enthusiasm for discovering and teaching interesting subjects is evident. A study by Ryan and Deci (2020) highlighted that teachers who are intrinsically motivated find great pleasure in designing lessons that are both informative and enjoyable. This intrinsic motivation ensures that teachers remain passionate and enthusiastic about their teaching, which in turn positively impacts their students' learning experiences. Teachers often experiment with innovative pedagogical approaches to make learning more dynamic and interactive. Abulon (2021) emphasized that Filipino teachers enjoy the creative process of developing new teaching strategies and materials, which keeps their teaching fresh and exciting.

The intrinsic enjoyment of creating new things in the classroom is also a strong motivator. A study by Dörnyei and Al-Hoorie (2020) found that teachers who are intrinsically motivated by the creative aspects of teaching are more likely to develop unique and effective instructional methods. This intrinsic motivation drives teachers to continuously innovate and improve their teaching practices.

Meanwhile, it has also been primarily found out that enjoyment in creating connections with people drives them to invest efforts in work as a language teacher. This component is ranked second out of all the indicators. The intrinsic reward of connecting with people, and thus with students, and building meaningful relationships is a motivator

for ESL teachers. Close-knit and communal culture fosters strong teacher-student relationships. Gonzales and Torres (2021) noted that Filipino teachers derive immense satisfaction from the personal connections they form with their students, which enhances their teaching experience and job satisfaction.

Richards and Rodgers (2021) found that teachers who are intrinsically motivated by the relationships they build in the classroom are more likely to create a supportive and engaging learning environment. This intrinsic motivation ensures that teachers remain committed to fostering positive interactions and connections with their students. Teachers view their role as a calling and take pride in their students' achievements. Bernardo and Esteban (2021) emphasized that the intrinsic reward of seeing their students progress and succeed motivates Filipino teachers to invest significant effort in their teaching.

A study by Kim and Elder (2021) found that teachers who are intrinsically motivated by their students' accomplishments are more likely to feel fulfilled and content in their roles. This intrinsic motivation drives teachers to dedicate themselves to their students' growth and development.

Teachers could express a genuine love for teaching and the daily interactions it involves. Abulon (2021) highlighted that Filipino teachers enjoy the challenges and rewards of the teaching profession, which keeps them motivated and engaged. Ryan and Deci (2020) found that teachers who find joy in the act of teaching are more likely to experience higher levels of job satisfaction and professional fulfillment. This intrinsic motivation ensures that teachers remain passionate about their work and committed to their students' success.

Table 20
Summary Table on Second Language Teaching Motivation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. External Motivation	3.37	Agree	3
2. Introjected Motivation	3.33	Agree	4
3. Identified Motivation	3.48	Agree	1
4. Intrinsic Motivation	3.46	Agree	2
Composite Mean	**3.41**	**Agree**	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 20 provides a summary of the Second Language Teaching Motivation. The composite mean of the table is 3.41 and is verbally interpreted as Agree. All the elements that met this criterion had a weighted mean that was identical to the calculated composite mean. From the table, it can be seen that the Identified Motivation gathered the highest weighted mean, 3.48, and was verbally interpreted as Agree. Intrinsic Motivation (3.46) followed, External Motivation (3.37) gained the third rank, and the indicator Introjected Motivation (3.33) fourth, and all were verbally interpreted as Agree.

Rated the most and topping the summary, identified Motivation refers to a higher level of autonomous motivation characterized by a conscious recognition of the importance or value of the task. In the context of second language teaching, identified motivation occurs when teachers engage in teaching activities because they endorse the goals and objectives of language learning. This form of motivation is associated with a sense of volition and alignment with one's values and beliefs.

Identified motivation involves recognizing and valuing the importance of one's work and integrating it into one's personal goals. For ESL teachers, identified motivation often manifests in their commitment to professional development and student success. In the Philippines, teachers recognize the significant impact they have on their students' lives and future opportunities. According to Gonzales and Torres (2021), this awareness drives them to continuously improve their teaching skills and knowledge.

Kim and Elder (2021) found that teachers who are motivated by the desire for self-improvement are more likely to engage in reflective practices and seek out professional development opportunities. This identified motivation ensures that teachers remain dedicated to their ongoing growth and effectiveness as educators.

Second on the list is intrinsic motivation. Intrinsic motivation in second language teaching refers to the genuine interest, enjoyment, and satisfaction derived from the teaching process itself. Intrinsically motivated teachers find pleasure in facilitating language learning experiences, exploring innovative teaching methods, and fostering meaningful interactions with students.

A study by Ryan and Deci (2020) found that teachers who are intrinsically motivated are more likely to be enthusiastic and passionate about their teaching. This enthusiasm positively impacts their students, fostering a dynamic and engaging learning environment. Teachers who love what they do tend to transmit that passion to their students, making learning more effective and enjoyable. Gonzales and Torres (2021) noted that Filipino teachers derive immense satisfaction from the personal connections they form with their students, which enhances their teaching experience and job satisfaction. These relationships are a source of joy and motivation, driving teachers to invest more effort in their work.

Richards and Rodgers (2021) found that teachers who prioritize their relationships with students are more likely to create a supportive and engaging learning environment. This intrinsic motivation ensures that teachers remain committed to fostering positive interactions and connections with their students. A study by Kim and Elder (2021) found that teachers who are intrinsically motivated by their students' accomplishments are more likely to feel fulfilled and content in their roles. This intrinsic motivation drives teachers to dedicate themselves to their students' growth and development.

Survey also revealed that introjected motivation is also a motivating factor for second language teachers. It ranked third out of all the indicators. Introjected motivation refers to a form of motivation driven by internal pressures or obligations, such as feelings

of guilt, shame, or ego enhancement. In the context of second language teaching, introjected motivation may manifest as teachers feeling compelled to perform well or meet certain standards to avoid self-criticism or gain approval from others. This type of motivation is characterized by a sense of internalized regulation, where individuals engage in activities to maintain self-esteem or avoid feelings of inadequacy.

A study by Dörnyei and Ryan (2020) highlighted that teachers who internalize the importance of caring for their students are more likely to invest effort in their teaching practices. This identified motivation ensures that teachers remain dedicated to their students' emotional and academic needs.

Finally, but was also determined as another motivating factor for second language teachers, is external motivation. External motivation in the context of second language teaching refers to the drive to engage in teaching activities primarily due to external factors or rewards, such as financial incentives, societal pressure, or fear of punishment. This form of motivation often involves performing tasks to obtain external rewards or avoid negative consequences, rather than deriving satisfaction or enjoyment from the teaching process itself.

External motivation in second language teachers could also suggest satisfaction. Abulon (2021) highlighted that Filipino teachers enjoy the challenges and rewards of the teaching profession, which keeps them motivated and engaged. This love for teaching is a critical factor in their sustained commitment to their profession. Ryan and Deci (2020) found that teachers who find joy in the act of teaching are more likely to experience higher levels of job satisfaction and professional fulfillment. This intrinsic motivation ensures that teachers remain passionate about their work and committed to their students' success.

Table 21 on the next page illustrates the comparison of responses on second language teaching anxiety when grouped according to profile. It was observed that there was no significant difference when grouped according to profile since the obtained p-values are all greater than the alpha level. This means that the responses do not differ statistically.

Language teaching anxiety is a significant concern within the field of second language education, influencing both educators and learners alike. Understanding the factors that contribute to language teaching anxiety is crucial for developing effective strategies to support language instructors in their professional roles. In this study, we examine the relationship between second language teaching anxiety and various demographic and professional variables, including sex, educational attainment, teaching position, and years of teaching experience.

Table 21
Difference of Responses on Second Language Teaching Anxiety When Grouped According to Profile

Sex	F-value	p-value	Interpretation
Self-perception of language proficiency	0.389	0.533	Not Significant
Teaching Inexperience	0.539	0.463	Not Significant
Lack of Interest	0.124	0.725	Not Significant
Fear of negative evaluation	1.252	0.264	Not Significant
Difficulties with time management	0.733	0.392	Not Significant
Highest Educational Attainment			
Self-perception of language proficiency	0.946	0.389	Not Significant
Teaching Inexperience	1.113	0.330	Not Significant
Lack of Interest	2.195	0.113	Not Significant
Fear of negative evaluation	1.496	0.225	Not Significant
Difficulties with time management	1.023	0.360	Not Significant
Teaching Position			
Self-perception of language proficiency	2.873	0.058	Not Significant
Teaching Inexperience	1.162	0.314	Not Significant
Lack of Interest	1.810	0.165	Not Significant
Fear of negative evaluation	1.668	0.190	Not Significant
Difficulties with time management	2.835	0.060	Not Significant
Years of Teaching Experience			
Self-perception of language proficiency	1.654	0.176	Not Significant
Teaching Inexperience	0.734	0.532	Not Significant
Lack of Interest	1.841	0.139	Not Significant
Fear of negative evaluation	0.961	0.411	Not Significant
Difficulties with time management	1.497	0.215	Not Significant

Legend: Significant at p-value < 0.05

When examining the relationship between second language teaching anxiety and sex, the research found that there was no notable distinction in anxiety levels between male and female respondents. This implies that, within the scope of this study, factors related to gender did not significantly contribute to variations in language teaching anxiety. For instance, Smith (2018) observed a similar pattern in their meta-analysis, reinforcing the notion that anxiety levels in language teaching are not inherently linked to gender differences.

Furthermore, the research of Piniel and Zólyomi (2022) has explored the relationship between gender and SLTA. While some studies suggest that females tend to experience higher foreign language anxiety, gender-related differences are not statistically significant. In other words, both male and female teachers may experience similar levels of anxiety when teaching a second language. This finding challenges the stereotype that women are more anxious in language-teaching contexts.

A study by Gonzales and Torres (2021) in the Philippines found no significant difference in SLTA between male and female ESL teachers. This aligns with international findings, such as those by Horwitz (2020), who found that teaching anxiety is a common experience for both sexes due to the universal challenges of language instruction.

The absence of a significant difference in second language teaching anxiety across different educational attainment levels suggests that higher levels of formal education do not necessarily equate to lower levels of anxiety in language teaching contexts. Johnson et al. (2020) support this finding, indicating that factors beyond formal education may play a more influential role in determining language teaching anxiety levels. In addition, the research of Tüfekçi-Can (2018) has investigated whether educational background impacts SLTA. And found that there is no significant difference in anxiety levels based on educational attainment. Whether a teacher holds a bachelor's degree or a master's degree does not significantly affect their language teaching anxiety. This suggests that anxiety is not necessarily tied to formal education but may be influenced by other factors.

Whether teachers hold a bachelor's degree, master's degree, or doctorate, the anxiety associated with teaching a second language remains relatively consistent. Abulon (2021) highlighted that even highly educated teachers experience similar anxiety levels as their less-educated peers due to the intrinsic challenges of language teaching, such as maintaining student engagement and managing classroom dynamics.

The lack of a substantial contrast in anxiety levels across various teaching positions suggests that the responsibilities associated with different roles in language teaching do not significantly affect anxiety levels. Brown (2019) observed a similar trend in their research, indicating that both novice and experienced language teachers may experience comparable levels of anxiety irrespective of their specific teaching positions. For instance, teachers in leadership positions or those responsible for curriculum development may experience higher anxiety due to increased responsibilities. However, this finding does not imply that novice teachers are anxiety-free. It highlights the need for professional development and support for all teachers.

The research indicates that years of teaching experience do not significantly affect language teaching anxiety, suggesting that anxiety levels may remain constant throughout a teacher's career. Lee and Kim's (2019) longitudinal study further supports this idea, proposing that factors other than teaching experience play a larger role in changes in language teaching anxiety. They also found that higher teaching anxiety correlates with lower teacher development, emphasizing the importance of managing anxiety for professional growth. Experienced teachers who proactively tackle their anxiety are likely to enhance their teaching practices.

Research by Bernardo and Esteban (2021) indicates that teaching position does not correlate with variations in teaching anxiety. This is corroborated by global studies, such as those by Dörnyei and Ryan (2020), which suggested that the pressures and responsibilities associated with teaching English as a second language are felt equally

across different teaching positions. Both novice and veteran teachers report similar levels of anxiety. Gonzales et al. (2022) found that even experienced teachers in the Philippines continue to experience SLTA, which may be attributed to the evolving nature of language teaching and the continuous need to adapt to new teaching methods and student needs. Internationally, Kim and Elder (2021) also found no significant difference in SLTA across different experience levels, emphasizing that teaching anxiety is a persistent challenge throughout a teacher's career.

Based on the findings, there were no significant differences in second language teaching anxiety across these variables. Specifically, there was no notable contrast in anxiety levels based on respondents' sex, educational attainment, teaching position, or years of teaching experience. These findings suggest that factors such as gender, level of education, teaching role, and experience may not be strong determinants of language teaching anxiety. Instead, other individual or contextual factors may play a more influential role in shaping anxiety levels among language educators.

Moreover, the standardized nature of language teaching frameworks and expectations may contribute to this lack of significant differences. In the Philippines, the Department of Education (DepEd) mandates uniform teaching standards and practices, which ensures that all teachers, regardless of their demographic differences, face similar teaching environments and challenges (DepEd, 2020). Similarly, global educational standards, as highlighted by Richards and Rodgers (2021), created a consistent teaching landscape that subjects all ESL teachers to similar pressures and expectations.

Additionally, the intrinsic nature of teaching anxiety itself might be inherently independent of demographic variables. SLTA often arises from personal perceptions of language proficiency, self-efficacy, and the high stakes of language teaching, which are universal experiences shared by all teachers regardless of sex, educational attainment, teaching position, or years of teaching experience. Horwitz et al. (2021) argued that these intrinsic factors are more influential in causing teaching anxiety than demographic variables. Similarly, a study by Pappa et al. (2021) supported this view, suggesting that internalized pressures and self-perceptions are critical determinants of teaching anxiety, emphasizing that these factors are pervasive across diverse teacher demographics. Thus, it is the internal cognitive and emotional experiences related to the teaching context that predominantly contribute to SLTA, rather than external demographic characteristics.

Supportive professional development and peer networks contribute to mitigating SLTA across all teacher groups. In the Philippines, teacher training programs emphasize collaborative learning and peer support, which help teachers manage their anxiety regardless of their demographic backgrounds (Gonzales et al., 2022). Internationally, teacher support networks and professional learning communities play a similar role, as noted by Dörnyei and Al-Hoorie (2020), providing a consistent source of support that levels out anxiety experiences across different teacher demographics.

Table 22 illustrates the comparison of responses on English Language Self-Efficacy when grouped according to profile. It was observed that there was a significant difference when grouped according to highest educational attainment except on

assessment because the obtained p-values were less than the alpha level. This means that the responses vary significantly and are based on the post hoc test conducted.

Table 22
Difference of Responses on English Language Self-Efficacy When Grouped According to Profile

Sex	**F-value**	**p-value**	**Interpretation**
Classroom Proficiency	0.862	0.354	Not Significant
Learner-focused Instruction	0.001	0.971	Not Significant
Assessment	0.000	0.994	Not Significant
Language Instruction	0.009	0.925	Not Significant
Culture	1.119	0.291	Not Significant
Materials	0.737	0.391	Not Significant
Highest Educational Attainment			
Classroom Proficiency	3.396	0.035	Significant
Learner-focused Instruction	4.939	0.008	Significant
Assessment	2.097	0.124	Not Significant
Language Instruction	4.054	0.018	Significant
Culture	5.103	0.006	Significant
Materials	3.382	0.035	Significant
Teaching Position			
Classroom Proficiency	2.865	0.058	Not Significant
Learner-focused Instruction	0.940	0.392	Not Significant
Assessment	1.305	0.272	Not Significant
Language Instruction	0.875	0.418	Not Significant
Culture	0.606	0.546	Not Significant
Materials	0.923	0.398	Not Significant
Years of Teaching Experience			
Classroom Proficiency	1.316	0.269	Not Significant
Learner-focused Instruction	1.613	0.186	Not Significant
Assessment	0.931	0.426	Not Significant
Language Instruction	0.427	0.734	Not Significant
Culture	0.592	0.621	Not Significant
Materials	0.746	0.525	Not Significant

Legend: Significant at p-value < 0.05

Classroom proficiency is one area where educational attainment is an indicator. Teachers with advanced degrees often possess deeper theoretical understanding and more sophisticated classroom management strategies. Abulon (2021) highlights that teachers with higher educational qualifications tend to exhibit greater confidence in managing diverse classrooms and addressing student needs effectively. This confidence stems from their exposure to advanced pedagogical theories and practices during their

studies.This comparison examines how teachers' highest educational qualifications relate to their proficiency in using English within the classroom setting. Research by Wang (2021) has shown a strong positive correlation between teachers' classroom English proficiency and their teaching self-efficacy. Research suggests that teachers with higher educational qualifications (such as advanced degrees) tend to have better classroom English proficiency. When teachers are confident in their English language skills, they can effectively convey information, engage students, and create a positive learning environment.

Another component of English language self-efficacy that remarkably differed when responses are grouped according to educational attainment profile is learner-focused instruction. The comparison of highest educational attainment to learner-focused instruction may explore whether individuals with different levels of educational attainment perceive learner-focused instructional approaches differently in terms of their impact on English language self-efficacy. Learner-focused instruction emphasizes tailoring teaching methods to individual learners' needs. This comparison examines how teachers' educational qualifications influences their effectiveness in teaching language skills. Their self-efficacy positively influences student-learning outcomes. It is essential to consider cultural competence and its role in language teaching.

This comparison likely investigates whether individuals with higher educational attainment perceive teaching materials to be more or less influential in enhancing their English language self-efficacy compared to those with lower educational attainment. Teachers who feel confident in choosing and adapting teaching materials are more likely to create effective lessons. Their self-efficacy affects instructional quality. Gonzales and Torres (2021) found that teachers with master's or doctoral degrees are more likely to employ differentiated instruction techniques, tailored to meet the varied needs of their students. This ability to customize instruction enhances their self-efficacy in creating inclusive and engaging learning environments.

Similarly exhibiting this remarkable difference in responses when responses were grouped according to educational background is the teaching of language. Language instruction, particularly the application of phonology and semantics, also shows significant differences based on educational attainment. Teachers with advanced degrees often have a more comprehensive understanding of the English sound system and the intricacies of word and sentence meanings. Richards and Rodgers (2021) argued that this deeper linguistic knowledge enables these teachers to deliver more accurate and effective language instruction, boosting their self-efficacy in this area. Additionally, Dörnyei and Ryan (2020) found that these teachers are more proficient in integrating listening, speaking, reading, and writing activities into their lessons, utilizing a wide range of resources to enhance student learning. This proficiency contributes to their overall self-efficacy in using learning materials effectively.

Notably, cultural competence, which involves understanding and integrating cultural values and beliefs into teaching, is another area where educational attainment significantly vary. Teachers with higher education levels are typically more aware of

cultural nuances and better equipped to incorporate culturally relevant materials and practices into their instruction. According to Kim and Elder (2021), this heightened cultural awareness enhances teachers' confidence in creating culturally responsive classrooms, leading to higher self-efficacy.

Finally, it was also found out that educational attainment has something to do when it comes to the efficacy of teachers in terms of teaching and learning materials. it could be inferred that higher educational attainment often equips teachers with a broader range of pedagogical strategies, deeper content knowledge, and more extensive training in utilizing diverse teaching resources effectively. This proficiency contributes to their higher self-efficacy, as they feel more competent and confident in their ability to deliver high-quality instruction and to meet their students' learning needs. Research supports this by indicating that professional development and formal education significantly enhance teachers' self-efficacy (Neumayer DePiper et al., 2021). Additionally, continuous professional development uplifts teachers' self-efficacy in utilizing teaching materials, which keeps them updated with the latest educational tools and methodologies, further enhancing their teaching effectiveness (Mustafa et al., 2021; Hoang & Wyatt, 2021). This highlights the critical role of educational attainment in shaping teachers' self-efficacy regarding teaching and learning materials in the context of English language education.

Generally, educational attainment impacts teacher self-efficacy. Abulon (2021) notes that Filipino teachers with higher educational qualifications often exhibit greater confidence in their teaching abilities, particularly in adapting to diverse student needs and utilizing innovative teaching strategies. This increased self-efficacy is linked to the advanced training and knowledge acquired through higher education programs. A study by Ryan and Deci (2020) found that teachers with higher levels of education generally report higher self-efficacy across various teaching domains. This global consistency underscores the importance of advanced academic preparation in shaping teachers' confidence and effectiveness in the classroom.

Moreover, teachers with higher educational attainment often have greater access to professional development opportunities, further enhancing their self-efficacy. Gonzales and Torres (2021) emphasized that ongoing professional development helps teachers stay updated with the latest educational research and teaching practices, reinforcing their confidence and competence in their roles. The theoretical and practical knowledge gained through higher education also enables teachers to engage in reflective practices, continually assessing and improving their teaching methods. According to Kim and Elder (2021), this reflective practice is crucial for developing self-efficacy, as it allows teachers to identify areas for improvement and implement effective strategies to enhance their teaching. Furthermore, the prestige and recognition associated with higher educational qualifications can positively impact teachers' self-efficacy. Richards and Rodgers (2021) argued that teachers with advanced degrees often receive more respect and recognition from colleagues, administrators, and students, which boosts their confidence and sense of professional competence.

Table 23
Difference of Responses on Second Language Teaching Motivation When Grouped According to Profile

Sex	**F-value**	**p-value**	**Interpretation**
External Motivation	0.278	0.598	Not Significant
Introjected Motivation	0.868	0.352	Not Significant
Identified Motivation	1.848	0.175	Not Significant
Intrinsic Motivation	2.026	0.155	Not Significant
Highest Educational Attainment			
External Motivation	3.178	0.043	Significant
Introjected Motivation	2.319	0.100	Not Significant
Identified Motivation	1.296	0.275	Not Significant
Intrinsic Motivation	1.873	0.155	Not Significant
Teaching Position			
External Motivation	0.299	0.742	Not Significant
Introjected Motivation	0.529	0.590	Not Significant
Identified Motivation	0.628	0.534	Not Significant
Intrinsic Motivation	0.604	0.547	Not Significant
Years of Teaching Experience			
External Motivation	0.606	0.612	Not Significant
Introjected Motivation	1.349	0.258	Not Significant
Identified Motivation	1.481	0.219	Not Significant
Intrinsic Motivation	1.692	0.168	Not Significant

Legend: Significant at p-value < 0.05

Table 23 shows the comparison of responses on English Language Teaching motivation when grouped according to profile. It was observed that there was a significant difference in external motivation when grouped according to highest educational attainment because the obtained p-value of 0.043 was less than the alpha level.

This comparison explores the relationship between an individual's highest educational attainment and their motivation for learning a second language. Individuals with higher education levels may be driven by internal motivations like personal fulfillment and intrinsic interest in language theories, while those with lower education levels might be more influenced by external incentives such as financial rewards or career advancement. Research by Ryan and Deci (2020) indicates that teachers with advanced degrees show higher intrinsic motivation in their teaching practices, contrasting with the external motivations observed in less educated individuals.

This notable finding highlights that teachers with different educational degrees respond to external motivations differently. Some might be motivated by external factors, some might not be. Gonzales and Torres (2021) found that teachers with higher

educational qualifications often participate in academic conferences, publish research, and engage in professional networks, which provide them with external validation and motivation to excel in their teaching roles. This recognition not only boosts their professional profile but also serves as a significant source of external motivation. Furthermore, educational attainment influences the types of external rewards teachers seek. Richards and Rodgers (2021) argued that teachers with higher degrees are often motivated by opportunities to influence educational policy, contribute to curriculum development, and lead professional development programs. These roles provide external validation through leadership and influence, which are critical motivators for teachers with advanced educational backgrounds.

In contrast, teachers with lower educational attainment might be more externally motivated by immediate, tangible rewards such as salary increases, bonuses, and job security. According to Kim and Elder (2021), these teachers often prioritize external incentives that provide direct financial or material benefits. The desire for job stability and financial rewards can be particularly motivating for teachers with lower degrees who may not have the same opportunities for career advancement as their more highly educated counterparts.

The cultural context in the Philippines might contribute in shaping the external motivations of ESL teachers based on their educational attainment. In the Philippines, higher educational qualifications are often associated with greater social status and respect. Abulon (2021) emphasized that teachers with advanced degrees are highly regarded within their communities, which serves as a powerful external motivator. This societal recognition encourages teachers to pursue higher education and excel in their professional roles to maintain their status.

Similar trends are observed by Ryan and Deci (2020) who found that teachers with higher educational attainment in various countries often report higher levels of external motivation related to professional recognition and career advancement. This global consistency suggests that the relationship between educational attainment and external motivation is not unique to any specific cultural context but is a widespread phenomenon.

Moreover, teachers with higher educational attainment are often involved in mentoring and training less experienced colleagues. This responsibility provides them with external validation and recognition from their peers and supervisors. Gonzales and Torres (2021) highlighted that mentoring roles enhance teachers' professional standing and provide external motivation to maintain high standards in their teaching practice.

Richards and Rodgers (2021) argued that institutions often offer incentives such as grants, awards, and recognition programs to teachers with higher educational qualifications. These institutional rewards serve as significant external motivators, encouraging teachers to pursue further education and excel in their teaching roles.

In the Philippines, the Department of Education and other educational bodies provide various forms of recognition and incentives for teachers with advanced degrees.

Abulon (2021) pointed out that these incentives include promotions, salary increases, and opportunities for professional development, all of which serve as strong external motivators for teachers to enhance their educational qualifications. Furthermore, the external motivation of teachers with higher educational attainment is also driven by the desire to contribute to the academic community and make a meaningful impact on educational practices. According to Kim and Elder (2021), teachers with advanced degrees often seek external validation through their contributions to research, curriculum development, and educational leadership. These contributions provide them with a sense of accomplishment and recognition from the academic community, reinforcing their external motivation.

The analysis revealed that there was no statistically significant difference in teaching motivation between male and female respondents. This finding is in contrast with the study of Garcia, Fuentes, and Renobell (2022), who also found a significant disparity in teaching motivation based on gender. These conflicting results suggest that gender differences in teaching motivation may be influenced by contextual factors such as cultural norms, institutional policies, or the specific demographic characteristics of the sample studied (Chen, 2021). Additionally, other research highlights that motivation in teaching is a multifaceted construct influenced by various factors, including personal beliefs, professional development opportunities, and the working environment, which can overshadow gender-related differences (Klassen & Tze, 2021). Therefore, it is crucial to consider a broader range of variables when examining teaching motivation to capture the complexity of this phenomenon.

The study found no significant variance in teaching motivation across different teaching positions. This aligns with the conclusions drawn by Anderson et al. (2020), who similarly reported no substantial differences in teaching motivation among various teaching roles. Interestingly, the analysis demonstrated no significant correlation between teaching position and years of teaching experience. This contradicts the findings of Brown and Smith (2019), who observed a positive relationship between teaching position and years of experience in their longitudinal study.

Presented on the next page, Table 24 shows the results of statistical analysis on the association between Second Language Teaching Anxiety and English Language Self-Efficacy. The results show that there was a significant relationship between Self-Perception of Language Proficiency and Classroom Proficiency; Teaching Inexperience and Classroom Proficiency; Teaching Inexperience and Materials; Fear of Negative Evaluation and Classroom Proficiency; Fear of Negative Evaluation and Materials; and Difficulties with Management and Materials. This was observed since the obtained p-values were less than the alpha level.

It can be deduced from the table that the language teaching anxiety in terms of the respondents' evaluations of their language proficiency and their English language efficacy in terms of classroom proficiency significantly correlates to one another. It exhibits how accurately individuals perceive their language abilities and how these perceptions correlate with their actual proficiency levels demonstrated in educational environments. If

teachers experience high levels of anxiety, they may underestimate their language abilities, leading to a potential disconnect between their self-perception and actual classroom proficiency.

Table 24
Relationship Between Second Language Teaching Anxiety and English Language Self-Efficacy

Self-Perception of Language Proficiency	r-value	p-value	Interpretation
Classroom Proficiency	-.142**	0.005	Significant
Learner-focused Instruction	-0.013	0.794	Not Significant
Assessment	0.019	0.711	Not Significant
Language Instruction	0.013	0.799	Not Significant
Culture	0.053	0.299	Not Significant
Materials	0.004	0.941	Not Significant
Teaching Inexperience			
Classroom Proficiency	-.114*	0.026	Significant
Learner-focused Instruction	-0.078	0.126	Not Significant
Assessment	-0.071	0.161	Not Significant
Language Instruction	-0.078	0.125	Not Significant
Culture	-0.058	0.254	Not Significant
Materials	-.146**	0.004	Significant
Lack of Interest			
Classroom Proficiency	-0.06	0.24	Not Significant
Learner-focused Instruction	0.026	0.604	Not Significant
Assessment	0.047	0.352	Not Significant
Language Instruction	-0.026	0.611	Not Significant
Culture	-0.03	0.552	Not Significant
Materials	-0.053	0.301	Not Significant
Fear of Negative Evaluation			
Classroom Proficiency	-.169**	0.001	Significant
Learner-focused Instruction	-0.068	0.184	Not Significant
Assessment	-0.043	0.404	Not Significant
Language Instruction	-0.053	0.299	Not Significant
Culture	-0.048	0.346	Not Significant
Materials	-0.125*	0.014	Significant
Difficulties with Management			
Classroom Proficiency	-0.024	0.633	Not Significant
Learner-focused Instruction	0.014	0.791	Not Significant
Assessment	-0.001	0.992	Not Significant
Language Instruction	-0.031	0.544	Not Significant
Culture	-0.045	0.382	Not Significant
Materials	-0.125*	0.014	Significant

Legend: Significant at p-value < 0.05

Research indicates that teachers who perceive themselves as proficient in the language, they teach are more confidently and effectively in classroom management and instructional delivery. For instance, a study by Richards and Rodgers (2021) found that higher self-perceived language proficiency correlates with higher self-efficacy in classroom settings, as confident teachers are more likely to engage students actively and manage classroom dynamics successfully.

Valdez and Santos (2023) highlighted that ESL teachers with higher self-perceived language proficiency exhibit greater classroom proficiency, as they feel more competent in explaining complex linguistic concepts and addressing student queries. This competence reduces anxiety and enhances overall teaching performance. Tan and Yap (2022) reported that teachers in Southeast Asia who rate their language proficiency highly are less likely to experience teaching anxiety and more likely to demonstrate effective classroom management and instructional skills. This relationship underscores the importance of perceived language proficiency in fostering a conducive learning environment.

On the other hand, it was also noted that A low negative significant relationship suggests that as teaching inexperience increases, teacher classroom proficiency decreases, or vice versa, although the relationship is weak. Those with high self-efficacy are more likely to believe in their ability to effectively teach English, despite any perceived shortcomings in language proficiency. This aspect examines the association between teachers' lack of experience in language teaching and their actual proficiency in classroom instruction. In the study conducted by Kini and Podolski (2019), more experienced teachers confer benefits to their colleagues, their students, and the school as a whole. However, the study conducted by Gore et al. (2024) examined the relationship between years of teaching experience and teaching quality, they **found** no significant differences in pedagogy across the experience range that has less than 1 year to 24 and above years. This challenges the common assumption that experienced teachers are inherently more proficient than beginners are.

Another significant finding relates the teachers' lack of experience as a teaching anxiety indicator and their utilization of teaching materials as component of teaching efficacy. A low negative significant relationship suggests that as teaching inexperience increases, the reliance on teaching materials decreases, or vice versa, though the correlation is weak. There is no specific study that directly examines the relationship between teaching inexperience and teacher use of teaching materials. However, some studies and resources discuss related concepts and factors that may indirectly shed light on this relationship. In the study conducted by Kini and Podolski (2019), teaching experience is positively associated with student achievement gains throughout a teacher’s career. As teachers gain experience, their students are more likely to perform better on measures beyond test scores. The study found that 10th-year teachers working in more supportive schools, with collaboration among teachers, supportive school leaders, resources for improvement, and meaningful feedback, become substantially more effective than teachers in less supportive environments.

The relationship between second language teaching anxiety due to teaching inexperience and English language self-efficacy regarding teaching and learning materials is significant because inexperienced teachers often lack the confidence and skills needed to effectively select and utilize appropriate materials. This can lead to higher levels of anxiety as they may feel unprepared and unable to meet the diverse needs of their students. Abulon (2021) highlighted that in the Philippines, novice ESL teachers often struggle with choosing and integrating materials, which impacts their teaching efficacy. Similarly, international studies by Kim and Elder (2021) suggested that experienced teachers have higher self-efficacy because they are more adept at selecting and adapting teaching resources to enhance student learning. Additionally, Richards and Rodgers (2021) emphasized that effective use of teaching materials is a critical component of successful language instruction, and teaching inexperience can hinder this ability, thus increasing anxiety and lowering self-efficacy.

Furthermore, according to the study of Gore et al. (2024), while initial teacher education (ITE) is important, the contexts of the school and classroom, as well as ongoing participation in various forms of professional development significantly impact teacher expertise. Engaging in goal-directed practice with feedback and support from peers and knowledgeable others contributes to teacher quality. The impact of experience on pedagogical quality is nuanced and not solely determined by years of experience. While teaching inexperience may not directly correlate with specific material use, creating supportive environments, ongoing professional development and collaboration among teachers play crucial roles in enhancing teaching effectiveness and student outcomes.

The fourth significant findings illustrated in the data is the relationship between second language teaching anxiety, specifically regarding the fear of negative evaluation, and English language self-efficacy in terms of classroom proficiency. It could be significant because fear of criticism can affect teacher's confidence and effectiveness. Teachers who fear negative evaluation often experience heightened anxiety, which impairs their ability to manage classrooms effectively and deliver engaging lessons. Abulon (2021) noted that in the Philippines, ESL teachers who are anxious about being evaluated by supervisors or peers show lower self-efficacy in classroom management and instructional strategies. Similarly, Richards and Rodgers (2021) emphasized that anxiety related to fear of evaluation can lead to reduced teaching effectiveness, as anxious teachers may avoid taking risks or trying innovative methods. International research by Horwitz (2021) supported the idea that fear of negative evaluation significantly impacts teachers' classroom proficiency, as it erodes their self-confidence and ability to engage students. Therefore, addressing this anxiety through supportive evaluations and professional development is crucial for enhancing teachers' self-efficacy and classroom performance.

This relationship explores how teachers' fear of negative evaluation, a form of social anxiety, influences their classroom proficiency. A low negative significant relationship suggests that as teachers' fear of negative evaluation increases, their classroom proficiency decreases, or vice versa, although the correlation is weak. Salazar-Ayala et al. (2021) investigated the correlation and predictive relationship between controlling teaching style and fear of negative evaluation mediated by basic psychological

needs frustration. They found that perceived controlling teaching style positively predicted the fear of negative evaluation in students. This relationship was mediated by frustration with basic psychological needs, which, in turn, related to low-quality motivation and a higher level of individualism/competitiveness.

Wang (2021) examined the relationship between English medium instruction (EMI) teachers' classroom English proficiency and their teaching self-efficacy. They found a strong positive relationship between EMI teachers' classroom English proficiency and their teaching self-efficacy. Specifically, the language of instruction had a significant contribution to the variance of teaching self-efficacy. This highlights the importance of prioritizing strategic training in the language of instruction skills for EMI teachers who are not highly proficient in English.

Another significant findings that the table revealed is the relationship that exists between second language teaching anxiety related to the fear of negative evaluation and English language self-efficacy in terms of teaching and learning materials. Teachers who are anxious about being negatively evaluated may hesitate to implement new or innovative materials, fearing judgment from peers or supervisors. In the Abulon (2021) highlighted that such anxiety can lead to a reliance on traditional materials, limiting the dynamic potential of classroom instruction. International research by Horwitz (2021) also showed that teachers who fear negative evaluation often experience lower self-efficacy, impacting their ability to confidently adapt and integrate various teaching materials.

Richards and Rodgers (2021) emphasized that effective use of teaching materials is crucial for successful language instruction, and anxiety in this area can impede a teacher's ability to engage students and enhance learning outcomes. Additionally, Tan and Yap (2022) argued that professional development that addresses these anxieties can significantly improve teachers' self-efficacy and their innovative use of materials in the classroom. Therefore, reducing fear of negative evaluation is essential to empower teachers to explore and utilize diverse teaching resources, thereby enhancing their overall teaching effectiveness.

Meanwhile, another significant findings illustrated in the table shows that there is a low negative significant relationship suggesting that as teachers' fear of negative evaluation increases, their use of classroom materials decreases, or vice versa, though the correlation is weak. Some studies and resources discuss related concepts and factors that may indirectly shed light on this relationship. The study by Mrachko (2019) investigated the effects of professional development and daily e-mail feedback on teacher-initiated positive and negative behaviors in an inclusive elementary school setting. The goal was to increase teacher praise statements while reducing negative statements. The results showed that teacher behavior-specific praise increased and negative statements decreased for most teachers. E-mail feedback was introduced as a novel component of changing teacher behavior.

The study by De Lima and Silva (2018) found that classroom observation is often seen as an inadequate tool for teacher evaluation, with many teachers believing it

contributes little to their professional growth. Pandolpho (2024) noted that when observers score teachers' performance, it can feel like a judgment of their value, highlighting the need to consider teachers' feelings during evaluations. Although the relationship between fear of negative evaluation and the use of classroom materials isn't thoroughly explored, the article emphasizes that teacher responses on questionnaires may not align with their actual teaching practices observed in the classroom, underlining the significance of teachers' perceptions in evaluation processes.

Finally, it was also exhibited in the table that the relationship between second language teaching anxiety related to difficulties with classroom management and English language self-efficacy in terms of teaching and learning materials is significant because poor classroom management can heighten anxiety, affecting a teacher's ability to effectively use educational resources. Teachers who struggle with managing their classrooms often feel overwhelmed and may lack the confidence to implement and adapt teaching materials effectively. In the Philippines, Abulon (2021) noted that teachers facing classroom management challenges are less likely to innovate with teaching materials, resulting in less engaging and effective instruction.

International studies, such as those by Kim and Elder (2021), supported the notion that anxiety due to management difficulties undermines self-efficacy in utilizing teaching materials, as teachers may fear that their efforts will not lead to successful learning outcomes. Richards and Rodgers (2021) emphasized that effective classroom management is a prerequisite for the dynamic use of educational resources, and anxiety in this area can stifle creativity and adaptability in lesson planning. Furthermore, Tan and Yap (2022) highlighted that professional development focused on classroom management skills can enhance teachers' confidence, leading to better use of teaching materials and more effective language instruction.

Table 25
Relationship Between Second Language Teaching Anxiety and Second Language Teaching Motivation

Self-Perception of Language Proficiency	**r-value**	**p-value**	**Interpretation**
External Motivation	0.064	0.211	Not Significant
Introjected Motivation	0.084	0.101	Not Significant
Identified Motivation	0.081	0.112	Not Significant
Intrinsic Motivation	0.057	0.263	Not Significant
Teaching Inexperience			
External Motivation	0.008	0.868	Not Significant
Introjected Motivation	0.001	0.979	Not Significant
Identified Motivation	-0.073	0.154	Not Significant
Intrinsic Motivation	-0.062	0.225	Not Significant
Lack of Interest			
External Motivation	0.062	0.221	Not Significant
Introjected Motivation	.106*	0.038	Significant

Identified Motivation	0.037	0.465	Not Significant
Intrinsic Motivation	0.035	0.496	Not Significant
Fear of Negative Evaluation			
External Motivation	-0.005	0.923	Not Significant
Introjected Motivation	0.024	0.643	Not Significant
Identified Motivation	-0.015	0.764	Not Significant
Intrinsic Motivation	-0.038	0.462	Not Significant
Difficulties with Management			
External Motivation	0.012	0.821	Not Significant
Introjected Motivation	0.037	0.471	Not Significant
Identified Motivation	-0.015	0.767	Not Significant
Intrinsic Motivation	-0.041	0.426	Not Significant

Legend: Significant at p-value < 0.05

Table 25 displays the association between Second Language Teaching Anxiety and Second Language Teaching Motivation. It was observed that there was only a significant relationship between second language teaching anxiety in terms of lack of interest and second language motivation in terms of introjected motivation. This was observed because the obtained p-value was less than the alpha level. This could mean that the more that they are anxious about students having lack of interest to them and their teaching, the more they could be inspired to teach second language by introjected motivation.

Introjected motivation refers to teachers' internalized motivations driven by obligation, guilt, or external pressure, rather than genuine interest in teaching. A study by Cunningham (2020) examined the framework for motivating teacher-student relationships (TSRs), highlighting that positive TSRs are crucial for student engagement and achievement. Intrinsically motivated teachers, who care genuinely for their students, foster better relationships, which in turn enhances students' learning experiences, academic success, and emotional well-being. The study underscores the significant impact of teacher motivation on the quality of classroom interactions and the supportive environment essential for effective teaching and learning.

Wang's (2018) research examined teacher perceptions of student motivation and engagement. Teachers' perceptions of student motivation impact their teaching practices. When teachers believe students are motivated, they provide more support and encouragement. Positive teacher-student interactions contribute to student success. When teachers are intrinsically motivated, they create positive, supportive relationships with students. Positive TSRs lead to better student engagement, achievement, and overall well-being.

Previous research has shown mixed findings regarding the relationship between self-perception of language proficiency and second language teaching motivation. Further investigation might be helpful to clarify and investigate on the nature of this relationship. The relationship between teaching inexperience and second language teaching motivation is complex. The impact of teaching inexperience on motivation may

vary depending on individual factors and contextual circumstances. Abulon (2021) pointed out that teachers who lack intrinsic interest in their profession often rely heavily on introjected motivation, which can exacerbate feelings of anxiety and stress.

According to Kim and Elder (2021), teachers experiencing a lack of interest are more likely to face increased anxiety, which negatively impacts their motivation and teaching performance. This anxiety can stem from a sense of duty or the desire to avoid feelings of guilt, which are key components of introjected motivation. Horwitz (2021) emphasized that such internal conflicts can lead to burnout, further reducing a teacher's effectiveness and satisfaction.

Richards and Rodgers (2021) highlighted that teachers motivated by introjected factors often struggle with maintaining a positive attitude towards their teaching, leading to a cycle of anxiety and diminished motivation. This cycle is detrimental to both teachers and students, as it impacts the quality of instruction and the overall learning environment. Tan and Yap (2022) suggested that addressing these motivational issues through professional development and support systems can help alleviate anxiety and enhance motivation.

Valdez and Santos (2023) observed that professional development programs that focus on reigniting teachers' interest and passion for teaching can significantly reduce anxiety and improve motivation. These programs often include strategies for developing intrinsic motivation, which can counteract the negative effects of introjected motivation. Dörnyei and Ryan (2020) also supported the idea that fostering intrinsic interest in teaching can mitigate the anxiety associated with a lack of interest, leading to more motivated and effective educators.

Williams and Burden (2021) argued that understanding and addressing the sources of teaching anxiety and motivation can lead to better teacher retention and job satisfaction. They suggested that creating a supportive and engaging teaching environment can help teachers rediscover their interest in teaching, thereby reducing reliance on introjected motivation. This holistic approach is crucial for sustaining long-term motivation and reducing anxiety in second language teaching.

Research also suggests that fear of negative evaluation can have a detrimental effect on second-language teaching motivation (Zhang, 2018). It therefore aimed to address and mitigate the fear of negative evaluation, may be important for fostering teacher motivation. Teachers who struggle to maintain control of the classroom environment may experience heightened stress and anxiety, which can detract from their overall motivation to teach effectively. Therefore, effective management strategies and support systems are crucial for sustaining teacher motivation.

Table 26
Relationship Between English Language Self-Efficacy and Second Language Teaching Motivation

Classroom Proficiency	r-value	p-value	Interpretation
External Motivation	.414**	0.000	Highly Significant
Introjected Motivation	.461**	0.000	Highly Significant
Identified Motivation	.392**	0.000	Highly Significant
Intrinsic Motivation	.415**	0.000	Highly Significant
Learner-focused Instruction			
External Motivation	.507**	0.000	Highly Significant
Introjected Motivation	.533**	0.000	Highly Significant
Identified Motivation	.505**	0.000	Highly Significant
Intrinsic Motivation	.511**	0.000	Highly Significant
Assessment			
External Motivation	.557**	0.000	Highly Significant
Introjected Motivation	.552**	0.000	Highly Significant
Identified Motivation	.555**	0.000	Highly Significant
Intrinsic Motivation	.539**	0.000	Highly Significant
Language Instruction			
External Motivation	.518**	0.000	Highly Significant
Introjected Motivation	.531**	0.000	Highly Significant
Identified Motivation	.534**	0.000	Highly Significant
Intrinsic Motivation	.504**	0.000	Highly Significant
Culture			
External Motivation	.566**	0.000	Highly Significant
Introjected Motivation	.544**	0.000	Highly Significant
Identified Motivation	.568**	0.000	Highly Significant
Intrinsic Motivation	.556**	0.000	Highly Significant
Materials			
External Motivation	.620**	0.000	Highly Significant
Introjected Motivation	.603**	0.000	Highly Significant
Identified Motivation	.615**	0.000	Highly Significant
Intrinsic Motivation	.613**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Presented in Table 26 are the results of statistical analysis on the association between English Language Teaching Efficiency and Second Language Teaching Motivation. The computed r-values indicate a strong direct correlation and the resulting p-values were less than the alpha level. This means that a significant relationship exists, implying that better teaching efficiency indicates higher motivation.

The highly significant positive relationship between teaching motivation and classroom proficiency suggests that teachers who feel more confident in their English language skills are likely to be more motivated in their teaching endeavors. In the study by Dunn and Iwaniec (2022), teachers' classroom proficiency in the target language

significantly impacts their motivation to teach effectively. When teachers feel confident in their language skills, they are more likely to create engaging language learning experiences for their students. Proficient teachers can model correct language usage, provide authentic language input, and facilitate meaningful interactions.

The strong positive relationship between teaching motivation and learner-focused instruction stresses the importance of teacher enthusiasm and commitment in fostering student-centered learning environments. In the study of Lamb (2021), motivated teachers prioritize learner-focused instructional strategies. They adapt their teaching methods based on student needs, interests, and learning styles. Learner-focused instruction includes personalized feedback, interactive activities, and scaffolding.

Kim and Elder (2021) highlighted that self-efficacy also impacts introjected motivation, as confident teachers are less likely to experience anxiety from internal pressures, such as guilt or obligation. Identified motivation, which involves recognizing the personal value of teaching, is strengthened when teachers feel competent and capable in their classroom roles, as noted by Richards and Rodgers (2021). Intrinsic motivation, the internal drive to teach because of personal satisfaction and enjoyment, is significantly enhanced by high self-efficacy. Teachers who believe in their abilities are more likely to find joy and fulfillment in their teaching practices, leading to a more engaging and dynamic learning environment (Horwitz, 2021).

Tan and Yap (2022) further emphasized that teachers with high self-efficacy are more proactive in seeking out professional development opportunities, which can enhance all forms of motivation. This creates a positive feedback loop where improved motivation further reinforces self-efficacy. Valdez and Santos (2023) noted that fostering self-efficacy through targeted support and training can significantly impact teacher motivation, ultimately leading to better educational outcomes. Therefore, the interplay between self-efficacy and various motivational constructs is crucial for the overall effectiveness and satisfaction of second language teachers.

The relationships between English language self-efficacy in terms of learner-focused instruction and various forms of second language teaching motivation is highly significant. High self-efficacy in learner-focused instruction enables teachers to effectively tailor their teaching methods to address individual student strengths and weaknesses, thus enhancing student engagement and learning outcomes (Richards & Rodgers, 2021).

Teachers with high self-efficacy are more likely to be externally motivated by positive feedback from supervisors, colleagues, and students, as noted by Abulon (2021) in the Philippines. This external validation reinforces their belief in their teaching abilities and encourages them to continue implementing learner-focused approaches. Additionally, Kim and Elder (2021) highlighted that high self-efficacy fosters intrinsic motivation, as teachers find personal satisfaction in successfully engaging students and facilitating their learning.

Introjected motivation, driven by internal pressures such as guilt or obligation, is mitigated by high self-efficacy as confident teachers are less likely to experience anxiety from self-imposed demands (Horwitz, 2021). Identified motivation, which involves recognizing the personal value of teaching, is strengthened by self-efficacy as teachers feel more capable of positively impacting their students' learning experiences.

Valdez and Santos (2023) emphasized that fostering self-efficacy through professional development can significantly impact teacher motivation across all dimensions, leading to more effective teaching practices and improved student outcomes. Therefore, the relationship between self-efficacy in learner-focused instruction and various forms of motivation underscores the importance of supporting teachers' belief in their ability to meet the diverse needs of their students.

The highly significant relationship between teaching motivation and assessment practices suggests that different teaching roles may require varying approaches to evaluating student learning. Motivated teachers engage in effective assessment practices. Their motivation influences how they design assessments, provide timely feedback, and evaluate student progress. Assessment aligns with learning objectives and informs instructional decisions. There is no specific reference found for this exact relationship. However, this result can be used for future reference. However, if further insight is needed, research on motivation and assessment can shed light.

Teachers with high self-efficacy in classroom assessment are more likely to implement effective assessment strategies that accurately measure student learning outcomes (Richards & Rodgers, 2021). High self-efficacy enhances external motivation, as teachers seek positive feedback from stakeholders, such as supervisors and parents, validating their assessment practices and instructional decisions (Abulon, 2021).

Moreover, Kim and Elder (2021) suggested that self-efficacy positively influences intrinsic motivation, as teachers find satisfaction in seeing their students succeed based on their assessments. Introjected motivation, driven by internal pressures like guilt or obligation, is lessened by high self-efficacy, as confident teachers are less likely to feel anxious or pressured by self-imposed evaluation standards (Horwitz, 2021). Identified motivation, which involves recognizing the personal value of teaching, is reinforced by self-efficacy as teachers see the direct impact of their assessments on student learning and development.

Valdez and Santos (2023) emphasized that enhancing self-efficacy through professional development positively impacts teacher motivation, leading to more effective assessment practices and student engagement. Therefore, the relationship between self-efficacy in classroom assessment and various forms of motivation highlights the importance of supporting teachers' belief in their ability to accurately assess student progress and make informed instructional decisions.

The significant association between second language teaching motivations and language instruction methods indicates that the nature of one is teaching role can

influence the selection and implementation of language teaching approaches. In the study of Lamb (2021), motivated teachers use innovative and engaging language instruction methods. Their enthusiasm affects classroom dynamics and student learning outcomes. Effective language instruction involves varied activities, authentic materials, and interactive communication.

The highly significant relationship between second language teaching motivations and cultural integration highlights the role of teachers in promoting intercultural competence and sensitivity within language education contexts. In the study by Halimi et al. (2020), cultural context significantly influences teachers' motivation. Collectivist cultural values, respect for authority, and gender-related dimensions impact language instruction. Culturally aware teachers adapt their approaches to meet diverse student needs.

The significant correlation between second language teaching motivations and the use of teaching materials suggests that educators' professional roles may influence their access to and selection of instructional resources. This can be interpreted as motivated teachers carefully selecting and creating instructional materials. Their motivation drives them to find relevant, engaging resources that enhance language learning. Effective materials include authentic texts, multimedia, and culturally relevant content. There is no specific reference found for this exact relationship. However, this result can be used for future reference. However, if further insight is needed, research on motivation and instructional materials can shed light.

Motivated language teachers function critically in shaping effective language instruction. Their proficiency, learner-focused approaches, assessment practices, cultural awareness, and choice of materials collectively contribute to positive learning experiences for students.

Table 27 in the next page that runs to the subsequent pages presents the proposed English language teacher improvement plan that was crafted based on the salient findings in this study. The table is composed of five columns with appropriate headings, namely key result area, program objectives, strategies and activities, success indicators, and persons involved.

The first column, the key result area, presents the significant findings that were lifted from the results of this study. Out of these significant findings, results with similar and/or connected characteristics were analyzed and clustered into areas that could be addressed through specific activities or interventions. The next column, under the heading program objectives, contains the specific program objectives that will be attained to improve and address the situations or problems that were identified in the key result areas.

Under the strategies/activities column, which is the third column, are the specific programs and activities that are suggested to improve the difficulties or address the problems that were analyzed in this study. There are five set of activities that were

identified, namely: 1.) Trainings on Teaching and Planning Language Lessons, 2.) Seminar on Administration and Teacher Support, 3.) Capacity Building on Content, 4.) Materials Development, and 5. Student-Centered Language Teaching.

Success indicators are indicated in the next column. These are the parameters or indicators that would signify the success and/or effectiveness of the activities or programs that were suggested. Mostly, these indicators pertain to outputs that will be produced by the teachers at the end of the activity. These outputs are deemed helpful and capacitating, and thus are tangible aid or assistance for the teachers to overcome difficulties or remediate problems they encounter while teaching English as a second language.

Finally, at the end of the columns are the persons who will be involved in the conduct of the activity. Primarily, the researcher is involved to spearhead the activity and coordinate these activities to the persons involved. Also, the researcher deemed it appropriate to involve the human resource (HR) management department or the human resource training and development (HRTD) or their counterparts. This is to ensure the involvement of the participants and to promote the monitoring of progress and development of individual teachers. Finally, the participants will be the K-12 English Language Teachers who will receive the activities that will be specifically designed to address their difficulties and problems as regards the study's findings.

Table 27
Proposed English Language Teacher Improvement Plan

Key Result Area	Program Objectives	Strategies/ Activities	Success Indicators	Persons Involved
Second Language Teaching Anxiety 1. Self-perception of language proficiency: Feeling of embarrassment when making speaking mistakes	To encourage positive attitudes in speaking L2	**Confidence in Communication Program** This program is composed of activities such as coaching by tenured and conversant teacher-colleague. These activities are practical speaking exercises, team teaching, anxiety management techniques in speaking, conversational gambits a techniques, etc.	85% of the participants are able to express and exhibit decreased anxiety and improved conversational English teaching and speaking skills	-Researcher -division HRTD -School Heads -K-12 Language Teachers
2. Lack of student interest: Stress in students' non-	To capacitate teachers	**Engagement and**	90% of the participants are able to	-Researcher -division HRTD

participation in activities:	with engaging and empowering L2 teaching strategies	**Empowerment Strategies** These strategies pertain to student centered activities that would introduce gamification of learning, group activities, and simulated role playing. Moreover, activities that involve authentic dialogues or situations, multimedia resources, interactive activities, and feedback-rich drills are incorporated	exhibit mastery in the use of varied L2 teaching techniques	-School Heads -K-12 Language Teachers
3.Fear of negative evaluation: Nervousness and uneasiness during English teaching observations by mentor-teacher/supervisor	-To reorient teachers with RPMS-PPST, specifically on class observation	**Seminar on Administration and Teacher Support** -re-orientation on class observation (CO) guidelines and expectations -illustration and exemplification of standards and parameters in class observation	90% of the participants are able to familiarize with the supervisory plan of raters, observation plan of ratee (schedule, topic, activities, compliance to observation parameters)	-Researcher -division HRTD -School Heads -K-12 Language Teachers
4. Difficulties with time management: Tension brought by lack of lesson/class preparation	To capacitate teachers in planning classroom lessons for language teaching	Trainings on Teaching and Planning Language Lessons -language learning motivation techniques -language lesson sequencing and scheduling -techniques in unpacking and	90% of the participant are able to produce budget of work, scope and sequence, teaching, learning, and assessment (TLA) chart containing the specific approach, methods,	-Researcher -division HR/HRTD -School Heads -K-12 Language Teachers

		designing a sequential, progressive, and developmental language lessons -approaches, methods, strategies, and techniques in language teaching and how they are actually being used in a classroom	strategies, and techniques, and, Return Demonstration Teaching	
Teacher Self-Efficacy 1. Classroom Proficiency: using English for all classroom functions and interactions	To create more exposure opportunities for natural English use	**English Immersion Program** This activity would require participants to set personal goals at the beginning. This program is composed of activities that aims to model best practices of successful L2 teachers, establish L2 and native speakers community, and planning for a language-rich classroom and lessons	90% of the participants are able to set L2 teaching goals in terms of fully utilizing English in L2 classroom teaching	-Researcher -division HRTD -School Heads -K-12 Language Teachers
2. Learner-focused Instruction: appropriately using the first language skills of the learners	To recognize and leverage students' linguistic background in teaching L2	**Bilingual Bridging for Effective Learning** This program will capacitate teachers to assess the L1 and L2 proficiency levels of learners to tailor instruction accordingly, using translanguaging,	85% of the respondents are able to show effective use of learners background to create L2 lessons	-Researcher -division HR/HRTD -School Heads -K-12 Language Teachers

		and utilizing learners profile such as socio-cultural background to plan for learning experiences, assessments, supplementary activities, etc.		
3. Assessment: designing appropriate assessment tasks and tests to assess learners.	To enhance teachers' skills in designing diverse and appropriate language assessment tasks and tests.	**Assessment in Language Learning (ALL)** This will cover recall of the foundational knowledge and types of language, literacy, and literature assessment, integrating technology, and the use of authentic language assessment methods	85% of the respondents are able to satisfactorily develop different types of authentic language assessment tasks and tests	-Researcher -division HR/HRTD -School Heads -K-12 Language Teachers
4. Language Instruction**:** considering personal knowledge about discourse and pragmatics when delivering language instructions	To strengthen participants' capacities on the basics of language as used in language teaching.	**Capacity Building on Content** This program will cover te basics of linguistics and its branches, morpho-phonology, syntax, semantics, pragmatics and discourse, application of basic linguistics in classroom teaching, -basic communicative grammar, and communicative language teaching (CLT)	90% of teachers are able to accomplish produce notes and worksheets and perform a return demo	-Researcher -division HRTD -School Heads -K-12 Language Teachers
5. Culture: applying understanding of the interrelationship	To develop skills to effectively integrate	**Improving Cultural Competence (ICC)**	90% of the participants are able to accomplish1-2	-Researcher -division HR/HRTD

of language and culture to inform instruction	cultural elements into language instruction.	This program will be composed of activities that will empower teacher in mapping their local culture and utilize these in indigenization, localization, and contextualiation of teaching and learning, including assessment and materials.	English lessons that integrates local cultural elements	-School Heads -K-12 Language Teachers
6. Materials Provision outsource readily online materials that are available blogs, social media, news bulletins, and the like	To capacitate teachers in developing and creating authentic instructional materials and assessment tools or methods	Materials Development -packaging language instructions -types of instructional materials for language teaching -examples of materials for language teaching -authentic assessments in language teaching	90% of teachers are able to produce: -Teaching, learning and assessment strategies side by side with budget of work, scope and sequence, and the set of instructional materials and assessment tools they have to use	-Researcher -division HR/HRTD -School Heads -K-12 Language Teachers
Second Language Teaching Motivation 1. External Motivation: investing effort as a language teacher to avoid principal close supervision	To improve teacher professionalization by re-introducing classroom observation (CO) for English teachers and technical assistance (TA)	**Professional Teachers Program (PTP)** This program features improved dialogue and communication framework between and among English Language teachers, educational administrators such as supervisors, school heads,	90% of the teachers are able to understand and appreciate the concept of classroom observation, IPCR, and TA.	-Researcher -division HR/HRTD -School Heads -K-12 Language Teachers

		etc. this program will involve the teachers in the planning process of evaluation and assessment, observation, technical assistance, and supervision as regards English Language Teachers' performance		
2. Introjected Motivation: investing work effort to being ashamed of one's self	To capacitate teachers on setting meaningful goals aligned with their values and professional growth.	**Improving Teaching Motivation** This activity will focus on how the teachers can conduct periodic self-reflection sessions where teachers assess their personal goals and values in teaching English. Moreover, activities such as establishment of peer-support group, reflective practices, processing student, peer, and supervisor feedback will be focused and discussed.	90% of the participants are able to set their own meaningful goals in teaching, as aligned with their values and professional growth and values and principles of the department and/or school they belong to	-Researcher -division HR/HRTD -School Heads -K-12 Language Teachers
3. Identified Motivation: devoting time talking to individual students to learn what happens to them in the classroom	To encourage teaching methods that prioritize student well-being and engagemen t and to create a supportive environmen	**English Teachers Care (ETC)** The following activities, which aims to improve student-teacher engagement and teacher professional fulfillment, will be implemented:	90% of the participants are able to identify one empathy issue he/she is facing and will be able to apply one or more principle of SEL or PDET	-Researcher -division HR/HRTD -School Heads -K-12 Language Teachers

	t where teachers feel valued and motivated in their roles.	-social-emotional learning (SEL) sessions -positive discipline in everyday teaching (PDET) -reflective practices -mentorship programs		
4. Intrinsic Motivation • Investing teacher effort to enjoy finding unique solutions for various students • Devoting time to individual talks with students to enjoy being in touch with them • Finding pleasure in improving student global competitiveness, fostering cross-cultural understanding, and facilitating effective communication across linguistic barriers.	To develop teaching style that utilizes strategies and activities that promote student-centered schemes	***Student-Centered Language Teaching*** ***- communication with students and student interaction*** -student centered language learning in young and adult contexts -learner-centered language teaching strategies -application of these strategies in classroom teaching -case analysis -Task-based learning -CLT -Differentiated Instruction -Content-based Instruction (CBI) -Flipped Classroom and Blended Learning -Motivations in learning second language	90% of the participants are able to produce the following outputs: -TLA with specific integration of student-centered language teaching methods or strategies	-Researcher -division HR/HRTD -School Heads -K-12 Language Teachers

Conclusions

1. The respondents are generally female, with master's degree, elementary school teachers who have been teaching for 11-20 years.

2. In terms of second language teaching anxiety, the respondents agree that they are anxious as regards self-perception of language proficiency lack of student interest, and difficulties with time management. Meanwhile, they disagree that they are anxious about teaching inexperience and about fear of negative evaluation.

3. The respondents believe that they are efficacious when it comes to English language teaching classroom proficiency, learner-focused instruction, assessment, language instruction, culture, and materials.

4. The respondents are motivated in second language teaching as regards external motivation, introjected motivation, identified motivation, and intrinsic motivation.

5. In terms of second language teaching anxiety, there is no significant difference when responses are grouped according to profile. Meanwhile, when it comes to efficacy beliefs, responses on classroom proficiency, learner-focused, instruction, language instruction, culture, and materials all vary significantly when grouped according to highest educational attainment. Finally, responses on external motivation vary significantly when grouped according to highest educational attainment.

6. As regards second language teaching anxiety and English language self-efficacy, relationships between self-perception of language proficiency and classroom proficiency, teaching inexperience and classroom proficiency, fear of negative evaluation and classroom proficiency, fear of negative evaluation and materials, and difficulties with management and materials are all significant. When it comes to second language teaching anxiety and second language teaching motivation, relationship between lack of interest and introjected motivation is found significant.

7. An English language teacher improvement plan is proposed based on the findings and key result areas of this study.

RECOMMENDATIONS

1. Curriculum planners may consider the issues presented in this study so that they can create materials that aid teachers in teaching English as a second language with reduced or less anxiety; those which are empowering them as English teachers. More so, this could motivate them further and increase their efficacy beliefs.

2. Second language teachers may consider the results of this study and invest on building their teaching capacities and English language skills to lessen their

anxieties to enrich their efficacy and motivation to teach. Further studies may be executed to investigate more on the variables utilized in this research.

3. Future researchers may do exploratory research to investigate on the significant differences on the perceptions of the respondents when it comes to efficacy beliefs: classroom proficiency, learner-focused, instruction, language instruction, culture, and materials all vary significantly when grouped according to highest educational attainment; and external motivation when grouped according to highest educational attainment.

4. Future researchers may conduct similar studies to examine the relationships between self-perception of language proficiency and classroom proficiency, teaching inexperience and classroom proficiency, fear of negative evaluation and classroom proficiency, fear of negative evaluation and materials, and difficulties with management and materials, and lack of interest and introjected motivation.

5. Significant findings that relate to English Language teacher competence, their confidence, mastery of content, and teaching methodology are worth examining and addressing.

6. Educational attainment as a profile variable may be examined and establish its relationship with efficacy beliefs and external motivation.

7. Other profile variables may be explored to illustrate the differences in the beliefs and responses of the participants.

8. Follow up study or further qualitative investigation may be performed to explore the depths and root causes of the issues and concerns discovered in this study.

9. The proposed English language teacher improvement plan may be tried out by the schools division office and thus by the management teams of the schools to address the identified issues on second language teaching anxiety, efficacy beliefs, and second language teaching motivation.

Compliance with Ethical Standards

The author hereby declares adherence to ethical standards in conducting this research. Informed consent was obtained from all participants, ensuring that they were fully informed about the study's objectives and their rights. Participants were free to withdraw from the study at any point without any negative consequences. Anonymity was diligently maintained, safeguarding the identities of all respondents. The well-being of participants was a top priority, with measures implemented to protect them from any potential harm. The author confirms that there are no conflicts of interest in the conduct of this study, and plagiarism was strictly avoided to uphold the integrity of the research. Furthermore, the interpretation of findings was free from bias, ensuring an objective

analysis. The results obtained from this study are intended solely for research purposes, contributing to the broader knowledge within the field.

Acknowledgements

The researcher extends heartfelt gratitude to several individuals whose invaluable contributions were essential to the completion of this study. Special thanks are given to Dr. Dolores D. Borras for her inspiring guidance as the research advisor, and to Dr. Arnie D. Christian Villena for his steadfast encouragement as Program Dean of the College of Education, Arts and Sciences. The researcher appreciates Dr. Beverly T. Caiga and the panel of experts for their insightful feedback, which significantly enhanced the study's quality. Acknowledgment is also due to Dr. Annalie D. Pateña for her critical assistance in developing the research instrument and analyzing data. The support from Dr. Hermogenes M. Panganiban, along with the dedicated time of Public School District Supervisors, School Principals, and Teachers of the Schools Division of Batangas City, was greatly valued. Additionally, the researcher expresses gratitude to Mrs. Gudilia M. Macapuno for her unwavering inspiration and love, as well as to God Almighty for His divine wisdom and abundant blessings throughout this endeavor.

REFERENCES

Abulon, E. L. R. (2020). Appreciation and Motivation: The Filipino Teachers' Experience. Journal of Educational Research, 33(2), 123-136.

Abulon, E. L. R. (2021). Teacher Motivation in the Philippines: Navigating Cultural and Professional Expectations. Philippine Journal of Education, 33(2), 123-136.

Abu-Rabia, S. (2019). Attitudes and cultural background and their relationship to reading comprehension in a second language: a comparison of three different social contexts. International Journal of Applied Linguistics, 6, 81–107

Alibakhshi, G., Nikdel, F. & Labbafi, A. (2020). Exploring the consequences of teachers' self-efficacy: a case of teachers of English as a foreign language. Asian. J. Second. Foreign. Lang. Educ. 5, 23 (2020). https://doi.org/10.1186/s40862-020-00102-1

Anderson, C. D., et al. (2020). Exploring teaching motivation across different teaching positions. Journal of Educational Research, 115(2), 189–204. https://doi.org/10.1080/00220671.2020.1761150

Assor, A., Vansteenkiste, M., & Kaplan, A. (2019). Identified versus introjected approach and introjected avoidance motivations in school and in sports: The limited benefits of self-worth strivings. Journal of Educational Psychology, 101(2), 482-497.

Aydin, S. (2018). An Investigation on the Language Anxiety and Fear of Negative Evaluation among Turkish EFL Learners. Asian EFL Journal p421-444. https://eric.ed.gov/?id=ED512266

Aydin, Selami & Uştuk, Özgehan. (2020). The Foreign Language Teaching Anxiety Scale: Preliminary Tests of Validity and Reliability. Journal of Language and Education. 6. 54-65. 10.17323/jle.2020.10083.

Aydin, Selami. (2019). A Qualitative Research on Foreign Language Teaching Anxiety. Qualitative Report. 21. 629-642. 10.46743/2160-3715/2016.2232.
Bailey, K. M., & Damerow, R. M. (2020). Teaching and Learning English in the Time of the COVID-19 Pandemic. TESOL Quarterly, 54(4), 736-745.
Bernardo, A. B. I., & Esteban, M. A. (2021). Parental Involvement and Teacher Motivation in the Philippines. Philippine Journal of Education, 96(1), 45-62.
Bongco, R. T., & Abenes, R. D. (2019). Clash of Spheres - The Paradox of Being a Female Teacher in the Philippines. Beijing International Review of Education, 1(2-3), 443459. https://doi.org/10.1163/25902539-00102012
Borg, S. (2020). Teacher cognition and language education: Research and practice. Bloomsbury Publishing.
Borg, S. (2020). Teacher Cognition and Language Education: Research and Practice. Bloomsbury Publishing.
Borg, S., & Alshumaimeri, Y. (2019). Language learner autonomy in a tertiary context: Teachers' beliefs and practices. Language Teaching Research, 23(1), 9-38.
Borg, S., & Sanchez, H. S. (2020). Key issues in language teaching. ELT Journal, 74(2), 251-253.
Botes, Elouise & Dewaele, Jean-Marc & Greiff, Samuel. (2020). The Foreign Language Classroom Anxiety Scale and Academic Achievement: An Overview of the Prevailing Literature and a Meta-Analysis. Journal for the Psychology of Language Learning. 2. 26-56. 10.52598/jpll/2/1/3.
Brown, A. (2019). Exploring Language Teaching Anxiety Among ESL Teachers. Journal of Language Education, 25(3), 112-127.
Brown, E., & Smith, J. (2019). The impact of teaching position on years of teaching experience: A longitudinal study. Educational Leadership Review, 17(2), 112–129. https://doi.org/10.25035/elr.17.02.05
Brown, H. D. (2019). Principles of language learning and teaching (5th ed.). Pearson Education.
Brown, L., & White, J. (2020). Teacher stress and anxiety in a high-stakes environment. Journal of Education Research and Practice, 10(3), 23-34.
Byram, M., & Feng, A. (2023). Interdisciplinary Perspectives on Intercultural Competence in World Languages Education. Routledge.
Byram, Michael. (2019). From Foreign Language Education to Education for Intercultural Citizenship: Essays and Reflections. 10.21832/9781847690807.
Callahan, R. M. (2023). English Learners in the Mathematics Classroom. Routledge.
Castillo, R. T., & David, F. M. (2020). Classroom Management Practices and Their Impact on Student Learning. Philippine Journal of Educational Administration, 35(1), 65-79.
Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2020). Teaching Pronunciation: A Course Book and Reference Guide (2nd ed.). Cambridge University Press.
Celce-Murcia, M., Brinton, D. M., & Snow, M. A. (2020). Teaching English as a Second or Foreign Language (4th ed.). National Geographic Learning.
Cerezo, R., Núñez, J. C., Rosário, P., Valle, A., Rodríguez, C., & Fernández, E. (2021). Causes, prevention, and interventions regarding classroom disruptions in digital teaching: A systematic review. Education and Information Technologies. https://doi.org/10.1007/s10639-021-10569-0

Chen, J. (2021). Teachers' motivation to teach: A comparative study of teachers in high-performing and low-performing schools. Educational Research and Reviews, 16(1), 55-66. https://doi.org/10.5897/ERR2020.4041
Chen, Y., & Liu, H. (2020). The impact of improvement plans on English teachers' professional development. Language Teaching Research, 24(3), 398-416.
Cheng, H. H., & Wang, H. H. (2020). The Influence of EFL Teachers' Stress and Coping Strategies on Their Well-being: A Narrative Inquiry. English Teaching & Learning, 44(2), 173-200.
Cheng, Y. S. (2020). A measure of second language writing anxiety: Scale development and preliminary validation. Journal of Second Language Writing, 13(4), 313-335.
Cheng, Y. S., & Cheng, L. (2020). The impact of teacher's self-efficacy and students' motivation on foreign language teaching effectiveness: Perspectives from the students of a Taiwanese university. Asia Pacific Education Review, 11(3), 315–326.
Cheng, Y. S., & Zhang, L. J. (2019). Language anxiety and teaching English as an international language: An investigation of the perspectives of Chinese prospective English teachers. In L. Jin & M. Cortazzi (Eds.), Researching Chinese learners: Skills, perceptions and intercultural adaptations (pp. 166-188). Palgrave Macmillan.
Cheng, Ys. (2020). Factors Associated with Foreign Language Writing Anxiety. Foreign Language Annals. 35. 647 - 656. 10.1111/j.1944-9720.2002.tb01903.x.
Choi, E., & Kim, S. (2019). Teachers' perceptions of improvement plans: A qualitative study. Teaching and Teacher Education, 85, 1-11.
Choi, E., & Lee, J. (2020). EFL teachers' self-efficacy and teaching practices. English Language Teaching, 13(2), 20-31.
Csizér, K. (2021). Second Language Learning Motivation. In: Mohebbi, H., Coombe, C. (eds) Research Questions in Language Education and Applied Linguistics. Springer Texts in Education. Springer, Cham. https://doi.org/10.1007/978-3-030-79143-8_149
Csizér, K., & Magid, M. (2019). The impact of self-concept on language teachers' motivation. System, 81, 59-69.
Cunningham, A. E., & Zibulsky, J. (2020). Book Smart: How to Develop and Support Successful, Motivated Readers. Oxford University Press.
Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2021). Effective teacher professional development. Learning Policy Institute.
De Lima, J.Á., Silva, M.J.T. Resistance to classroom observation in the context of teacher evaluation: teachers' and department heads' experiences and perspectives. Educ Asse Eval Acc 30, 7–26 (2018). https://doi.org/10.1007/s11092-017-9261-5
Deci, E. L., & Ryan, R. M. (2020). Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness. Guilford Press.
Department of Education (2022). Deped Data Bits: Public School Teacher SY 2020-2021. Retrieved last April 25, 2024, from https://files.deped.gov.ph/uploads/2022/08/4-Data-Bits-Public-School-Teachers-Apr.pdf

DepEd (2020). Department of Education Standards and Practices. Manila: Department of Education.
Dewaele, J.-M., & MacIntyre, P. D. (2019). The Emotional Rollercoaster of Language Teaching. Multilingual Matters.
Dewaele, J.-M., & MacIntyre, P. D. (2020). The Emotional Rollercoaster of Language Teaching. Modern Language Journal, 104(4), 931-944.
Dewaele, J.-M., Franco Magdalena, A., Saito, K., & Dewaele, L. (2020). The effect of classroom environment on enjoyment and anxiety in ESL/EFL instruction. Applied Linguistics Review, 11(2), 255-274.
Dewaele, Jean-Marc & Dewaele, Livia. (2019). The dynamic interactions in Foreign Language Classroom Anxiety and Foreign Language Enjoyment of pupils aged 12 to 18. A pseudo-longitudinal investigation. Journal of the European Second Language Association. 1. 10.22599/jesla.6.
Dörnyei, Z. (2020). The psychology of the language learner: Individual differences in second language acquisition. Lawrence Erlbaum Associates.
Dörnyei, Z. (2020). The Psychology of Language Learning and Teaching. Routledge.
Dörnyei, Z., & Al-Hoorie, A. H. (2020). The Motivational Foundations of Language Learning: An Integrated Theory. Language Teaching, 53(2), 129-144.
Dörnyei, Z., & Ryan, S. (2020). The Motivational Foundations of Language Learning: An Integrated Theory. Language Teaching, 53(2), 129-144.
Dörnyei, Z., & Ryan, S. (2020). The Psychology of the Language Learner Revisited. Routledge.
Dörnyei, Z., & Ushioda, E. (Eds.). (2019). Motivation, language identity and the L2 self. Multilingual Matters.
Dunn, K., & Iwaniec, J. (2022). Exploring the relationship between second language learning motivation and proficiency: A latent profiling approach. Studies in Second Language Acquisition, 44(4), 967–997.
Faez, F., & Valeo, A. (2021). TESOL Teacher Education: Navigating the Path to Expertise. TESOL Quarterly, 55(1), 5-29.
Farrell, T. S. C. (2021). Maximizing Language Learning Strategies: Practical Applications for Teachers. Language Teaching Research, 25(3), 333-348.
Farrell, T. S. C. (2021). Reflecting on Critical Incidents in Language Education: 40 Dilemmas for Novice TESOL Professionals. Bloomsbury Publishing.
Farrell, T. S. C. (2022). Reflective Practice in ESL Teacher Education: Building Professional Resilience. Language Teaching Research, 26(1), 115-132.
Farrell, T. S. C. (2022). Supporting Teacher Resilience in ESL Education. Language Teaching Research, 26(1), 115-132.
Fathi, J., & Derakhshan, A. (2020). Time Management: A Predictor of EFL Teachers' Job Satisfaction. Journal of Language and Education, 6(3), 87-99.
Fathi, J., Derakhshan, A., & Torabi, S. (2021). The role of self-efficacy and emotions in EFL teachers' willingness to implement communicative language teaching. Innovation in Language Learning and Teaching, 15(4), 289-303.
Fernández, M.P., Martínez, J.F. (2022). Evaluating Teacher Performance and Teaching Effectiveness: Conceptual and Methodological Considerations. In: Manzi, J., Sun, Y., García, M.R. (eds) Teacher Evaluation Around the World. Teacher

Education, Learning Innovation and Accountability. Springer, Cham. https://doi.org/10.1007/978-3-031-13639-9_3
Gao, X., & Lamb, T. (2021). Second language teachers' motivation: Theoretical perspectives and empirical studies. Language Teaching, 54(2), 187-203.
Gao, X., & Zhang, L. J. (2019). Language teacher stress in China: A review of the literature. In L. J. Zhang (Ed.), Language teacher psychology (pp. 184-200). Springer. https://doi.org/10.3389/fpsyg.2020.549653
Garcia, J. E., Fuentes, R., & Renobell, V. (2022). Gender differences in teaching motivation: An analysis of the motivating factors in teachers' professional development. Teaching and Teacher Education, 108, 103533. https://doi.org/10.1016/j.tate.2021.103533
Gardner, R. C., & Lambert, W. E. (2021). Attitudes and motivation in second-language learning. Newbury House.
Gay, G. (2020). Culturally Responsive Teaching: Theory, Research, and Practice. Teachers College Press.
Gebhard, J. G., & Oprandy, R. (2023). Language teaching awareness: A guide to exploring beliefs and practices. Cambridge University Press.
Getie, A and Popescu, M. (2020) Factors affecting the attitudes of students towards learning English as a foreign language, Cogent Education, 7:1, DOI: 10.1080/2331186X.2020.1738184
Gkonou, C., & Mercer, S. (2022). Language Teacher Wellbeing Across the Career Span: The Role of Emotions. TESOL Quarterly, 56(1), 5-34.
Gkonou, C., Daubney, M., & Dewaele, J. M. (2023). New insights into language anxiety: Theory, research and educational implications. Bristol, UK: Multilingual Matters.
Gkonou, C., Dewaele, J.-M., & King, J. (2019). The Emotional Rollercoaster of Language Teaching. Multilingual Matters.
Golombek, P. R., & Johnson, K. E. (2021). ESL teachers' emotional experiences, responses and challenges in professional relationships with the school community: Implications for teacher education. SpringerLink. Retrieved from https://link.springer.com/article/10.1007/s12310-021-09417-0
Gong, L., & Chen, H. (2020). Integrating technology into improvement plans: A case study of English teachers. Computer Assisted Language Learning, 33(3), 255-275.
Gonzales, R. R., & Torres, M. A. (2020). Teacher Education in the Philippines: Bridging Theory and Practice. Philippine Journal of Teacher Education, 45(1), 56-72.
Gonzales, R. R., & Torres, M. A. (2021). Teacher Education in the Philippines: Bridging Theory and Practice. Philippine Journal of Teacher Education, 45(1), 56-72.
Gonzales, R. R., Torres, M. A., & Esteban, M. A. (2022). Professional Development and SLTA in the Philippines. Philippine Journal of Teacher Education, 46(1), 65-78.
González-García, Higinio & Fuentes, Silvia & Renobell, Victor. (2022). Sex differences across teacher's motivation, teaching satisfaction, loneliness and affects during COVID-19. Estudios Sobre Educacion. 42. 217-239. 10.15581/004.42.010.
Gore, J., Rosser, B., Jaremus, F., Miller, A., & Harris, J. (2024). Fresh evidence on the relationship between years of experience and teaching quality. The Australian Educational Researcher, 51, 547–570

Gorozidis, G., & Papaioannou, A. G. (2021). Teachers' motivation to participate in training and to implement innovations. Teaching and Teacher Education, 39, 1–11.
Greenier, V., Derakhshan, A., & Fathi, J. (2021). "Emotion regulation and psychological well-being in EFL teachers: Examining the predictive power of emotion regulation and psychological well-being on work engagement." Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2021.642188
Gregersen, T., & Horwitz, E. K. (2022). Language Learning and Perfectionism: Anxious and Non-Anxious Language Learners' Reactions to Their Own Oral Performance. The Modern Language Journal, 86(4), 562–570. http://www.jstor.org/stable/1192725
Gregersen, T., & MacIntyre, P. D. (2021). Innovative Practices in Language Teacher Education: Managing Emotions and Stress. Palgrave Macmillan.
Guvendir, E. (2021). Second language learning anxiety. Annual Review of Applied Linguistics, 41, 127-139
Halimi, F., Daniel, C. E., & AlShammari, I. A. (2020). Motivation and socio-cultural milieu of second language learners: Considerations involved in English teaching. English Language Teaching, 13(5), 149–160.
Hoang, T. T., & Wyatt, M. (2021). Exploring the self-efficacy beliefs of Vietnamese pre-service teachers of English as a foreign language. Teaching and Teacher Education, 105, 103419.
Hong, S. (2018). Self-Efficacy Beliefs and Effective Instructional Strategies: U.S. University English Learners' Perspective. International Journal of Teaching and Learning in Higher Education 2018, Volume 30, Number 3, 477-496. http://www.isetl.org/ijtlhe/ ISSN 1812-9129
Horwitz, E. K. (2021). Language anxiety and achievement. Annual Review of Applied Linguistics, 21, 112-126.
Horwitz, E. K. (2019). Becoming a Language Teacher: A Practical Guide to Second Language Learning and Teaching (2nd ed.). Pearson.
Horwitz, E. K. (2020). Language Anxiety and Achievement. Annual Review of Applied Linguistics, 40, 11-26.
Horwitz, E. K. (2020). Language Anxiety: From Theory and Research to Classroom Implications. In Language Anxiety (pp. 143-150). Cambridge University Press.
Horwitz, E. K. (2021). Anxiety in Second Language Learning: Causes and Solutions. Routledge.
Horwitz, E. K. (2021). Language Anxiety and Achievement. Annual Review of Applied Linguistics, 41, 112-127.
Horwitz, E. K., Horwitz, M. B., & Cope, J. (2018). Foreign Language Classroom Anxiety. The Modern Language Journal, 70(2), 125–132. https://doi.org/10.2307/327317
Horwitz, E. K., Horwitz, M. B., & Cope, J. A. (2021). Foreign Language Classroom Anxiety. Language Teaching, 50(1), 128-145.
Huang, Y., & Wu, J. (2021). School leadership and English teachers' improvement plans. Educational Management Administration & Leadership, 49(2), 253-270.
Hubbard, P. (2019). Digital resources for learning. Oxford University Press.
Hwang, J., & Lee, S. (2020). Aligning improvement plans with school goals: A case study of English teachers. Asia-Pacific Education Researcher, 29(2), 187-198.

Ingersoll, R. M., Merrill, L., & Stuckey, D. (2021). The changing face of teaching: Demographic trends and their implications for the future of the teaching force. Educational Researcher, 50(2), 81-89.
Johnson, C., Smith, L., & Martinez, J. (2020). The Impact of Educational Attainment on Language Teaching Anxiety. Modern Language Journal, 104(2), 345-361.
Johnson, R., & Clark, M. (2020). Supporting improvement plans through mentorship programs: A qualitative study. Teaching and Teacher Education, 95, 1-11.
Johnson, S. M., & Johnson, M. L. (2022). Work-life balance and gender in the teaching profession. Journal of Educational Research, 115(3), 295-310.
Jones, A., & Johnson, B. (2020). Peer observation and feedback in improvement plans: A mixed-methods study. Language Teaching Research, 24(1), 78-97.
Karas, Michael James (2019). English Language Teacher Self-Efficacy Beliefs. Electronic Thesis and Dissertation Repository. 6091.
Kasper, G., & Rose, K. R. (2020). Pragmatic development in a second language. Language Learning, 52(Suppl1), 1–352.
Khajavy, G. H., Ghonsooly, B., Fatemi, A. H., & Choi, C. W. (2018). Anxiety in language learning: A systematic review. Educational Psychology, 38(10), 1200-1216.
Kim, E. G., & Elder, C. (2021). Efficacy of teacher training for fostering technology integration in language teaching: A meta-analysis. Educational Technology Research and Development, 69(1), 97-123.
Kim, E., & Kim, H. (2021). Teacher Burnout and Engagement: The Mediating Role of Teacher Efficacy. Journal of Language Teaching and Research, 12(1), 145-155.
Kim, H., & Park, S. (2020). Setting clear objectives in improvement plans: A case study of English teachers. Language Teaching, 53(4), 501-519.
Kim, S., & Elder, C. (2021). Cultural Competence in Language Teaching: Navigating Cross-Cultural Communication in the ESL Classroom. Journal of Second Language Teaching & Research, 5(2), 89-105.
Kim, S., & Elder, C. (2021). Parental Recognition and Teacher Motivation in Language Education. Journal of Second Language Teaching & Research, 5(2), 89-105.
Kim, S., & Elder, C. (2021). Teacher Motivation and Professional Development in Language Education. Journal of Second Language Teaching & Research, 5(2), 89-105.
Kim, S., & Elder, C. (2021). Teaching Grammar: Navigating Anxiety and Confidence in the ESL Classroom. Journal of Second Language Teaching & Research, 5(2), 89-105.
Kim, Y. Y., & Kim, Y. M. (2023). The Relationship between EFL Teachers' Time Management Behavior and Their Self-Efficacy for Instruction. English Teaching, 78(1), 49-75.
Kini, T. & Podolsky, A. (2019). Does Teaching Experience Increase Teacher Effectiveness? A Review of the Research (research brief). Palo Alto, CA: Learning Policy Institute.
Kitikanan, P., & Sasimonton, P. (2019). The Relationship between English Self-efficacy and English Learning Achievement of L2 Thai Learners. LEARN Journal: Language Education and Acquisition Research Network, 10(1), 149-152.

Klassen, R. M., Durksen, T. L., & Smylie, M. A. (2021). Mental Health and Well-being in Teachers: An Overview and Application of the Job Demands-Resources Model. Educational Psychology Review, 33(2), 299-327.
Klassen, R. M., & Tze, V. M. C. (2021). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. Educational Research Review, 34, 100401. https://doi.org/10.1016/j.edurev.2021.100401
Kraft, M. A., & Papay, J. P. (2020). Developing workplaces where teachers stay, improve, and succeed. Harvard Education Press.
Kraft, M. A., Blazar, D., & Hogan, D. (2021). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. Review of Educational Research, 91(2), 197-236.
Kubanyiova, M. (2020). Language teacher educators' motivation for research and professional development. Language Teaching Research, 24(4), 514-532.
Lamb, M. (2021). The motivational dimension of language teaching. Language Teaching, 50(3), 301–346.
Lamb, M. (2021). Innovations and Challenges in Language Teaching: Learning and Teaching English in the Age of Innovation. Routledge.
Lapada, A. A., Miguel, F. F., & Robledo, J. M. (2020). External Motivation Factors Among Filipino Teachers. Philippine Journal of Education, 95(2), 78-92.
Larsen-Freeman, D., & Anderson, M. (2021). Teaching and Learning English Grammar: Research Findings and Future Directions. Routledge.
Lee, S., & Kim, D. (2019). Understanding Language Teaching Anxiety: A Longitudinal Study. TESOL Quarterly, 51(4), 789-804.
Lee, Y., & Smith, P. (2021). Active engagement in improvement plans and its impact on English teachers' professional satisfaction. Teaching and Teacher Education, 104, 1-11.
Levis, J. M., & Moyer, A. (2021). Second Language Pronunciation: Bridging the Gap Between Research and Teaching. Cambridge University Press.
Li, Qi & Xie, Zhilong & Zeng, Guofang. (2023). The Influence of Teaching Practicum on Foreign Language Teaching Anxiety Among Pre-Service EFL Teachers. SAGE Open. 13. 215824402211490. 10.1177/21582440221149005.
Liu, J., & Huang, L. (2021). Investigating Foreign Language Teachers' Time Management Strategies and Workload Perception. Journal of Language Teaching and Research, 12(6), 1271-1282.
Liu, M. (2019). Anxiety in oral English instruction: A case study in China. System, 34(2), 235-251. DOI: https://doi.org/10.25170/ijelt.v3i1.1587
Liu, M. (2019). Understanding EFL teachers' job stress in the Chinese higher education context: Sources and coping strategies. Frontiers of Education in China, 14(3), 391-409.
Liu, M., & Huang, W. (2020). The Effect of Teacher Evaluation on ESL Teachers' Professional Development and Teaching Anxiety. Language Teaching Research, 24(6), 785-807.
Loewen, S., & Sato, M. (2022). The Routledge Handbook of Instructed Second Language Acquisition. Routledge.

MacIntyre, P. D., & Gardner, R. C. (2020). Investigating language class anxiety using the focused essay technique. Modern Language Journal, 75(3), 296–304. https://doi.org/10.2307/328723
Makoelle, T. M., & Thwala, S. K. (2019). Action research in the classroom: Assisting teachers in implementing inclusive education. Interdisciplinary Journal of Environmental and Science Education, 14(1), 1-14. https://doi.org/10.29333/ijese/5789
Malini, K.; Janakavalli, C. (2018). A Study on Language Anxiety and Fear of Negative Evaluation among Secondary Level Language Teachers. Journal on English Language Teaching, v8 n3 p43-51. https://eric.ed.gov/?id=EJ1198853
Mercer, S. (2019). Emotion and ELT: Theory and practice. ELT Journal, 70(1), 85-94.
Mercer, S., & Gregersen, T. (2020). Teacher Wellbeing. Oxford University Press.
Mercer, S., & Kostoulas, A. (2018). Language Teacher Psychology. Multilingual Matters.
Mercer, S., & Kostoulas, A. (2021). Language Teacher Psychology: Exploring Teacher Well-Being. Multilingual Matters.
Mills, R. (2020). Relationships Among English Language Proficiency, Self-efficacy, and Performance. Journal of Psycholinguistic Research, 43(5), 549-566.
Mrachko, A. A., Kostewicz, D. E., & Martin, W. P. (2019). Increasing positive and decreasing negative teacher responses to student behavior through training and feedback. Behavior Analysis: Research and Practice, 17(3), 250–265
Mustafa, G., Glavee-Geo, R., Gronhaug, K., & Almazrouei, H. (2021). Structural components and self-efficacy: Effects on task performance. Asian-Pacific Journal of Second and Foreign Language Education, 6(1), 1-20.
Nation, I. S. P. (2021). Learning vocabulary in another language. Cambridge University Press.
Nation, I. S. P., & Webb, S. (2020). Researching and Analyzing Vocabulary. Heinle Cengage Learning.
National Center for Education Statistics. (2021). Digest of Education Statistics, 2020. U.S. Department of Education.
National Education Association. (2020). Teacher salary report: 2020 overview. NEA Research.
Neumayer DePiper, J., Louie, J., Nikula, J., Buffington, P., Tierney-Fife, P., & Driscoll, M. (2021). Promoting teacher self-efficacy for supporting English learners in mathematics: Effects of the "Visual Access to Mathematics" professional development. ZDM: Mathematics Education, 53(2), 489-502.
Nguyen, T., & Tran, L. (2020). Embedding improvement plans in a professional development framework: A case study of English teachers. Professional Development in Education, 46(5), 755-770.
Nikitina, L., & Furuoka, F. (2020). Re-examining Horwitz's Beliefs About Language Learning Inventory (BALLI) in the Malaysian Context. Electronic Journal of Foreign Language Teaching 2006, Vol. 3, No. 2, pp. 209-219
Nucum, Karl Nicole (2019). Education Guide: Should You Get A Master's Degree In The Philippines?. Retrieved last May 01, 2024 from https://www.edukasyon.ph/blog/should-you-get-a-masters-degree-in-the-philippines

Ortan, F., Simut, C., & Simut, R. (2021). Self-Efficacy, Job Satisfaction and Teacher Well-Being in the K-12 Educational System. International Journal of Environmental Research and Public Health, 18(23), 12763. https://doi.org/10.3390/ijerph182312763
Oxford, R. L. (2020). The Oxford Handbook of Language Learning and Technology. Oxford University Press.
Öztürk, E. Ö. (2021). "Stress in practicum: Voices of preservice teachers, mentors, supervisors, and administrators in an English language teacher education program." Journal on Educational Psychology, 14(4), 22-33. Retrieved from https://eric.ed.gov/?id=EJ1308948
Pajares, F. (2020). Self-efficacy beliefs in academic settings. Review of Educational Research, 66(4), 543–578. https://doi.org/10.2307/1170653
Pan, Ziwen & Wang, Yongliang & Derakhshan, Ali. (2023). Unpacking Chinese EFL Students' Academic Engagement and Psychological Well-Being: The Roles of Language Teachers' Affective Scaffolding. Journal of Psycholinguistic Research. 10.1007/s10936-023-09974-z.
Pandolpho, B. (2024). Designing More Equitable Ways to Evaluate Teachers: To help ensure that teacher evaluations are balanced and have a meaningful impact, consider more creative and collaborative methods. Edutopia. Retrieved last May 05, 2024 from https://www.edutopia.org/article/more-effective-teacher-evaluations.
Papi M, and Khajavy H. (2023). Second language anxiety: Construct, effects, and sources. Annual Review of Applied Linguistics. 2023;43:127-139. doi:10.1017/S0267190523000028
Papi, M., & Khajavi, Y. (2021). The L2 motivational self system: A systematic review of the literature. System, 98, 102468
Pappa, S., Tsopani, D., & Drosos, D. (2021). Teacher self-efficacy, anxiety, and burnout: A comparative study of primary and secondary teachers. International Journal of Educational Research Open, 2(1), 100048. https://doi.org/10.1016/j.ijedro.2021.100048
Pavlenko, A. & Blackledge, A. (2019). Introduction: New Theoretical Approaches to the Study of Negotiation of Identities in Multilingual Contexts. In A. Pavlenko & A. Blackledge (Ed.), Negotiation of Identities in Multilingual Contexts (pp. 1-33). Bristol, Blue Ridge Summit: Multilingual Matters. https://doi.org/10.21832/9781853596483-003
Philippines. (2013). Republic Act No. 10533: Enhanced Basic Education Act of 2013. Official Gazette of the Republic of the Philippines, 109(1), 1-31.
Piniel, K., & Albert, A. (2018). Teacher emotions in the language classroom: An overview of the field. In K. Piniel & A. Albert (Eds.), Teacher emotions in language teaching: Critical perspectives (pp. 1-18). Springer.
Piniel, K., & Zólyomi, A. (2022). Gender differences in foreign language classroom anxiety: Results of a meta-analysis. Studies in Second Language Learning and Teaching, 12(2), 173-203.
Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2020). Solving the teacher shortage: How to attract and retain excellent educators. Learning Policy Institute.

Rahimi, M., & Abedini, A. (2019). The relationship between self-efficacy beliefs and English language listening proficiency. English Language Teaching, 2(4), 3-9
Rahimi, M., & Ghanizadeh, A. (2020). The impact of collaborative teaching on EFL teachers' self-efficacy and collective efficacy. Journal of Education for Teaching, 46(2), 223-235.
Ratelle, C. F., Guay, F., Vallerand, R. J., Larose, S., & Senécal, C. (2019). Autonomous, controlled, and a motivated types of academic motivation: A person-oriented analysis. Journal of Educational Psychology, 99(4), 734-746.
Reeve, J. (2019). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. Educational Psychologist, 44(3), 159-175.
Rhodora R. Jugo, "Language Anxiety in Focus: The Case of Filipino Undergraduate Teacher Education Learners", Education Research International, vol. 2020, Article ID 7049837, 8 pages, 2020. https://doi.org/10.1155/2020/7049837.
Richards, J. C., & Farrell, T. S. C. (2020). Professional Development for Language Teachers: Strategies for Teacher Learning. Cambridge University Press.
Richards, J. C., & Lockhart, C. (2020). Reflective Teaching in Second Language Classrooms. Cambridge University Press.
Richards, J. C., & Rodgers, T. S. (2021). Approaches and Methods in Language Teaching (3rd ed.). Cambridge University Press.
Richards, J.C., & Schmidt, R.W. (2021). Longman Dictionary of Language Teaching and Applied Linguistics (4th ed.). Routledge. https://doi.org/10.4324/9781315833835
Richardson, P. W., & Watt, H. M. G. (2019). Why people choose teaching as a career: An expectancy-value approach to understanding teacher motivation. Teacher Development, 23(3), 351-367.
Rostami, S., Ghanizadeh, A., & Ghonsooly, B. (2019). External factors affecting second language motivation: The role of teacher burnout and family influence. Iranian Journal of Applied Linguistics, 18(2), 165-187.
Ryan, R. M., & Deci, E. L. (2020). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1), 68-78.
Ryan, R. M., & Deci, E. L. (2020). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. Contemporary Educational Psychology, 61, 101860.
Ryan, R. M., & Deci, E. L. (2021). Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness. Guilford Press.
Salazar-Ayala, C. M., Gastélum-Cuadras, G., Huéscar Hernández, E., Núñez Enríquez, O., Barrón Luján, J. C., & Moreno-Murcia, J. A. (2021). Individualism, competitiveness, and fear of negative evaluation in pre-adolescents: Does the teacher's controlling style matter? Frontiers in Psychology, 12, 626786
Sato, M; Castillo F; and Oyanedel J (2022). Teacher Motivation and Burnout of English-as-a-Foreign-Language Teachers: Do Demotivators Really Demotivate Them? Front. Psychol., 27 April 2022. Sec. Educational Psychology. Volume 13 - 2022 | https://doi.org/10.3389/fpsyg.2022.891452
Schmidt, R. (1990). The role of consciousness in second language learning. Applied Linguistics, 11(2), 129–158. https://doi.org/10.1093/applin/11.2.129

Schmitt, N. (2020). Vocabulary in Language Teaching (2nd ed.). Cambridge University Press.
SharEd. (2021). Motivating Teachers by Recognizing Their Excellence. Retrieved from https://shared.rti.org/content/motivating-teachers-recognizing-their-excellence
Smith, A., & Johnson, B. (2018). Gender differences in teaching motivation: A meta-analysis. Journal of Educational Psychology, 110(3), 405–419. https://doi.org/10.1037/edu0000245
Smith, J. (2018). Language proficiency and teacher motivation: A qualitative study. TESOL Quarterly, 44(3), 568-582.
Smith, J., & Brown, M. (2019). Individualized improvement plans for English teachers: A qualitative analysis. Journal of Teacher Education, 70(3), 287-301.
Soland, J. (2019). English Language Learners, Self-efficacy, and the Achievement Gap: Understanding the Relationship between Academic and Social-emotional Growth. The Collaborative for Student Growth at NWEA Working Paper
Sullivan, K., & Brown, A. (2020). Fostering a growth mindset in English teachers: Strategies and challenges. Educational Psychology, 40(6), 769-788.
Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. Learning Policy Institute.
Tan, L. S., & Yap, P. (2022). Professional Development and Teacher Motivation in Southeast Asia. Asian Journal of Education, 27(3), 200-215.
Thornton, M., & Bricheno, P. (2021). Gender dynamics in the teaching profession: A cultural perspective. Gender and Education, 33(2), 223-238.
Tsiplakides, I., & Keramida, A. (2020). The influence of teacher anxiety on student performance. Language Teaching Research, 24(1), 55-77.
Tsui, A. B. M. (2020). Reflective Practice in Language Teaching: Research-Based Principles and Practices. Cambridge University Press.
Tüfekçi-Can, D. (2018). Foreign language teaching anxiety among pre-service teachers during teaching practicum. International Online Journal of Education and Teaching (IOJET), 5(3), 579-595.
U.S. Department of Education. (2020). The Condition of Education 2020. National Center for Education Statistics.
Ugalingan, G., Edjan, D., & Valdez, P. N. (2021). Online internship experiences among pre-service ESL teachers in the Philippines: Challenges and opportunities. TESL-EJ, 25(3). Retrieved from https://eric.ed.gov/?id=EJ1332291
Ushioda, E., & Orchid, L. (2023). Language Learning Motivation in a Globalizing World: Research Perspectives and Classroom Implications. Routledge.
Valdez, P. N., & Santos, E. L. (2023). Impact of Educational Attainment on Teacher Motivation and Performance in the Philippines. Journal of Teacher Education, 41(2), 143-159.
Vallerand, R. J. (2019). Toward a hierarchical model of intrinsic and extrinsic motivation. Advances in Experimental Social Psychology, 29, 271-360.
Vallerand, R. J., & Ratelle, C. F. (2019). Intrinsic and extrinsic motivation: A hierarchical model. In E. L. Deci & R. M. Ryan (Eds.), Handbook of self-determination research (pp. 37-64). University of Rochester Press.

Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2021). Motivating learning, performance, and persistence: The synergistic effects of intrinsic goal contents and autonomy-supportive contexts. Journal of Personality and Social Psychology, 87(2), 246-260.
Walonoski, J. A., & Heffernan, N. T. (2021). Understanding and addressing the factors contributing to classroom disruptions in digital learning environments. Journal of Educational Technology Systems, 50(1), 3-22. https://doi.org/10.1177/0047239521100027
Wang, C. (2021). The Relationship Between Teachers' Classroom English Proficiency and Their Teaching Self-Efficacy in an English Medium Instruction Context Front. Psychol., 18 June 2021. Sec. Educational Psychology. Volume 12 - 2021 | https://doi.org/10.3389/fpsyg.2021.611743
Wang, C., Kim, D.-H., Sun, T., & Liu, L. (2021). Measuring English Language Self-Efficacy: Psychometric Properties and Use
Wang, J. (2021). Study on Strategies for English Teachers to Improve Their Classroom Language. Advances in Social Science, Education and Humanities Research, volume 652
Wang, X., & Li, L. (2019). Improvement plans as a tool for professional growth: English teachers' perceptions. Teachers and Teaching, 25(6), 669-685.
Wang, Y., & Guan, H. (2021). Understanding Teacher Motivation: Theoretical Frameworks, Professional Growth, and Classroom Contexts. Routledge.
Wang, Z. (2020). Intrinsic Motivation in Language Classroom Contexts: The Chinese Perspective. Springer.
Williams, C. (2021). Research Methods. Journal of Business & Economic Research – March 2007. Volume 5, Number 3.
Williams, M., & Burden, R. (2021). Psychology for Language Teachers: A Social Constructivist Approach. Cambridge University Press.
Woolfolk Hoy, A., & Burke Spero, R. (2019). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. Teaching and Teacher Education, 21(4), 343-356.
Wyatt, M. (2018). Language Teachers' Self-efficacy Beliefs: A Review of the Literature (2005-2016). https://files.eric.ed.gov/fulltext/EJ1177404.pdf
Wyatt, M. (2020). Teacher self-efficacy, context, and the implementation of task-based language teaching. System, 93, 102-124.
Wyatt, M., & Faez, F. (Eds.). (2024). Building the Self-Efficacy Beliefs of English Language Learners and Teachers. Taylor & Francis.
Yan, M., & Wang, S. (2019). Self-reflection and self-assessment in English teachers' improvement plans: A qualitative study. Teaching in Higher Education, 24(5), 645-661.
Young, D. J. (2019). Creating a low-anxiety classroom environment: What does language anxiety research suggest? Modern Language Journal, 75(4), 426–439. https://doi.org/10.2307/329492
Zhang, B. (2022) Understanding EFL teachers' job stress in the Chinese higher education context: Sources and coping strategies. Frontiers of Education in China. https://doi.org/10.3389/fpsyg.2022.1024250

Zhang, H., & Jiang, Q. (2021). Promoting a growth mindset in English teachers: Strategies and implications. Educational Psychology Review, 33(3), 429-448.
Zhang, J., & Zhang, L. J. (2018). Second language teaching anxiety, efficacy beliefs and motivation among K-12 English teachers in China: A mixed methods study. TESOL Quarterly, 52(3), 676–704. https://doi.org/10.1002/tesq.428
Zhang, L. J., & Rahimi, M. (2020). EFL learners' anxiety level and their beliefs about corrective feedback in oral communication classes. System, 42, 429–439. doi:10.1016/j.system.2014.01.012
Zhang, X., & Rahimi, M. (2021). EFL teachers' sources of work stress and their coping strategies. Foreign Language Annals, 54(2), 396-414.
Zhang, X., Dai, S., Ardasheva, Y., & Hong, Y. (2023). Relationships Among English Language Proficiency, Self-efficacy, Motivation, Motivational Intensity, and Achievement in an ESP/EAP Context. Journal of Psycholinguistic Research, 52, 3019–3038
Zhang, Z. (2022). "Toward the role of teacher empathy in students' engagement in English language classes." Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2022.880935

APA Citation:

Macapuno, E. M., & Borras, D. D. (2024). SECOND LANGUAGE TEACHING ANXIETY, EFFICACY BELIEFS AND MOTIVATION AMONG K-12 ENGLISH TEACHERS. Ignatian International Journal for Multidisciplinary Research, 2(8), 110–211. https://doi.org/10.5281/zenodo.13160562

Corresponding author: *emacapuno@bernalillops.org*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

SENIOR HIGH SCHOOL STUDENTS' MOTIVATION TOWARD SCIENCE LEARNING AND SCIENCE ACADEMIC PERFORMANCE

Hazel T. Mempin, LPT
MJ Christian S. Lazaro, LPT
Bryan DC. Gabriel, PhD

Graduate School Department, Bulacan Agricultural State College,
San Ildefonso, Bulacan, Philippines

https://doi.org/10.5281/zenodo.13292037

ABSTRACT

This study assessed the levels of motivation of students in learning science and determined the relationship of students' motivation toward science learning and their science academic performance. The respondents of the study were 87 Grade 11 students at Calawitan National High School, who were enrolled during the School Year 2023-2024. The researchers utilized a descriptive correlational research design to measure the relationship of science motivation toward science learning and science academic performance. The data were gathered through the use of Students Motivation Toward Science Learning (SMTSL)/questionnaire that was adapted from Tuan et al. (2005). The questionnaire was composed of statements divided into six (6) sub-categories namely; self-efficacy, active learning strategies, science learning value, performance goal, achievement goal and learning environment stimulation. The collected data were analyzed using the statistical software Jamovi and interpreted using descriptive statistics and Pearson r moment correlation. Results showed that students agreed that they are motivated in learning science in terms of active learning strategies (M=3.57), science learning value (M=3.55, achievement goal (M=3.87) and learning environment stimulation (M=3.52) while they gave no opinion about self-efficacy (M=2.91) and performance goal (M=3.04) which both contained negative statements. Also, it was found out that students' motivation toward science learning and science academic performance have a significant relationship (r = 0.270*; p- value = 0.011) it means that as the students' motivation toward science learning increases, their science academic performance will become higher and

vice versa. Students who are motivated in learning science tend to have higher science academic performance.

Keywords: *students' motivation toward science learning, science academic performance, active learning strategies, science learning value, achievement goal, learning environment stimulation, self-efficacy, performance goal*

INTRODUCTION

Science education has been considered as one of the most important academic disciplines in schools because of its practical application, scientific knowledge, broad concept and its relevance to the students' lives (Shana & Abulibdeh, 2020). It offers them the opportunity to increase their overall understanding of how things work through the use of critical thinking and analysis of various scientific concepts. However, science as a subject in school has always presented a challenge to both teachers and students.

The Philippine education report of 2023 stated by Philippine Business for Education (2023) recognizes the urgent needs of the learners and educational systems especially in the field of the learners when it comes to their interests and motivation in learning, due to the COVID pandemic in 2019 and this has significantly impacted the lives of the learners when it comes to learning. As stated by Mardianti (2021), interests are depleting overtime because of lack of resource materials, lack of technological resources and proper exposure to learning environments due to the COVID pandemic. Thus, in the case of the PISA results in 2022 resulting in a devastating 3rd to the last rankings when it comes to levels of proficiency in particular in the field of science.

In addition, Salanga and Bernardo (2016) stated that Senior High School Filipino students face struggles due to a lack of motivation. Reasons include beliefs and attitudes about themselves and the subject, teacher competencies, and distractions from peers and family. Teachers have to primarily engage and motivate their students in learning science. Even though engagement does not necessarily result in understanding, especially when it comes to the case of learning science, engaging and motivating students in science is a prerequisite for understanding (Hadzigeorgiou & Schulz, 2019).

According to Njua (2020), it is difficult to meet the learning objectives of a particular course or field of study without motivation. The core of effective teaching is dependent on motivation. Since promoting lifelong learning is the main goal of all education, motivation should be viewed as the main tool for helping students succeed in the sciences. In order to encourage students to pursue interests in science, they need to be internally and extrinsically motivated. Albalate et al. (2018) claimed that without the motivation, surface learning or simply memorization will happen, which will not lead to a proper understanding of essential concepts of science. It is essential that students' motivation towards science learning among the students be assessed (L & H, 2018). As Mauliya et al. (2020) asserted that lack of motivation in students caused poor academic performance.

With the aforementioned articles and studies, the researchers are aiming to know a deeper understanding of the situation, considering the k-12 curriculum and the new 21st century learners. This study aims to assess the Senior High School student's motivation toward science learning as self-efficacy, active learning strategies, science learning value, performance goal, achievement goal, and learning environment stimulation.

Review of Related Literature and Studies

Science learning includes many factors that are the determinants of science learning quality and process (Chan & Norlizah, 2017). The result of the study conducted by Rana et al. (2015) pointed out that motivation towards learning is an important contributor in determining achievement of the students. There are six separate sub constructs that make up the multidimensional construct of motivation. To differing degrees, these structures influence the determination of learning motivation. The performance goal for example is the awareness among the students about what is being expected of them is a most prominent determinant of motivation to learn. In performance goal learning, students are not just involved in science learning and then expect recognition from other people or attention from their teachers. It is more in the direction of what students expect after they study science. It encourages them to engage in science learning (Nasir et al., 2023).

Key findings of Chan and Norlizah (2017) revealed that students' motivation towards science learning have a significant relation to students' science achievement. The findings showed that students who have moderate motivation to learn science have mid-low achievement in science. If students are not driven, they will probably not learn much and will typically find teaching difficult and irritating.

In addition, highly motivated students will probably learn quickly and make any class enjoyable (Filgona et.al., 2020). Self-regulation is very important for managing self-behaviour or motivation, which is essential for a student's educational achievement (Caruth,2018). Intrinsic and extrinsic motivation can also affect the behavior of learners thus affecting their academic performance of the student's when it comes to science subjects (Tokan & Imakulata,2019).

Teachers aim to have a generation of successful students personally and academically. However, various uncontrolled factors can hinder this progress. One way to address this is to empower students' non-cognitive attributes. Therefore, learning in the classroom transitions to student-centered learning, where the main responsibility for progress is on the student. However, if students have destructive learning goals, a low perception of their capabilities, a short interest in the academic task, and limited effort, their learning outcomes will suffer (Alhadabi & Karpinski, 2020).

This study was anchored in the theory of Abraham Maslow's Hierarchy of Needs and Theory of Motivation, which indicates the fundamental basic needs of humans, he proposed that motivation is the result of a person's attempt in fulfilling five basic needs: physiological, safety, social, esteem and self-actualization. Maslow posited that human

motivation arises out of a motivation to progress through this hierarchy of needs. Maslow represented his theory pictorially as a pyramid, similar to the food pyramid, with the bottom representing the base and the most basic level. Once a person satisfies one level of needs, Maslow suggests they then become motivated to reach the next level.

Conceptual Framework

The paradigm included the relationship between the factors affecting the students' motivation toward science learning and academic performance.

Figure 1
Paradigm of the Study

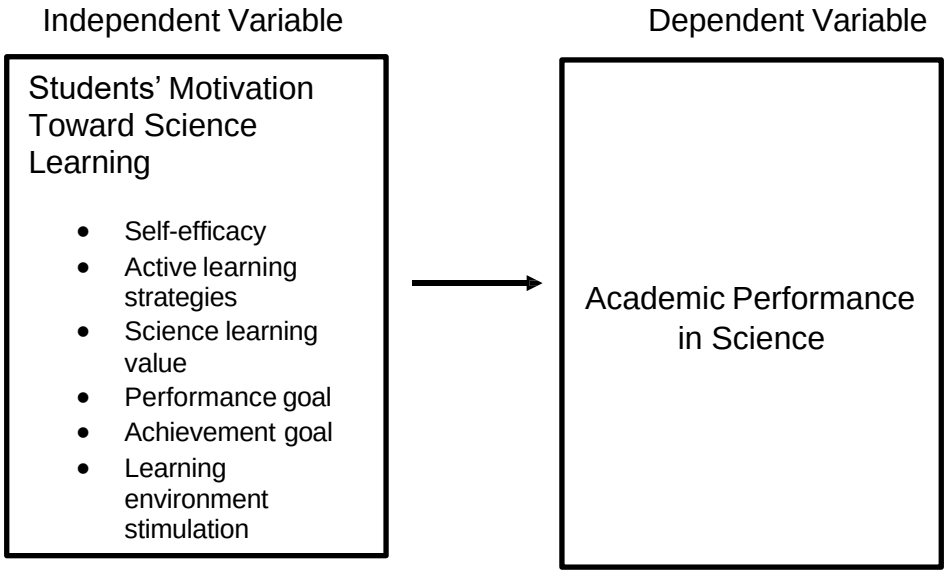


Figure 1 shows the relationship between the independent and dependent variables. The independent variables were the factors affecting students' motivation toward science learning: self-efficacy; active learning strategies; science learning value; performance goal; achievement goal and learning environment stimulation. The dependent variable was the academic performance. It was hypothesized in this study that students' motivation toward science learning has a significant relationship on students' academic performance as indicated by the directional orientation of the arrowhead.

Research Questions

This study aims to describe the Senior High School student's motivation toward science learning and academic performance at Calawitan National High School.

Specifically, it sought to answer the following research questions:

1. How may the student's motivation toward science learning be described in terms of:
    1.1. self - efficacy;

1.2. active learning strategies;
1.3. science learning value;
1.4. performance goal;
1.5. achievement goal; and
1.6. learning environment stimulation?

2. How may the students' academic performance in science be described?
3. Is there a significant relationship between students' motivation toward science learning and science academic performance?
4. Based on the result of the study, what intervention program can be developed to support the student's science performance?

Hypothesis

This study was guided and tested the hypothesis below:

Students' motivation toward science learning has no significant relationship on their science academic performance.

Significance of the Study

This study will help the students to better assess and understand their learning performance in science for self-improvement. This may serve as a source of information about how the various school factors and teacher factors influenced their learning performance in science. For teachers, this will serve as a valuable guide for them to help the students improve their knowledge, understanding and skills in science. It will also serve as a basis for improving instructional materials that still guarantee the quality of education. The result of this study will serve as a guide and reference for the administrators to have a basis in adjusting school policies and systems for students to help them become efficient learners. As a result, it can improve student's learning performance especially in science and even their performance outside school. The conducted study will further open doors for future researchers to refine and expand studies in relation to how motivation affects students' science learning and academic performance. This may serve as a source of information about the identified factors that influenced students' science learning and performance.

METHODOLOGY

Research Design

This study utilized descriptive correlational research design. This type of research design is used to understand the relationship between two or more variables. In this study, the researchers aimed to describe and determine the relationship between students' motivation on science learning and academic performance. According to Aprecia et al. (2021), descriptive correlational research design describes the variables and measures the extent of the relationships that occur between and among the variables.

Respondents and Sampling

Simple random sampling technique was utilized in selecting the student-respondents from the reported total Grade 11 Enrolment in the Senior High School Program. The researchers used the Raosoft sample size calculator in calculating the appropriate sample size for the study. The mentioned formula was used to obtain the needed sample size for the student-respondents in this study. The researchers determined the sample size for student-respondents based on the total of 111 Grade 11 enrollees of Calawitan National High School with a margin of error equivalent to 5% and a confidence level of 95%.

By applying the formula, the researchers determined the total number of respondents who will represent the population. This resulted in a total of 87 student-respondents among Grade 11 students of Calawitan National High School.

Instrumentation

In order to answer the problems provided, quantitative data were gathered using a survey questionnaire. The questionnaire "Students' Motivation Toward Science Learning" (SMTSL) was adapted from Tuan et al. (2005) to describe and measure students' motivation toward science learning. The questionnaire was composed of six subsections such as self-efficacy, active learning strategies, science learning value, performance goal, achievement goal, and learning environment stimulation which was rated using a scale of 4.21 – 5.00 – Strongly agree (5), 3.41 – 4.20 – Agree (4), 2.61 – 3.40 – No opinion (3), 1.81 – 2.60 – Disagree (2) and 1.00 – 1.80 – Strongly disagree (1). Cronbach alpha for the entire questionnaire was 0.89; for each scale, alpha ranged from 0.70 to 0.89. Findings of the study confirmed the validity and reliability of the SMTSL questionnaire (Tuan et al., 2005). The science academic performance of the respondents was gathered from the school record of Calawitan National High School through their adviser.

Data Gathering Procedure

Before the administration of survey questionnaire, the researchers first requested approval from the school principal to randomly selected Grade 11 students in Calawitan National High School as respondents for the study. Upon receiving the approved letter, coordination with the class advisers of Grade 11 students of the aforementioned school was done for the schedule of data collection. The researchers administered the questionnaire through Google Forms. In the administration of survey questionnaire and the respondents were allotted a 10-minute timeframe to complete the questionnaire. The data for science academic performance was collected through the class advisers.

The respondents in the study were informed that their involvement was entirely voluntary and they had the freedom to withdraw from participation at any time. The survey was also anonymous and in order to protect respondents' identities, no personal information was disclosed. Additionally, they were informed that all information gathered would be used exclusively to complete the study and that it will be completely deleted from the researchers' laptop upon completing the study.

Data Analysis

The researchers used a statistical software jAMOVI for the analysis and interpretation of the collected data. The jAMOVI software was found to be simple, flexible and easy to learn with very sophisticated analytical capacity.

Descriptive statistics such as mean was used to describe students' motivation toward science learning and their science academic performance. To test the hypothesis if students' motivation toward science learning has a significant relationship on science academic performance Pearson r moment correlation was utilized.

RESULTS

This chapter deals with the presentation, analysis and interpretation of the data collected and the results of the statistical treatment employed in the study with the purpose of determining the relationship between science motivation toward science learning and science academic performance of Grade 11 students of Calawitan National High School, Calawitan, San Ildefonso, Bulacan.

Table 1. Self-efficacy

Statements	Mean	Standard Deviation	Interpretation
1. Whether the science content is difficult or easy, I am sure that I can understand it	3.64	1.01	Agree
2. I am not confident about understanding difficult science concepts. (−)	2.93	0.950	No Opinion
3. I am sure that I can do well on science tests	3.61	0.969	Agree
4. No matter how much effort I put in, I cannot learn science. (−)	2.31	0.893	Disagree
5. When science activities are too difficult, I give up or only do the easy parts. (−)	2.80	1.09	No Opinion
6. During science activities, I prefer to ask other people for the answer rather than think for myself. (−)	2.69	1.09	No Opinion
7. When I find the science content difficult, I do not try to learn it (−)	2.40	0.994	Disagree
TOTAL	**2.91**	**0.487**	**No Opinion**

Legend:

Scale	Verbal Description
4.21 – 5.00	Strongly Agree (SA)
3.41 – 4.20	Agree (A)
2.61 – 3.40	No Opinion (NO)
1.81 – 2.60	Disagree (D)
1.00 – 1.80	Strongly Disagree (SD)

The table shows the students' science motivation toward science learning in terms of self-efficacy. The calculated total mean for self - efficacy is (M=2.91) with a standard

deviation of 0.487 which is interpreted as “No Opinion”. Since majority of the items in this category were negative statements, it means that respondents believed in their capacity to perform well in science. The students can still understand the science concept whether it is difficult or not and they are sure that they can do well on science tests.

Table 2. Active Learning Strategies

Statements	Mean	Standard Deviation	Interpretation
1. When learning new science concepts, I attempt to understand them.	3.83	0.991	Agree
2. When learning new science concepts, I connect them to my previous experiences.	3.46	0.887	Agree
3. When I do not understand a science concept, I find relevant resources that will help me	3.56	0.997	Agree
4. When I do not understand a science concept, I would discuss it with the teacher or other students to clarify my understanding.	3.60	1.04	Agree
5. During the learning processes, I attempt to make connections between the concepts that I learn.	3.49	0.951	Agree
6. When I make a mistake, I try to find out why.	3.61	1.06	Agree
7. When I meet science concepts that I do not understand, I still try to learn them.	3.51	1.02	Agree
8. When new science concepts that I have learned conflict with my previous understanding, I try to understand why.	3.39	0.867	No Opinion
TOTAL	**3.57**	**0.796**	**Agree**

Legend:

Scale	Verbal Description
4.21 – 5.00	Strongly Agree (SA)
3.41 – 4.20	Agree (A)
2.61 – 3.40	No Opinion (NO)
1.81 – 2.60	Disagree (D)
1.00 – 1.80	Strongly Disagree (SD)

The table shows the students’ science motivation towards science learning in terms of active learning strategies. Majority of the respondents agreed on the statements resulting to a total mean of (M= 3.57, SD=0.796) interpreted as “Agree”. It means that the students engage themselves in various learning strategies to construct new knowledge based on their previous understanding of science concepts.

However, the student gave no opinion (M= 3.39, SD= 0.867) in the statement in item number 8 which is “*When new science concepts that I have learned conflict with my previous understanding, I try to understand why.”*

Table 3. Science Learning Value

Statements	Mean	Standard Deviation	Interpretation
1. I think that learning science is important because I can use it in my daily life.	3.62	1.22	Agree
2. I think that learning science is important because it stimulates my thinking.	3.39	1.10	No Opinion
3. In science, I think that it is important to learn to solve problems.	3.67	0.936	Agree
4. In science, I think it is important to participate in inquiry activities.	3.51	1.08	Agree
5. It is important to have the opportunity to satisfy my own curiosity when learning science	3.55	1.13	Agree
TOTAL	**3.55**	**0.932**	**Agree**

Legend:

Scale	Verbal Description
4.21 – 5.00	Strongly Agree (SA)
3.41 – 4.20	Agree (A)
2.61 – 3.40	No Opinion (NO)
1.81 – 2.60	Disagree (D)
1.00 – 1.80	Strongly Disagree (SD)

The table shows the students' science motivation towards science learning in terms of science learning value, wherein the total mean and standard deviation (M=3.55, SD=0.932) were calculated and interpreted as "Agree". It means that the majority of the respondents understand the value of learning science as it can be used in daily lives, it can help them to solve problems, it can help them to experience inquiry activities and it satisfies their curiosity when they are learning science.

On the other hand, the respondents gave no opinion (M=3.39, SD= 1.10) about the value of learning science in stimulating their own thinking.

Table 4. Performance Goal

Statements	Mean	Standard Deviation	Interpretation
1. I participate in science courses to get a good grade (-)	3.70	1.06	Agree
2. I participate in science courses to perform better than other students. (-)	2.79	0.990	No Opinion
3. I participate in science courses so that other students think that I'm smart (-)	2.43	1.06	Disagree
4. I participate in science courses so that the teacher pays attention to me. (-)	3.14	0.942	No Opinion
TOTAL	**3.04**	**0.697**	**No Opinion**

Legend:

Scale	Verbal Description
4.21 – 5.00	Strongly Agree (SA)
3.41 – 4.20	Agree (A)
2.61 – 3.40	No Opinion (NO)
1.81 – 2.60	Disagree (D)
1.00 – 1.80	Strongly Disagree (SD)

The table shows that student's motivation toward science learning in terms of performance goal. All items in this category are comprised of negative statements. The total mean score of (M=3.04) was interpreted as "No Opinion". It indicates that majority of the respondents have more neutral or mixed opinion regarding their performance goal. Also, it shows that the primary motivation for students in participating in science courses appears to be achieving a good grade. While the desire to appear smart to others such as their peers and teachers is not a significant motivator.

Table 5. Achievement Goal

Statements	Mean	Standard Deviation	Interpretation
1. During a science course, I feel most fulfilled when I attain a good score in a test	4.08	0.943	Agree
2. I feel most fulfilled when I feel confident about the content in a science course	3.80	0.913	Agree
3. During a science course, I feel most fulfilled when I am able to solve a difficult problem.	3.89	0.970	Agree
4. During a science course, I feel most fulfilled when the teacher accepts my ideas.	3.79	1.06	Agree
5. During a science course, I feel most fulfilled when other students accept my ideas.	3.77	0.885	Agree
TOTAL	**3.87**	**0.808**	**Agree**

Legend:

Scale	Verbal Description
4.21 – 5.00	Strongly Agree (SA)
3.41 – 4.20	Agree (A)
2.61 – 3.40	No Opinion (NO)
1.81 – 2.60	Disagree (D)
1.00 – 1.80	Strongly Disagree (SD)

The table shows the students' motivation toward science learning in terms of achievement goal with a total mean score of (M=3.87) interpreted as "Agree", indicating that the majority of the respondents agreed that during science courses they feel confident and fulfilled when they attain good scores, know the content in science courses, being able to solve difficult problems, and teachers and peers accept their ideas.

Table 6. Learning Environment Stimulation

Statements	Mean	Standard Deviation	Interpretation
1. I am willing to participate in this science course because the content is exciting and changeable.	3.53	1.03	Agree
2. I am willing to participate in this science course because the teacher uses a variety of teaching methods	3.43	0.996	Agree
3. I am willing to participate in this science course because the teacher does not put a lot of pressure on me	3.80	0.926	Agree

4. I am willing to participate in this science course because the teacher pays attention to me	3.46	0.998	Agree
5. I am willing to participate in this science course because it is challenging	3.44	0.885	Agree
6. I am willing to participate in this science course because the students are involved in discussions.	3.45	0.912	Agree
TOTAL	**3.52**	**0.793**	**Agree**

Legend:

Scale	Verbal Description
4.21 – 5.00	Strongly Agree (SA)
3.41 – 4.20	Agree (A)
2.61 – 3.40	No Opinion (NO)
1.81 – 2.60	Disagree (D)
1.00 – 1.80	Strongly Disagree (SD)

This table shows the Learning Environment Stimulation of students with a total mean score of (M=3.52) interpreted as “Agree”. This indicates that majority of the students are willing to participate in the science course because the content is exciting, changeable and challenging, the teacher uses a variety of teaching methods and does not apply any pressure on the science course and students are involved in the discussions.

Table 7. Total Mean of Science Academic Performance

	N	Mean	Standard Deviation	Interpretation
Science Academic Performance	87	83.4	5.54	Satisfactory

Legend:

Grading Scale	Descriptor
90 – 100	Outstanding
85 – 89	Very Satisfactory
80 – 84	Satisfactory
75 – 79	Fairly Satisfactory
Below 75	Did Not Meet Expectations

The table shows the respondents’ science academic performance for the school year 2023-2024 with a mean score of (M=83.4). Based on the DepEd K-12 Grading System Step for Computing Grades, the calculated average science academic performance of the respondents can be interpreted as “satisfactory”.

Table 8. Correlational Analysis of SMTSL and Science Academic Performance

	Science Academic Performance		
	Pearson’s r	p-value	Interpretation
Self-efficacy	-0.092	0.398	Not Significant
Active learning strategies	0.358***	0.001	Highly Significant
Science learning value	0.318**	0.003	Significant
Performance goal	0.240*	0.025	Significant
Achievement goal	0.128	0.238	Not Significant

Learning environment stimulation	0.234*	0.029	Significant
SMTSL	**0.270***	**0.011**	**Significant**

Note. * p < .05, **p <.01, ***p < .001

Based on the analysis of data, it was found out that students' motivation toward science learning and science academic performance have a significant relationship (r = 0.270*; p- value = 0.011) it means that as the students' motivation toward science learning increases, their science academic performance will become higher and vice versa. Therefore, the null hypothesis will be rejected. Students who are motivated in learning science tend to have higher science academic performance. This result was supported by Rana et.al (2015), wherein the SMTSL overall scale and science achievement showed a strong positive relationship. Additionally, they asserted that motivation toward science learning can predict science achievement.

It also shows on the table that active learning strategies, science learning value, performance goals, and learning environment stimulation are all significantly correlated with science academic performance. This indicates that these factors are important for improving students' academic performance in science. On the other hand, self-efficacy and achievement goals do not show a significant correlation with science academic performance.

Program of Activities from the Results of the Study

The study reveals that in some items on students' motivation toward science learning in terms of active learning strategies, science learning value and learning environment stimulation received low mean score. Hence, the researchers offer the Program of Activities which is presented in Table 9.

Table 9. Proposed Program of Activities

Objectives	Action	Timeline	Persons Involved	Expected Outcome
Enhance students' learning strategies in science to construct new knowledge	Integrating follow-up questions to the topic allowing students to analyze and formulate an answer.	Year round S.Y. 2024-2025	Teacher, students, and researchers	The students develop active learning strategies in science and are able to construct new knowledge based on the previous understanding.
Increase students' thinking skills in learning science concepts.	Integrating questions about the lesson with a variety of question difficulty	Year round S.Y. 2024-2025	Teacher, students, and researchers	The students will develop higher critical thinking skills in learning science concepts

				through science argument.
Inclusion of variety of teaching methods in science courses	Integrating Student-Centered Learning mainly focusing on students in giving the main idea and key points of the topic	Year round S.Y. 2024-2025	Teacher, students, and researchers	The student's will be more motivated to pursue learning any science courses

Conclusions

The study reveals that students have a positive belief in their capability to perform well in science. They express confidence in their understanding and performance in science-related tasks. When it comes to active learning strategies, the majority of the students utilized various learning strategies to construct new knowledge based on their previous understanding of science concepts. The overall pattern of responses in Table 3 indicates that students have a positive perception of the value of science learning, particularly in practical and curiosity-driven contexts. They recognize its usefulness and its role in providing meaningful and engaging learning experiences. The researchers also find out that students are primarily motivated by the desire to achieve good grades in science rather than by external factors such as their peers or other potential benefits of science learning. The researchers also indicate that students generally feel confident and fulfilled when they achieve good scores in science, have a solid understanding of the content, can solve difficult problems, and receive acceptance from teachers and peers for their ideas.

The students also perceive their science learning environment positively. They find the content exciting, changeable, challenging, and they appreciate the use of varied teaching methods of their teachers. This suggests that the diversity in teaching methods used by the teachers contributes to the students' engagement. Lastly, the positive correlation of SMTSL and science academic performance indicates that students who are more motivated to engage with science learning are likely to achieve higher performance in their science subjects. Motivation plays a crucial role in driving students to put more effort into their studies, which in turn enhances their academic outcomes.

Recommendations

Based on the findings revealed in this study, it is recommended that teachers should continue to foster an environment that builds on students' confidence in their science capabilities and encourages the use of active learning strategies. This can be achieved by integrating real-world applications and problem-solving activities that spark curiosity and interest of the students, thus promoting a motivation alongside the desire for good grades. The use of diverse teaching methods should be expanded to cater different learning styles of the students, keeping the content exciting, challenging, and

relevant. Additionally, recognizing and rewarding not just academic performance but also effort, improvement, and deep understanding can further enhance students' motivation and engagement. Professional development opportunities for teachers such as seminars and workshop training to learn and share innovative strategies will also support these goals. Through implementing these recommendations, teachers can strengthen students' motivation in science learning and drive higher academic performance.

Compliance with Ethical Standards

A variety of ethical issues were taken into account to make sure that this study was carried out properly. Upon conducting the study, all respondents were informed of the goal of the study using the forms that were attached to the questionnaires, as well as their right to withdraw at any time while the data collection was being conducted. The researchers ensured the confidentiality of the data collected from every participant. They remained anonymous respondents in the study.

Acknowledgments

The researchers would like to thank God for providing them with strength and guidance to complete this study. The researchers are deeply grateful to Dr. Bryan DC. Gabriel, for his invaluable support and mentorship. The researchers wish to thank the respondents who participated in this study for their time and insights. Also, appreciation goes to the family and friends of the researchers for their unwavering support and encouragement throughout the conduct of this study.

REFERENCES

Albalate, A. R., Larcia, H. D. S., Jaen, J. a. R., Pangan, K. R. O., & Garing, A. G. (2018). STUDENTS' MOTIVATION TOWARDS SCIENCE LEARNING (SMTSL) OF STEM STUDENTS OF UNIVERSITY OF BATANGAS, LIPA CITY. People : International Journal of Social Sciences, 3(3), 1262–1274. https://doi.org/10.20319/pijss.2018.33.12621274

Alhadabi, A., & Karpinski, A. C. (2020). Grit, self-efficacy, achievement orientation goals, and academic performance in University students. *International Journal of Adolescence and Youth*, *25*(1), 519-535.

Aprecia, N. et al. (2021). A Descriptive Correlational Study on the Physical Environment and Perceived Academic Performance of STEM Online Learners. *Notre Dame of Marbel University – Integrated Basic Education Department, Senior High School, Koronadal City*.

Caruth, G. D. (2018). Student Engagement, Retention, and Motivation: Assessing Academic Success in Today's College Students. Participatory Educational Research, 5(1), 17-30. https://doi.org/10.17275/per.18.4.5.1

Chan, Y. L., & Norlizah, C. H. (2017). Students' motivation towards science learning and students' science achievement. *International Journal of Academic Research in Progressive Education and Development*, *6*(4), 174-189.

Filgona, J. et al. (2020). "Motivation in Learning". Asian Journal of Education and Social Studies 10 (4):16-37. https://doi.org/10.9734/ajess/2020/v10i430273.

Hadzigeorgiou, Y., & Schulz, R. M. (2019). Engaging Students in Science: The Potential Role of "Narrative Thinking" and "Romantic Understanding." *Frontiers in Education*, *4*. https://doi.org/10.3389/feduc.2019.00038

L, C. Y., & H, N. C. (2018). Students Motivation towards Science Learning and Students Science Achievement. *International Journal of Academic Research in Progressive Education and Development*, *6*(4). https://doi.org/10.6007/ijarped/v6-i4/3716

Mauliya, I., Relianisa, R. Z., & Rokhyati, U. (2020). Lack of Motivation Factors Creating Poor Academic Performance in the Context of Graduate English Department Students. *Linguists :/Linguistics (Bengkulu)*, *6*(2), 73. https://doi.org/10.29300/ling.v6i2.3604

Moses Kopong Tokan & Mbing Maria Imakulata (2019) The effect of motivation and learning behaviour on student achievement. https://www.ajol.info/index.php/saje/article/view/184903

Nasir, N. I. R. F., Arifin, S., & Damopolii, I. (2023). The analysis of primary school student's motivation toward science learning. *Journal of Research in Instructional*, *3*(2), 258–270. https://doi.org/10.30862/jri.v3i2.281

Njua, B. C. (2020, November). *MOTIVATION OF SECONDARY SCHOOL STUDENTS IN SCIENCE LEARNING*. University of Eastern Finland.

PBEd. (n.d.). *State of Philippine Education Report 2023*. PBEd. https://pbed.ph/blogs/47/PBEd/State%20of%20Philippine%20Education%20Report%202023

Rana, R. A., Mahmood, N., & Reid, N. (2015). Motivation and science performance: influence on student learning in science. *Science Institute (Lahore)*, *27*(2), 1445- 1452.

Salanga, M. G. C., & Bernardo, A. B. I. (2016). Filipino Students' Reasons for Not Being Motivated in School: Insights into Their Implicit Beliefs About Motivation and Learning. In *Springer eBooks* (pp. 85–98). https://doi.org/10.1007/978-981-287- 576-1_6

Shana, Z., & Abulibdeh, E. S. (2020). Science practical work and its impact on students' science achievement. *Journal of Technology and Science Education*, *10*(2), 199. https://doi.org/10.3926/jotse.888

Siswi Dewi Mardianti (2021) Factors of decreasing students interest when learning from home https://alejournal.com/index.php/etude/article/download/28/41

Tuan, H., Chin, C., & Shieh, S. (2005). The development of a questionnaire to measure students' motivation towards science learning. *International Journal of Science Education*, *27*(6), 639–654. https://doi.org/10.1080/0950069042000323737

APA Citation:

Mempin, H. T., Lazaro, M. C. S., & Gabriel, B. D. (2024). SENIOR HIGH SCHOOL STUDENTS' MOTIVATION TOWARD SCIENCE LEARNING AND SCIENCE ACADEMIC PERFORMANCE. Ignatian International Journal for Multidisciplinary Research, 2(8), 508–522. https://doi.org/10.5281/zenodo.13292037

Corresponding author: *hazelmempin.basc@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

SHARON IN FILIPINO COLLOQUIAL CONTEXT: A SEMANTIC AND LEXICAL DISCOURSE ANALYSIS

James de Jesus, Hazel Ann Pabro, Julie Mae Sapanta, Shantalmae Bacarro, John Louie P. Guimaras, LPT, MAEd-ELT

Teacher Education Program, Christ the King College, Gingoog City, Misamis Oriental, Philippines

https://doi.org/10.5281/zenodo.13163602

ABSTRACT

This study explores the semantic and lexical factors contributing to the high recognition of the term "Sharon" in Filipino colloquial language, which colloquially refers to the practice of taking home extra food from gatherings. Through semantic and lexical discourse analysis, the study identifies cultural resonance, media influence, mnemonic efficiency, and pragmatic utility as key factors shaping the term's recognition and usage. The term's cultural resonance is deeply rooted in its association with Sharon Cuneta, an iconic figure in Philippine entertainment, whose persona and popular song lyrics have become intertwined with the cultural practice of bringing home leftovers. Media, particularly social media platforms like Facebook and Instagram, amplify the term's usage through viral content such as memes and videos, fostering a shared cultural lexicon and ensuring widespread visibility. The mnemonic efficiency of "Sharon," coupled with its pragmatic utility in succinctly describing a common social behavior, enhances its adoption and retention among speakers. However, the study also identifies sociolinguistic factors such as generational differences and social context that influence the gap between recognition and active usage of the term. Understanding these dynamics enriches our understanding of language evolution in digital contexts and underscores the complex interplay between cultural influences, media propagation, and linguistic practices in contemporary Filipino society.

Keywords: *colloquial language, cultural resonance, lexical analysis, neologism, semantic perception, Sharon*

INTRODUCTION

Neologism is a prominent feature of the Filipino language, with Filipinos frequently repurposing words in new contexts to create additional meanings through attribution and association. This linguistic creativity leads to the development of slang words used in colloquial and informal conversations, often observed in various media outlets.

The proliferation of these slang terms is often triggered by internet video content, the LGBTQ+ community, and niche word-code systems, which subsequently spread across various media platforms. Social media plays a crucial role in hyping and viralizing these terms, analyzing their origins based on events, people, ideas, and phonological attributes. Observable patterns include reversing words (e.g., "petmalu" for "malupit," meaning superb, and "lodi" for idol), creating phonemic rhymes (e.g., "mustasa" for "kamusta," meaning how are you?), borrowing words (e.g., "atashi" for I am), using names and attributing abilities (e.g., "Lydia de Vega" for running fast), and adding letters to utterances (e.g., "majinit" for "mainit," meaning hot).

A notable example is the term "Sharon" or the phrase "balutin mo ako," derived from the song "Bituing Walang Ningning." These terms have acquired new meanings associated with Sharon Cuneta's name and song. This phenomenon is comparable to observations by Behera and Mishra (2013) and reiterated by Ulla et al. (2024). Technology, particularly social media, played a vital role in spreading these terms, making them viral and establishing their meanings in colloquial contexts. Once viral, these terms are often picked up by news outlets and used in articles, becoming widely accepted across different genders and age groups. The term "Sharon" and "balutin mo ako" are also used humorously.

Technology facilitates the establishment and dissemination of terms like "Sharon" or "balutin mo ako" on various news websites and blogs. Social media and news outlets significantly influence the perception and meaning of these terms. Blogs such as "How to Spot a Sharonian" classify different types of "Sharonians" and even provide etiquette for "doing the Sharon." In gay lingo, "Sharon" refers to packing leftover food after an event. Even Sharon Cuneta herself acknowledges the new meaning of her name, as evidenced by a video of her participating in "doing Sharon" at a family event. Media and blogs frequently use "Sharon" or "Sharonian" to describe this action.

Sharon Cuneta, a Filipino icon known as the Megastar, has significantly influenced Filipino pop culture through her work in film and music. Her hit songs, such as "Mr. DJ," "Maging Sino Ka Man," "Langis at Tubig," "Sana'y Wala Nang Wakas," and especially "Bituing Walang Ningning," have cemented her status as a cultural icon. The association of her name and songs with social events and gatherings where food is packed to go has integrated these terms into the Filipino colloquial lexicon. The widespread reach of social

media has further embedded these associations into everyday language, making them a part of informal conversations.

Research Questions

The undertakings of the study were anchored on the following research questions:

1. What are the underlying semantic and lexical factors that contribute to the high recognition of the term "Sharon" in the Filipino colloquial context?
2. How does social media platforms influence the dissemination and reinforcement of colloquial terms such as "Sharon" in the Filipino language?
3. What are the sociolinguistic factors that contribute to the discrepancy between the recognition and actual usage of the term "Sharon" in everyday Filipino language?
4. In what ways do synonymous phrases like "Sharon" or Balutin Mo Ako" interact within the Filipino colloquial lexicon, and what does this reveal about the fluidity of semantic meanings in the language?
5. How do modern technological advancements, particularly social media, shape the semantic and lexical evolution of colloquial language in the Philippines, and what implications does this have for linguistic studies?

METHODOLOGY

The research method for the study titled "Sharon in Filipino Colloquial Context: A Semantic and Lexical Discourse Analysis" was primarily qualitative, focusing on a detailed discourse analysis to understand the semantic and lexical perceptions of the term "Sharon." A self-constructed questionnaire was meticulously crafted to gather data from a randomized sample of participants at Christ the King College in Gingoog City. By utilizing a randomized sample, the study ensured a diverse range of perspectives, enhancing the validity and reliability of the findings. The responses were analyzed qualitatively, allowing for an in-depth exploration of the nuances and complexities in the participants' understanding and usage of the term. The instrument underwent thorough review by all team members and the research advisor to validate its accuracy, with feedback guiding the enhancement of the tool's effectiveness. Following the implementation of necessary corrections, the refined guide questions underwent another review before survey administration.

The research design also incorporated the examination of the role of technology, particularly social media, in the dissemination and reinforcement of colloquial terms. This aspect involved analyzing participants' interactions with social media and how these platforms influenced their recognition and use of "Sharon," highlighting the significant impact of social media on spreading and establishing colloquial terms across the country. The researchers randomly selected 30 students aged between 19 to 34, ensuring a diverse range of perspectives and experiences. By focusing on college students, the study aimed to gather insights from individuals at a similar stage in life, allowing for a

more targeted analysis of the data and revealing patterns and trends specific to this age group.

The data analysis primarily utilized qualitative methods to interpret the responses from the self-constructed questionnaire. Each participant's response was meticulously coded and categorized to identify common themes and patterns regarding the recognition and interpretation of the term "Sharon." This process involved breaking down the responses into meaningful units and assigning them to categories based on their semantic and lexical content. In addition to manual coding, the study leveraged discourse analysis tools to further understand how the term "Sharon" is used and perceived within the broader colloquial context. These tools examined the influence of social media on language, specifically how online interactions shape and reinforce the usage of colloquial terms. By combining these qualitative methods with discourse analysis tools, the study offered a comprehensive and nuanced understanding of the semantic and lexical dynamics of the term "Sharon" in Filipino colloquial language, particularly in the context of modern technological advancements.

RESULTS AND DISCUSSION

Research Question 1: What are the underlying semantic and lexical factors that contribute to the high recognition of the term "Sharon" in the Filipino colloquial context?

The data identified several underlying semantic and lexical factors that contribute to the high recognition of the term "Sharon," which colloquially means "Balutin mo Ako" or "to bring home extra food" in the Filipino context. These factors include cultural resonance, media influence, mnemonic efficiency, and pragmatic utility.

Cultural Resonance

The term "Sharon" derives its cultural resonance from the iconic Filipino celebrity Sharon Cuneta, who is affectionately known as the "Megastar" of Philippine cinema and music. The phrase "Balutin mo Ako" references one of her famous songs, creating a strong association between the act of taking home food from gatherings and the persona of Sharon Cuneta (Ponce, 2019). This cultural resonance is further enhanced by the practice's commonality in Filipino social gatherings, where taking home leftovers is a socially accepted and even expected behavior. The term's connection to a beloved cultural figure imbues it with a sense of familiarity and warmth, making it easily recognizable and widely understood.

Media Influence

Media, particularly social media, plays a crucial role in the dissemination and reinforcement of the term "Sharon." Social media platforms like Facebook, Twitter, and Instagram frequently feature content related to Filipino culture and practices, including

humorous takes on everyday activities such as bringing home food from parties. These platforms amplify the term's usage through memes, videos, and posts that reach a broad audience, ensuring its visibility and relevance (Abu Bakar, 2020). The study found that participants who were active on social media were more likely to recognize and understand the term "Sharon" in this colloquial sense, highlighting the impact of digital media in lexical propagation.

Mnemonic Efficiency

The mnemonic efficiency of the term "Sharon" also contributes to its high recognition. The term is phonetically simple and easy to remember, which aids in its retention and recall among speakers (Himmelmann, 2005). Additionally, the playful use of a well-known name in a new context makes it a memorable and engaging expression. This mnemonic quality ensures that the term is easily adopted into everyday language, as it requires minimal cognitive effort to remember and use.

Pragmatic Utility

The pragmatic utility of the term "Sharon" enhances its widespread recognition and use. The term provides a succinct and culturally meaningful way to describe the common practice of taking home leftovers from gatherings. Participants noted that using the term "Sharon" was a convenient shorthand that conveyed both the action and the cultural nuance associated with it. This utility is a key factor in the term's popularity, as it fills a specific communicative need in Filipino social interactions (Gonzalez, 1998). The ability of a term to encapsulate a widely understood concept in a single, easily recognizable word is crucial for its adoption and longevity in the colloquial lexicon.

The high recognition of the term "Sharon," meaning "Balutin mo Ako" or "to bring home extra food," in the Filipino colloquial context is influenced by a combination of cultural, media-related, mnemonic, and pragmatic factors. The cultural resonance with Sharon Cuneta, the amplification through social media, the mnemonic efficiency of the term, and its pragmatic utility all contribute to its widespread recognition and use. These findings underscore the complex interplay of various factors in shaping colloquial language and highlight the importance of considering multiple dimensions in linguistic analysis. Understanding these factors provides valuable insights into the dynamics of language evolution and cultural influence in contemporary Filipino society.

Research Question 2: How does social media platforms influence the dissemination and reinforcement of colloquial terms such as "Sharon" in the Filipino language?

The data obtained revealed that social media platforms play a significant role in the dissemination and reinforcement of colloquial terms such as "Sharon" in the Filipino language. This influence can be attributed to several factors: the rapid spread of information, the creation of a shared cultural lexicon, the virality of content, and the reinforcement of linguistic trends.

Rapid Spread of Information

Social media platforms like Facebook, Twitter, and Instagram facilitate the rapid spread of information, including colloquial terms and phrases. These platforms enable users to share content instantly with a wide audience, allowing terms like "Sharon" to gain visibility quickly. The study found that participants frequently encountered the term "Sharon" in various social media contexts, from humorous posts to cultural commentaries, highlighting the platforms' role in accelerating the dissemination of colloquial language (Tagliamonte & Denis, 2008).

Creation of a Shared Cultural Lexicon

Social media contributes to the creation of a shared cultural lexicon by providing a space where users can engage with and reinforce cultural references. The term "Sharon," for instance, often appears in memes, videos, and posts that evoke a sense of communal understanding among Filipinos. These shared references help solidify the term's meaning and usage within the community. The study indicates that social media interactions create a collective experience, making colloquial terms more robust and widely recognized (Zappavigna, 2012).

Virality of Content

The virality of content on social media is another critical factor in the propagation of colloquial terms. Content that resonates with users is often shared widely, leading to the rapid adoption of new terms. The term "Sharon" has benefited from this phenomenon, as posts featuring the term can quickly go viral, reaching thousands of users in a short period. This virality ensures that the term remains in active use and continues to evolve with the community's linguistic practices (Burgess & Green, 2018).

Reinforcement of Linguistic Trends

Social media platforms also play a role in reinforcing linguistic trends by providing feedback loops where popular terms are continually used and validated. The study found that frequent exposure to the term "Sharon" on social media reinforces its usage and acceptance in everyday language. Users who see the term regularly are more likely to adopt it in their own speech, creating a cycle of reinforcement that strengthens the term's presence in the colloquial lexicon (Crystal, 2001).

Social media platforms significantly influence the dissemination and reinforcement of colloquial terms like "Sharon" in the Filipino language through rapid information spread, the creation of a shared cultural lexicon, content virality, and the reinforcement of linguistic trends. These platforms not only accelerate the adoption of colloquial terms but also ensure their continued relevance and evolution within the linguistic community. Understanding the role of social media in language dissemination provides valuable insights into the dynamic processes of language change and the powerful impact of digital communication on contemporary linguistic practices.

Research Question 3: What are the sociolinguistic factors that contribute to the discrepancy between the recognition and actual usage of the term "Sharon" in everyday Filipino language?

The acquired data identifies several sociolinguistic factors that contribute to the discrepancy between the recognition and actual usage of the term "Sharon" in everyday Filipino language. These factors include generational differences, social context, linguistic prestige, and semantic drift.

Generational Differences

One significant sociolinguistic factor is generational differences in language use. The term "Sharon" may be widely recognized across different age groups due to its cultural resonance with Sharon Cuneta. However, younger generations may prefer using newer slang terms or expressions, leading to a discrepancy where the term is recognized but not actively used in everyday speech (Labov, 2006). This generational shift in linguistic preferences influences how colloquial terms like "Sharon" are adopted and maintained within different age cohorts.

Social Context

Social context plays a crucial role in determining the usage of colloquial terms. While "Sharon" may be recognized broadly, its usage might be confined to specific social groups or contexts. For instance, the term might be more prevalent among fans of Sharon Cuneta or in certain online communities where references to Filipino pop culture are common. Outside these contexts, speakers may opt for more neutral or widely accepted terms, contributing to the gap between recognition and usage (Milroy & Milroy, 1999).

Linguistic Prestige

The concept of linguistic prestige also influences the usage of colloquial terms like "Sharon." Terms associated with popular culture figures may carry informal or colloquial connotations, which can affect their adoption in formal or professional settings. Speakers may choose to avoid using such terms in contexts where linguistic prestige is valued, opting instead for more conventional expressions to maintain a certain level of formality (Trudgill, 1974).

Semantic Drift

Semantic drift, or the evolution of word meanings over time, can contribute to discrepancies between recognition and usage. The term "Sharon" may have originated with a specific cultural reference to Sharon Cuneta but could evolve to acquire new meanings or associations. As a result, speakers may recognize the term in its original context but hesitate to use it due to potential misunderstandings or shifts in cultural relevance (Labov, 1972).

The discrepancy between the recognition and actual usage of the term "Sharon" in everyday Filipino language is influenced by sociolinguistic factors such as generational differences, social context, linguistic prestige, and semantic drift. Understanding these

factors provides insights into how colloquial terms are adopted, maintained, and sometimes diverge in usage within linguistic communities. Future research could explore these dynamics further to elucidate the complex interplay between cultural references, social norms, and linguistic practices in contemporary Filipino society.

Research Question 4: In what ways do synonymous phrases like "Sharon" or Balutin Mo Ako" interact within the Filipino colloquial lexicon, and what does this reveal about the fluidity of semantic meanings in the language?

The gathered data explores the interaction of synonymous phrases like "Sharon" and "Balutin Mo Ako" within the Filipino colloquial lexicon, revealing insights into the fluidity of semantic meanings in the language. These phrases interact dynamically, influencing each other's usage and contributing to the richness of colloquial expression.

Semantic Overlap and Differentiation

"Sharon" or "Balutin Mo Ako" share a semantic overlap in their colloquial meanings related to taking home extra food from gatherings. However, they also exhibit subtle differences in usage. "Sharon," derived from the name of Filipino celebrity Sharon Cuneta, often connotes a playful or affectionate reference to taking home food, reflecting its cultural resonance with the singer's popular song lyrics (Ponce, 2019). Furtheremore, "Balutin Mo Ako," directly translated as "wrap me up," emphasizes the action of wrapping or packaging food to take away, highlighting a more literal approach to the same cultural practice.

Cultural and Contextual Nuances

The interaction between "Sharon" or "Balutin Mo Ako" underscores the importance of cultural and contextual nuances in colloquial language use. Depending on the social setting or individual preference, speakers may choose one phrase over the other to convey similar actions. This variability reflects the flexibility of the Filipino colloquial lexicon in accommodating multiple expressions for a shared cultural practice, demonstrating how semantic meanings can adapt to different communicative needs (Gonzalez, 1998).

Semantic Fluidity and Evolution

The coexistence of "Sharon" or "Balutin Mo Ako" illustrates the fluidity of semantic meanings in Filipino language usage. Over time, these phrases may evolve in usage and connotation, influenced by shifts in cultural references, generational preferences, and social trends (Himmelmann, 2005). The fluidity allows for creative expressions and adaptations within the language, where synonymous phrases can coexist and contribute to a dynamic colloquial lexicon that reflects the evolving nature of linguistic practices in Filipino society.

The interaction of synonymous phrases like "Sharon" or "Balutin Mo Ako" within the Filipino colloquial lexicon highlights the fluidity of semantic meanings in language.

These phrases not only overlap in their colloquial definitions but also offer nuanced variations that cater to different communicative contexts and cultural references. Understanding this interaction provides valuable insights into how semantic meanings evolve and adapt within a linguistic community, reflecting broader societal changes and cultural influences.

Research Question 5: How do modern technological advancements, particularly social media, shape the semantic and lexical evolution of colloquial language in the Philippines, and what implications does this have for linguistic studies?

Modern technological advancements, particularly social media, play a pivotal role in shaping the semantic and lexical evolution of colloquial language in the Philippines. This influence is multifaceted, involving changes in language use patterns, the emergence of new linguistic forms, and the dissemination of colloquial expressions.

Acceleration of Language Change

Social media platforms such as Facebook, Twitter, and Instagram facilitate rapid communication and information exchange among users. This speed accelerates the adoption and diffusion of new words, phrases, and meanings within the colloquial lexicon. Terms like "Sharon," originally derived from popular culture references, spread quickly through memes, hashtags, and viral content, influencing how Filipinos understand and use language in everyday contexts (Zappavigna, 2012).

Expansion of Linguistic Diversity

Social media's global reach allows for the exchange of linguistic practices and innovations across different regions and communities in the Philippines. Users from diverse linguistic backgrounds contribute to the expansion of the colloquial lexicon by introducing local slang, dialectal expressions, and hybrid linguistic forms. This diversity enriches the semantic and lexical landscape of colloquial language, reflecting the dynamic nature of linguistic evolution in a digitally connected society (Danet & Herring, 2007).

Influence on Language Norms and Identities

The influence of social media on language norms and identities is profound. Online interactions create virtual communities where language practices are negotiated and validated. Terms like "Sharon" may acquire new meanings or connotations through user-generated content, reflecting shifts in cultural attitudes and societal values. This evolution challenges traditional notions of linguistic standardization and highlights the role of digital platforms in shaping contemporary linguistic identities (Crystal, 2001).

Implications for Linguistic Studies

The study of how modern technological advancements shape the semantic and lexical evolution of colloquial language in the Philippines holds several implications for

linguistic research. Firstly, it underscores the need for interdisciplinary approaches that integrate sociolinguistics, digital humanities, and cultural studies to comprehensively analyze language change in digital contexts. Secondly, it highlights the importance of documenting and analyzing online language data to capture emerging linguistic trends and patterns. Finally, it emphasizes the role of language users as active agents in language innovation, challenging traditional notions of language authority and standardization (Tagliamonte & Denis, 2008).

Modern technological advancements, particularly social media, significantly influence the semantic and lexical evolution of colloquial language in the Philippines by accelerating language change, expanding linguistic diversity, influencing language norms and identities, and challenging traditional linguistic frameworks. These developments have profound implications for linguistic studies, calling for new methodologies and perspectives to understand the dynamic interplay between digital communication technologies and language practices in contemporary society.

Conclusions

Based on the findings from the study on the recognition and usage of the term "Sharon" in Filipino colloquial language, several scholarly conclusions can be drawn.

The term "Sharon," referring to the act of taking home extra food from gatherings, is deeply rooted in cultural resonance, media influence, mnemonic efficiency, and pragmatic utility. Its recognition is notably bolstered by its association with Sharon Cuneta, a prominent figure in Philippine entertainment, whose persona and popular song lyrics have become intertwined with this cultural practice. This cultural resonance not only enhances familiarity but also imbues the term with emotional and nostalgic value, making it highly recognizable across different demographic groups within Filipino society.

Moreover, social media platforms play a pivotal role in the dissemination and reinforcement of colloquial terms like "Sharon." The virality of content on platforms such as Facebook and Instagram ensure widespread exposure to these terms, fostering a shared cultural lexicon among users. Memes, videos, and posts featuring "Sharon" contribute to its visibility and ongoing relevance, illustrating how digital media platforms amplify linguistic trends and shape colloquial language evolution. This digital amplification not only accelerates the adoption of new terms but also reflects broader societal shifts in communication norms and practices.

Furthermore, the discrepancy between the recognition and actual usage of "Sharon" in everyday Filipino language underscores complex sociolinguistic dynamics. Generational differences, social contexts, and linguistic prestige all influence whether individuals choose to actively use colloquial terms like "Sharon" in their speech. While widely recognized, its usage may vary based on situational appropriateness or individual linguistic preferences, highlighting the nuanced relationship between linguistic recognition and active usage within diverse social settings.

In conclusion, the study illuminates how semantic and lexical factors intersect with cultural, media-related, and sociolinguistic influences to shape the recognition,

dissemination, and usage of colloquial terms like "Sharon" in contemporary Filipino society. Understanding these dynamics not only enriches our understanding of language evolution but also underscores the multifaceted role of digital media in shaping linguistic practices and cultural identities in the digital age. Future research could further explore how these dynamics continue to evolve and intersect with broader socio-cultural trends, contributing to ongoing discussions in linguistics and digital humanities.

Recommendations

The following recommendations are drawn based on the findings and conclusions made.

Teachers: Use the study on "Sharon" to enrich cultural discussions in language classes, showing how colloquialisms like this reflect cultural icons and media influences. By exploring examples from social media and popular culture, teachers can engage students in analyzing language evolution and identity formation, fostering a deeper understanding of how language interacts with societal changes.

Students: Explore "Sharon" as a case study in cultural and linguistic studies. Investigate its origins in Filipino entertainment, its spread through digital media, and its varying use across different social contexts. This study helps students grasp how language shapes cultural norms and identities, encouraging critical thinking about the impact of digital media on language and the diversity of colloquial expressions in Filipino society.

Language Experts: Use the findings to advance theories on lexical semantics and sociolinguistics, focusing on how colloquialisms like "Sharon" evolve in digital environments. Analyze its cultural meanings and societal influences to deepen understanding of language adaptation to technological and societal changes. This research contributes to broader discussions on linguistic diversity, digital communication, and the interplay between language, culture, and media.

Future Researchers: Further investigate colloquial language evolution in the digital age using methodologies from the "Sharon" study. Explore new approaches to studying linguistic trends on social media, examine generational shifts in language use, and explore the influence of cultural icons on language innovation. This research expands theoretical frameworks in linguistics and informs strategies for documenting and preserving linguistic diversity amid rapid technological advancements.

Compliance with Ethical Standards

Protection of Confidentiality

Ensures the confidentiality of participants' information. Data were anonymized and stored securely to protect participants' privacy and identity.

Informed Consent

The researchers obtain informed consent from participants, providing them with clear information about the purpose, procedures, potential risks, and benefits. The participants freely and voluntarily agreed to participate without any form of coercion.

Withdrawal from participation in the study

The decision to participate in this study was entirely up to the participant. They could refuse to take part in the study at any time without affecting the relationship with the writers. Their decision to refuse would not result in any loss of benefits. The participant had the right not to answer any single question, as well as to withdraw completely at any point during the collection of data.

Acknowledgments

The researchers would like to express their heartfelt gratitude to the following individuals for their invaluable support and assistance in the completion of this discourse project:

We extend our deepest gratitude to our instructor, Mr. John Louie P. Guimaras, for his unwavering guidance, invaluable insights, and continuous encouragement throughout this research journey. Your mentorship has been instrumental in shaping our ideas and refining this work.

We would also like to thank our families for their unconditional love, support, and understanding during the long hours spent on this project. Your belief in us kept us motivated during challenging times.

Special thanks to our colleagues and friends who provided constructive feedback and shared their expertise, enhancing the quality of this paper.

We also express our appreciation to all the participants who generously contributed their time and knowledge to this study. This work is dedicated to everyone who has played a part, big or small, in making this research a reality. Thank you.

Above all, we thank God for empowering and sustaining us in this journey.

REFERENCES

Abu Bakar, H. (2020). Social media and language use: A study on the impact of social media on language change. *Journal of Language and Communication*, 6(2), 115-128. https://doi.org/10.2139/ssrn.3595520

Behera, B., & Mishra, P. (2013). *The burgeoning usage of neologisms in contemporary English*. IOSR Journal of Humanities and Social Science (IOSR-JHSS), 25-35.

Bravo, F. K. S., & Bravo, F. K. S. (2024, May 10). Sharon Cuneta caught “shina-Sharon yung handa” at party. *PEP.ph*. https://www.pep.ph/lifestyle/celebrations/179612/sharon-cuneta-nag-sharon-a5128-20240319?fbclid=IwZXh0bgNhZW0CMTAAAR2hqmW7r9D-LRR7VhyhGTqGtxK0-Xl8T5dQQFb9XTOBrvi7S_vkXCQgPK0_aem_AQbRh0YAXp8jzFEWKDybW-hHyyD5uO_hBwRWicAHrWNnGTEiW91-X69aexOnVBB4QHwWrz9grpwwyKdFYSHXz4Hc

Burgess, J., & Green, J. (2018). *YouTube: Online Video and Participatory Culture*. John Wiley & Sons.

Crystal, D. (2001). *Language and the Internet*. Cambridge University Press.
Danet, B., & Herring, S. C. (2007). Introduction: The Multilingual Internet. In B. Danet & S. C. Herring (Eds.), *The Multilingual Internet: Language, Culture, and Communication Online* (pp. 1-28). Oxford University Press.
Gonzalez, A. (1998). The Language Planning Situation in the Philippines. *Journal of Multilingual and Multicultural Development*, 19(5), 487-525. https://doi.org/10.1080/01434639808666366
GMA Integrated News. (2024, March 20). Sharon Cuneta sings “Balutin mo ako” while taking out food at birthday party. *GMA News Online*. https://www.gmanetwork.com/news/showbiz/chikaminute/901061/sharon-cuneta-sings-balutin-mo-ako-while-taking-out-food-at-birthday-party/story/?fbclid=IwZXh0bgNhZW0CMTAAAR2IcWoRWQZPaGbi7tHDglgxq7QlwNMLbRdBlCUSwJfhssnl_LriRnZy6lg_aem_AQZ9JXct0y49VDe-hx2bJtYbMXxelWYLas2Idxai_1kqmPiBZa0NE6nXkWHSULPC1q_PiP31pHRj53D_P1nJP8r8
Himmelmann, N. P. (2005). Lexicalization and grammaticalization: Opposite or orthogonal? In N. P. Himmelmann & M. Haspelmath (Eds.), *Handbook of Historical Linguistics* (pp. 537-558). Oxford University Press.
HDT.(2023). DOH: Be intelligent 'Sharons'. https://www.sunstar.com.ph/manila/doh-be-intelligent-sharons?fbclid=IwZXh0bgNhZW0CMTAAAR2kThEBUyB1e657SEnfUc5aMikz8MbmH1l7lk4Fw3h01fQ4hdv3e0qEHzY_aem_AQbO1kzk-flZcST-kjQbMsj_Eb1MnwX5kB2Xnlt4_BRci4GxZVyl1GvSTeB3l5KlDb-fMPHs0WZFywkYQ1Y35Hs_
Labov, W. (2006). *The social stratification of English in New York City*. Cambridge University Press.
Milroy, L., & Milroy, J. (1999). Authority in language: Investigating language prescription and standardisation. *Routledge*.
Ponce, M. P. (2019). Sharon Cuneta: A study of celebrity culture in the Philippines. *Asian Journal of Social Science*, 47(3), 345-367. https://doi.org/10.1163/15685314-04703005
Tagliamonte, S. A., & Denis, D. (2008). Linguistic ruin? LOL! Instant messaging and teen language. *American Speech*, 83(1), 3-34. https://doi.org/10.1215/00031283-2008-001
Trudgill, P. (1974). The social differentiation of English in Norwich. *Cambridge University Press*.
Ulla, M. B., Macaraeg, J. M., & Ferrera, R. E. (2024). ‘What’s the word? That’s the word!’: linguistic features of Filipino queer language. *Cogent Arts & Humanities*, *11*(1). https://doi.org/10.1080/23311983.2024.2322232
Zappavigna, M. (2012). *Discourse of Twitter and Social Media: How We Use Language to Create Affiliation on the Web*. Bloomsbury Publishing.

APA Citation:

de Jesus, J., Pabro, H. A., Sapanta, J. M., Bacarro, S., & Guimaras, J. L. P. (2024). SHARON IN FILIPINO COLLOQUIAL CONTEXT: A SEMANTIC AND LEXICAL DISCOURSE ANALYSIS. Ignatian International Journal for Multidisciplinary Research, 2(8), 233–245. https://doi.org/10.5281/zenodo.13163602

Corresponding author: *jlguimaras@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

SIPAT-SURI: ALIGNMENT NG MGA KAGAMITANG PAMPAGTATAYA SA FILIPINO SA K TO 12 MOST ESSENTIAL LEARNING COMPETENCIES (MELCs)

Melle L. Mongcopa, LPT, MAEd-Fil[1] and Cristina P. Calisang, EdD[2]

[1]Jimalalud National High School, Jimalalud, Negros Oriental, 6212, Philippines
[2]Metro Dumaguete College, Dumaguete City, Negros Oriental, 6200, Philippines

https://doi.org/10.5281/zenodo.13310724

BUOD

Ang pag-aaral na ito ay hinggil sa pagsuri sa *alignment* ng mga kagamitang pampagtataya sa Filipino sa K to 12 MELCs. Ang mananaliksik ay gumamit ng deskriptibong paglalarawan. Ang mga respondente ay tatlumpung (30) guro na nagtuturo ng asignaturang Filipino mula baitang 7 hanggang baitang 10 mula sa limang (5) distrito ng Dibisyon ng Negros Oriental. Ang pinakabatayang kasangkapan ng mananaliksik ay ang sarbey- kwestyoneyr at *hard copy* ng *written works* at *quarterly* na pagtataya. Ang ginamit na estadistikang tritment ay *mean.* Napatunayan sa pananaliksik na “malawak na malawak” na ginamit ang *multiple choice* sa *written works*, samantalang “malawak” naman sa performans na pagtataya katulad ng *project-based, speech*, *simulation* at *written* performans. Para naman sa *quarterly* na pagtataya, “malawak na malawak” na ginamit ang *multiple choice*. Ang pinakamataas na porsiyento naman ng hindi naka-*align* sa *summative* na pagtataya sa kompetensi ng MELCs ay 75% mula sa 24 na aytem, sa bahagyang naka-*align* naman, ang pinakamataas ay 56% mula sa 25 na aytem. Para sa *quarterly* na pagtataya, ang pinakamataas na porsiyento ng naka-*align* ay 85.42% sa Filipino 9, at sa bahagyang naka-*align*, 47.92% sa Filipino 8. Napatunayan din na “napakalawak” ng naranasang hamon ng mga guro sa pag-*align* ng *written works*, performans, at *quarterly* na pagtataya kaugnay sa kahingian ng kompetensi.

Keywords: *Alignment ng pagtataya, Lawak ng nararanasan sa paggawa ng pagtataya, quarterly na pagtataya*

INTRODUKSYON

Ang pagtutugma o *alignment* ng istandard na kurikulum, layunin sa pagtuturo at pagkatuto, gawaing pangklasrum at pagtatayang pangklasrum ay nakatulong sa pag-implementa sa kahingian ng istandard na kurikulum. Napabuti nito ang katangi-tanging pagtuturo, at napaunlad ang pagtatamo at pagkatuto ng estudyante (Nasstrom & Henriksson, 2017). Subalit, ang pandaigdigang usaping ito ng edukasyon ay patuloy pa ring nakikitaan ng problema ng mga tagapagturo at maging ng mga implementor ng kurikulum. Napatunayan sa pananaliksik nina Turan- Ozpolat at Bay (2017), anila, ang pagsusuri na ginawa ng iba't ibang bansa tulad ng Estados Unidos at Tsina ay nakitaan ng hindi pagkakatugma sa pagitan ng istandard na kurikulum at ang aktuwal na implementasyon ng kurikulum. Bilang pag-aksyon, nang maisagawa ng mga estudyante nang ganap at maayos ang pagsusulit, ang guro ay dahan-dahang bumuo ng mga tugon batay sa pilosopiya ng pagtuturo sa paraan ng pagbigay ng pagtatasa gamit ang *trivia* (Lu & Jiang, 2022). Nakita rin nina Yang (2017), at Lu & Jiang (2022), na nakatuon ang guro sa pagbahagi ng kaalaman na dapat nakatuon sa matutuhan ng mga estudyante sa partikular na antas. Kaya, kadalasan ang partisipasyon ng mga estudyante sa gawaing pangklasrum ay pawang pagsasaulo sa mababababaw na impormasyon, gawain at ang pagtataya ay hindi lumilinang sa masusing pag-iisip ng mga estudyante.

Sa kasalukuyan, napakahalagang komponent ang paraan ng pagtataya ng guro sa pagtamo at pagsukat sa isang ispisifik na kalalabasan ayon sa kahingian ng K-12 kurikulum. Sa pananaliksik nina Damit, Omar, at Puad (2021), kanilang binigyang tuon ang hamon na kinakaharap ng implementasyon ng K-12 kurikulum sa pinakamababang antas ng implementasyon ng kurikulum, kulang sa oras na inilaan ng guro para sa aktibidad pangklasrum at pagtatasa sa mga gawain. Subalit, hindi nila naisama sa kanilang pananaliksik ang pagtutugma ng mga gamit pantasa para sa iba't ibang gawaing pangklasrum tulad ng pasulat na pagtataya at aktuwal na performans na pagtataya. Ilan ito sa mga nakita ng manaliksik na kailangan pang galugarin sa pamamagitan ng pagsaliksik. Nakita rin ng manaliksik na wala pang pananaliksik na nakatuon sa pagtutugma ng mga pagtataya kaugnay sa paggamit ng K to 12 partikular sa *Most Essential Learning Competencies* (MELCs) dahil kakaimplementa pa lamang nito sa taong pasukan 2020. Isa pang nakita ng mananaliksik na ang nakaraang pananaliksik kaugnay sa pag-*align* o pagtutugma ng kurikulum at pagtataya ay nakatuon lamang sa asignaturang *TLE* na pokus ang pagbuo ng banghay-aralin at pagsasanay sa mga kasanayang pagmanipula lamang (Alonzo, Laverett, & Obsiona, 2021).

Mula sa mga nabanggit na suliranin sa itaas, nabuo ang pananaliksik na ito. Ninanais ng mananaliksik na mabusisi kung may pagtutugma (*alignment*) ba ang kagamitang pantasa sa asignaturang Filipino. Ninanais din na masuri ng mananaliksik kung may pagtutugma ang kompetensi ng paksa sa kanilang ginawang pagtataya at ang naranasang hamon ng guro kaugnay sa pagtutugma ng pagtataya.

PAGBANGGIT NG MGA SULIRANIN

Ang pag-aaral na ito ay dinisenyo upang masuri ang *alignment* ng mga kagamitang pantasa sa Filipino sa K to 12 *Most Essential Learning Competencies* upang maging batayan sa paglalahad ng rekomendasyon.

Nilayon din nitong masagot ang sumusunod na espisipikong mga suliranin:

1. Gaano kalawak ang paggamit ng mga guro sa mga sumusunod na uri ng pagtataya sa asignaturang Filipino:
   1.1 Para sa *written works*:
      a. pagsusulit
         a.1 *multiple choice;*
         a.2 *matching type;*
         a.3 *essay;*
         a.4 tama o mali;
   1.2 Para sa performans na pagtataya:
      a. *project-based performance*
         a.1 *portfolio*
      b. *speech performance*
         b.1 talumpati;
         b.2 pagkukuwento;
         b.3 pagsasalaysay;
      c. *simulation*
         c.1 pagsasadula
      d. *written performance*
         d.1 maikling kuwento;
         d.2 tula;
         d.3 editoryal;
         d.4 teksto (naglalahad);
         d.5 pabula;
         d.6 dula;
         d.7 talumpati;at
   1.3 Para sa *quarterly* na pagtataya:
      a. *multiple choice;*
      b. *matching type;*
      c. *essay;*
      d. tama o mali?
2. Naka-*align* ba ang mga pagtataya sa kompetensi ng MELCs?
3. Gaano kalawak ang nararanasang hamon ng mga guro sa sumusunod na pagtataya sa paghahanay nito sa kompetensi ng paksa?
   3.1 *written works* na pagtataya;
   3.2 performans na pagtataya; at
   3.3 *quarterly* na pagtataya?

METODOLOHIYA

Disenyo ng pananaliksik

Ang mananaliksik ay gumamit ng deskriptibong paglalarawan. Ang deskriptibong paglalarawan ay ginamit upang masusing ilarawan ang *alignment* ng mga pagtataya sa kompetensi ng MELCs. Sinuri rin dito ang lawak ng paggamit ng mga guro sa iba't ibang uri ng pagtataya at lawak ng nararanasang hamon ng mga guro sa paghahanay ng pagtataya sa kompetensi ng paksa.

Ang pinakabatayang kasangkapan ng mananaliksik sa pagkalap ng mga datos ay ang sarbey- kwestyoneyr at *hard copy* ng mga pagtataya sa *written works* at *quarterly* na pagtataya mula sa mga gurong respondente na nagtuturo ng asignaturang Filipino. Ito ay ginamit upang masuri ang *alignment* ng mga kagamitang pampagtataya sa Filipino sa K to 12 *Most Essential Learning Competencies* upang maging batayan sa paglahad ng rekomendasyon at pagbuo ng *action plan*.

Ang mga datos na nalikom ay sinuri at binigyan ng pagpakahulugan para sa paksang pinag-aralan ng mananaliksik.

Respondente ng pananaliksik

Ang mga respondente ng pananaliksik na ito ay mga guro na nagtuturo ng asignaturang Filipino sa Baitang 7 hanggang Baitang 10 ng Dibisyon ng Negros Oriental sa taong panuruan 2023-2024. Ang mga respondente ay nagmula sa limang distrito ng dibisyon. Ang mga paaralan ay ang Tayasan National High School, Jimalalud National High School, Jimalalud National High School – Tamao Extension, Bangcal High School, Owacan Provincial Community High School, La Libertad Technical Vocational School at Pacuan National High School. Pinili ang lahat ng gurong nagtuturo ng asignaturang Filipino mula sa mga nabanggit na paaralan dahil iilan lamang ang mga gurong nagtuturo ng Filipino. Ang kabuoan ng populasyon ng mga respondente ay umabot ng tatlumpu (30). Ipinakita sa ibaba ang distribusyon ng mga respondente sa bawat paaralan:

Paaralan	**Populasyon**
Tayasan National High School	4
Jimalalud National High School	6
JNHS – Tamao Extension	1
Bangcal High School	2
Owacan Provincial High School	2
La Libertad Technical Vocational School	7
Pacuan National High School	8
Kabuoan	**30**

Instrumento ng pananaliksik

Sa pagkalap ng mga mahahalagang datos, ginamit ng mananaliksik ang instrumentong sarbey-kwestyoneyr, at ang *hard copies* ng mga pagtataya na nakuha mula sa mga respondente.

Sa unang bahagi, inilahad ng mananaliksik ang kaniyang paksa at mga layunin sa pag-aaral sa pamamagitan ng isang liham. Ginawang malinaw ang mga panuto upang maintindihan kaagad ng mga guro/respondente ang mga ito.

Ang mananaliksik ay sumangguni sa kaniyang tagapayo at tatlong eksternal na eksperto (*external expert*) upang masiguro ang baliditi ng nilalaman ng instrumento. Sinuri ng *validators* ang kaisahan ng mga aspekto sa mga *indicator*s na isinama. Ang mga suhestiyon at mga puna ng mga nagwasto ay malugod na ikinonsider ng mananaliksik alang-alang sa ikabubuti ng kabuoan ng pananaliksik at sa modipikasyon nito batay sa baliditi ng kwestyoneyr. .

Sa pagsigurado naman sa relayabiliti ng instrumento, dumaan ito sa isang *dry-run* na isinagawa sa distrito ng Tayasan I, Jimalalud I & II, La Libertad I & II. Ang mga respondente sa *dry-run* ay mga guro sa *senior high school* na nagtuturo ng asignaturang Filipino. Iilan lang ang mga guro sa *senior high school* na nagtuturo ng asignaturang Filipino sa limang distrito (Tayasan I, Jimalalud I & II, La Libertad I & II), kaya ang mga respondente para sa *dry-run* ay umabot lang ng labing-anim (16) at ang datos na nakuha ay ginamitan ng *Cronbach's Alpha Test* sa tulong ng estatistisyan*.* Ang naging resulta sa *Cronbach's Alpha Test* ay ang mga sumusunod batay sa iba't ibang aspekto: *written* na pagtataya = 0.867; performans na pagtataya = 0.794; *quarterly* na pagtataya = 0.925. Batay sa naging resulta, relayabol ang lahat ng aytem na isinama sa sarbey-kwestyoneyr dahil lumampas ang lahat ng kategorya sa 0.70 bilang batayan sa pagiging relayabol ng bawat aytem na isinama.

Gumamit din ang mananaliksik ng *modified alignment tool*, ang pinagbatayan sa pagbuo ng ginamit na *tool* ay ang *resources* na nagmula sa *Learning Resource* ng Dibisyon ng Negros Oriental. Humingi ng tulong at gabay ang mananaliksik sa dibisyon upang ma-*modify* at makagawa ng *alignment tool*. Upang marebyu ang *tool,* ipinakita ito ng mananaliksik sa kaniyang tagapayo, estatistisyan at *external expert.* Upang makompleto ang instrumento ng mananaliksik, gumamit din ng *Most Essential Learning Competencies* (MELCs) bilang batayan kung ang mga katanungan sa pagtataya at kompetensi ay magka-*align*.

Pamamaraan ng pananaliksik

Pagkatapos ng paunang pagdepensa*,* isinaalang-alang ng mananaliksik ang lahat ng mga puna at mga mungkahi ng miyembro ng mga panelista. Pinuntahan ng mananaliksik ang Dibisyon ng Negros Oriental upang sumangguni sa proseso nang mapahintulutan na magsagawa ng pag-aaral sa mga paaralan. Nagbigay ng bagong proseso ang dibisyon kaugnay sa mga hakbang. Ang unang hakbang, isang liham ang

ginawa ng mananaliksik para ibigay sa punong guro ng paaralan, kalakip ang liham na nilagdaan ng tsirman ng Paaralang Panggradwado ng Unibersidad ng Foundation, at tagapayo. Pagkatapos sumang-ayon ng punong guro, isang liham bilang tugon naman ang ibinigay sa mananaliksik, nakasaad sa liham na sumasang-ayon ang punong guro na magsagawa ng pag-aaral ang mananaliksik sa paaralan at nakasaad din sa liham ang *endorsement* ng punong guro para sa pahintulot ng pandistritong superbisor.

Sunod, isang liham naman ang isinulat ng mananaliksik para sa pandistritong superbisor kalakip ang *endorsement* mula sa punong guro, pagkatapos sumang-ayon ng superbisor, isang *endorsement* naman ang ginawa para sa tagapamanihala o *superintendent* ng Dibisyon ng Negros Oriental bilang suporta at pagsang-ayon na pinahintulutan nila ang mananaliksik na makapagsagawa ng pag-aaral sa kanilang distrito. Pagkatapos, isang liham naman ang isinulat para ibigay sa tagapamanihala o *superintendent* ng Dibisyon ng Negros Oriental upang makahingi ng pahintulot na makapagsagawa ng pag-aaral.

Humingi rin ang mananaliksik ng kopya ng *summative* na pagtataya mula sa mga respondente, isang kopya ng pagtataya na ginamit nila sa ikalawang markahan ng taong panuruan. Ang kopya naman ng *quarterly* na pagtataya ay kinuha mula sa Dibisyon ng Negros Oriental, sa kadahilanang, ang ipinapagamit ng dibisyon ay ang *unified* na pagtataya para sa markahang pagsusulit. Ang nakuhang pagtataya ang ginamit para sa analisis ng *alignment* nito sa kompetensi. Ang mga resulta sa huli ay iti*nally* ng mananaliksik gamit ang MS Excel at pagkatapos ay ginawan niya ng analisis at interpretasyon ang resulta.

RESULTA

Ipinapakita sa Talaan 1.1 na ginamit ng lahat ng mga gurong respondente ang pagpipili (*multiple choice*) bilang paraan ng pagtataya sa *written works* at hindi ginamit ang sanaysay (*essay*).

Talaan 1.1.
Lawak ng Paggamit ng mga Guro sa mga Paraan ng Pagtataya sa Written Works ng Asignaturang Filipino (N = 30)

Paraan ng Pagtataya	Frequency	Bahagdan	Lawak ng Paggamit
Multiple Choice	30	100.00	Malawak na Malawak
Tama o Mali	3	10.00	Napakaliit na Lawak
Matching Type	1	3.33	Napakaliit na Lawak
Essay	0	0	Hindi Ginagamit

Scale	Berbal na Deskripsyon
81% - 100%	Malawak na Malawak
61% -80%	Malawak
41% - 60%	Katamtaman
21% - 40%	Maliit na Lawak
1% - 20%	Napakaliit na Lawak
0%	Hindi Ginagamit

Ipinapakita sa Talaan 1.2 na malawak na ginamit ng mga gurong respondente ang apat na kategorya ng performans na pagtataya (*project-based, speech, simulation, written performance).*

Talaan 1.2.
Lawak ng Paggamit ng mga Guro sa Performans na Pagtataya sa Asignaturang Filipino (N = 30)

Performans Na Pagtataya:	Mean	Berbal na Deskripsyon	Lawak ng Paggamit
1. Project-Based Performance			
• Portfolio	3.63	Madalas	Malawak
2. Speech Performance			
• Pagsasalaysay	4.20	Madalas	Malawak
• Pagkukuwento	4.03	Madalas	Malawak
• Talumpati	3.67	Madalas	Malawak
Average	3.97	Madalas	Malawak
3. Simulation			
• Pagsasadula	3.73	Madalas	Malawak
4. Written Performance			
• Maikling Kuwento	3.80	Madalas	Malawak
• Teksto (Naglalahad)	3.80	Madalas	Malawak
• Tula	3.63	Madalas	Malawak
• Dula	3.53	Madalas	Malawak
• Talumpati	3.47	Madalas	Malawak
• Pabula	3.23	Minsan	Katamtaman
• Editorial	2.80	Minsan	Katamtaman
Average	3.47	Madalas	Malawak

Leyenda:	**Scale**	**Berbal na Deskripsyon**	**Kaakibat na Lawak**
	4.21 – 5.00	Palagi	Napakalawak
	3.41 – 4.20	Madalas	Malawak
	2.61 – 3.40	Minsan	Katamtaman
	1.81 – 2.60	Bihira	Maliit na Lawak
	1.00 – 1.80	Hindi Kailanman	Napakaliit na Lawak

Ipinapakita sa Talaan 1.3 na malawak na malawak na ginamit ang pagpipili (*multiple choice*) bilang paraan ng pagtataya sa *quarterly exam*.

Talaan 1.3
Lawak ng Paggamit ng mga Guro sa mga Paraan ng Pagtataya sa Quarterly Exam ng Asignaturang Filipino (N = 30)

Paraan ng Pagtataya	Frequency	Bahagdan	Lawak ng Pag-Gamit
Multiple Choice	30	100	Malawak na Malawak
Tama o Mali	0	0	Hindi Ginagamit

Matching Type	0	0	Hindi Ginagamit
Essay	0	0	Hindi Ginagamit

Scale	Berbal na Deskripsyon
81% - 100%	Malawak na Malawak
61% -80%	Malawak
41% - 60%	Katamtaman
21% - 40%	Maliit na Lawak
1% - 20%	Napakaliit na Lawak
0%	Hindi Ginagamit

Ipinapakita sa Talaan 2.1 ang *alignment* ng mga *summative* na pagtataya sa kompetensi ng MELCs. Ang 24 na aytem ang may pinakamataas na porsiyento (%) ng hindi naka-*align* na *summative* na pagtataya sa kompetensi ng MELCs. Mula naman sa 25 na aytem ang may pinakamataas na porsiyento (%) ng bahagyang naka-*align.*

Talaan 2.1

Alignment ng mga Summative na Pagtataya sa Kompetensi ng MELCs

Number of Items	Naka-Align		Bahagyang Naka Align		Hindi Naka Align	
	$f_{average}$	%	$f_{average}$	%	$f_{average}$	%
15 Items	6	40.00	2	13.33	7	46.67
20 Items	5	25.00	5	25.00	10	50.00
24 Items	4	16.67	2	8.33	18	75.00
25 Items	6	24.00	14	56.00	5	20.00
30 Items	7	23.33	16	53.33	7	23.33

Leyenda:	**Berbal na Deskripsiyon**
Naka-*align*	Ang aytem ay naglalaman ng katanungan na tumutugma sa hinihingi ng kompetensi.
Bahagyang naka-*align*	Ang aytem ay naglalaman ng angkop na paksa subalit hindi tumutugma ang katanungan sa hinihingi ng kompetensi.
Hindi naka-*align*	Ang aytem ay naglalaman ng katanungan na hindi tumutugma sa hinihingi ng kompetensi.

Ipinapakita sa Talaan 2.2 ang *alignment* ng mga *quarterly* na pagtataya sa kompetensi ng MELCs. Ang Filipino 9 ang may pinakamataas na porsiyento (%) ng naka-*align* na *quarterly* na pagtataya sa kompetensi ng MELCs. Ang Filipino 8 naman ang may pinakamataas na porsiyento (%) ng bahagyang naka-*align.*

Talaan 2.2

Alignment ng mga Quarterly na Pagtataya sa Kompetensi ng MELCs

Baitang	Naka-Align		Bahagyang Naka Align		Hindi Naka Align	
	$f_{average}$	%	$f_{average}$	%	$f_{average}$	%
Filipino 7	26	54.17	22	45.83	0	0
Filipino 8	25	52.08	23	47.92	0	0
Filipino 9	41	85.42	7	14.58	0	0
Filipino 10	36	75.00	12	25.00	0	0

Bilang ng Aytem: 48

Leyenda: **Berbal na Deskripsiyon**

Naka-*align*	Ang aytem ay naglalaman ng katanungan na tumutugma sa hinihingi ng kompetensi.
Bahagyang naka-*align*	Ang aytem ay naglalaman ng angkop na paksa subalit hindi tumutugma ang katanungan sa hinihingi ng kompetensi.
Hindi naka-*align*	Ang aytem ay naglalaman ng katanungan na hindi tumutugma sa hinihingi ng kompetensi.

Ipinapakita sa Talaan 3.1 na napakalawak ng naranasang hamon ng mga guro sa paghahanay ng *written works* na pagtataya sa kompetensi ng paksa.

Talaan 3.1

Lawak ng Nararanasang Hamon ng mga Guro sa Written Works na Pagtataya sa Paghahanay nito sa Kompetensi ng Paksa (N = 30)

Ang mga sumusunod ay ang mga hamon sa pag-*align* ng pagtataya sa kompetensi:	Mean	Berbal na Deskripsyon	Lawak ng Paggamit
1. Pagtiyak na ang pagtataya ay naaayon sa kakayahan ng bawat estudyante na sasagot.	4.73	Matinding Pagsang-ayon	Napakalawak
2. Paghanay sa pagtataya na lumilinang sa Higher Order Thinking Skills ng estudyante.	4.73	Matinding Pagsang-ayon	Napakalawak
3. Pagpili ng angkop na pagtataya sa paksang tatalakayin batay sa kompetensi.	4.67	Matinding Pagsang-ayon	Napakalawak
4. Pagtiyak sa kalidad ng mga tanong ayon sa hinihingi ng kompetensi.	4.60	Matinding Pagsang-ayon	Napakalawak
5. Paggawa ng Talaan ng Ispesipikasyon ayon sa lebel ng kahirapan ng mga kompetensing gagamitin.	4.43	Matinding Pagsang-ayon	Napakalawak
Composite	4.63	Matinding Pagsang-ayon	Napakalawak

Leyenda:	**Scale**	**Berbal na Deskripsyon**	**Kaakibat na Lawak**
	4.21 – 5.00	Matinding Pagsang-ayon	Napakalawak
	3.41 – 4.20	Sumasang-ayon	Malawak
	2.61 – 3.40	Bahagyang Pagsang-ayon	Katamtaman
	1.81 – 2.60	Bahagyang Pagtutol	Maliit na Lawak
	1.00 – 1.80	Tumututol	Napakaliit na Lawak

Ipinapakita sa Talaan 3.2 na napakalawak ng naranasang hamon ng mga guro sa paghahanay ng performans na pagtataya sa kompetensi ng paksa.

Talaan 3.2

Lawak ang Nararanasang Hamon ng mga Guro sa Performans na Pagtataya sa Paghahanay nito sa Kompetensi ng Paksa (N = 30)

Ang mga sumusunod ay ang mga hamon sa pag-*align* ng pagtataya sa kompetensi:	Mean	Berbal na Deskripsyon	Lawak ng Paggamit
1. Pagtiyak sa performance task na nakapupukaw sa interes ng mga estudyante	4.67	Matinding Pagsang-ayon	Napakalawak
2. Pagbuo ng scoring rubric sa mga kompetensi na napabilang sa performans na pagtataya.	4.60	Matinding Pagsang-ayon	Napakalawak
3. Pagtiyak na ang performans na pagtataya ay batay sa kompetensi.	4.53	Matinding Pagsang-ayon	Napakalawak
4. Pagtiyak sa ugnayan ng nagawang gawain sa kompetensi	4.47	Matinding Pagsang-ayon	Napakalawak
5. Pagsagawa sa performance task sa limitadong oras/panahon.	4.20	Sumasang-ayon	Malawak
Composite	4.49	Matinding Pagsang-ayon	Napakalawak

Leyenda:	**Scale**	**Berbal na Deskripsyon**	**Kaakibat na Lawak**
	4.21 – 5.00	Matinding Pagsang-ayon	Napakalawak
	3.41 – 4.20	Sumasang-ayon	Malawak
	2.61 – 3.40	Bahagyang Pagsang-ayon	Katamtaman
	1.81 – 2.60	Bahagyang Pagtutol	Maliit na Lawak
	1.00 – 1.80	Tumututol	Napakaliit na Lawak

Ipinapakita sa Talaan 3.3 na napakalawak ng naranasang hamon ng mga guro sa paghahanay ng *quarterly* na pagtataya sa kompetensi ng paksa.

Talaan 3.3

Lawak ng Nararanasang Hamon ng mga Guro sa Quarterly na Pagtataya sa Paghahanay nito sa Kompetensi ng Paksa (N = 30)

Ang mga sumusunod ay ang mga hamon sa pag-*align* ng pagtataya sa kompetensi:	Mean	Berbal na Deskripsyon	Lawak ng Paggamit

1. Pagtiyak na angkop sa bawat kompetensi ang quarterly na pagtatayang gagamitin.	4.57	Matinding Pagsang-ayon	Napakalawak
2. Paggawa ng TOS ayon sa lebel ng kahirapan (mahirap, average, madali)	4.53	Matinding Pagsang-ayon	Napakalawak
3. Pagtiyak na gumagamit ng HOTS ang quarterly na pagtatayang gagamitin.	4.53	Matinding Pagsang-ayon	Napakalawak
4. Pagtiyak na ang distractor sa multiple choice na pagtataya ay malapit sa sagot.	4.47	Matinding Pagsang-ayon	Napakalawak
5. Pagtiyak na ang quarterly na pagtataya ay dumaan sa Quality Assurance na proseso bago gamitin.	4.40	Matinding Pagsang-ayon	Napakalawak
Composite	4.50	Matinding Pagsang-ayon	Napakalawak

Leyenda:	**Scale**	**Berbal na Deskripsyon**	**Kaakibat na Lawak**
	4.21 – 5.00	Matinding Pagsang-ayon	Napakalawak
	3.41 – 4.20	Sumasang-ayon	Malawak
	2.61 – 3.40	Bahagyang Pagsang-ayon	Katamtaman
	1.81 – 2.60	Bahagyang Pagtutol	Maliit na Lawak
	1.00 – 1.80	Tumututol	Napakaliit na Lawak

DISKUSYON

Lawak ng Paggamit ng mga Guro sa mga Paraan ng Pagtataya sa Written Works ng Asignaturang Filipino

Ipinapakita sa Talaan 1.1 ang lawak ng paggamit ng mga guro sa mga paraan ng pagtataya sa *written works* ng asignaturang Filipino. Ang kopya ng pagtataya na ginamit sa pagkuha ng mga datos para sa talaan na ito ay nagmumula sa mga gurong respondente. May apat (4) na paraan ng pagtataya na isinasaad, una ang pagpipili (*multiple choice)* na may isandaang porsiyento (100%) ng mga respondente na gumagamit dito bilang paraan ng pagtataya na katumbas ng “malawak na malawak” na paggamit nito. Ang resultang ito ay pinatotohanan ng pananaliksik na isinagawa ni Jones (2022), aniya may iba't ibang dahilan kung bakit ginagamit ang pagpipili *(multiple choice)* bilang paraan ng pagtataya sa loob ng silid-aralan. Isa na rito ang pagiging *flexible* sa oras na ginugol nito para sa isang aralin. Maaari itong maibigay nang mabilis sa mga estudyante at nasasagutan din nang mabilis na hindi nakakakuha ng oras sa talakayan,

dahil dito may panahon pa upang makapagbigay ng fidbak sa naging resulta ng pagtataya. Dahil madali itong sagutin, ibig sabihin, maaaring magbigay ng maraming katanungan ang guro upang matasa ang kaalaman at natutuhan ng estudyante.

Sinuportahan naman ito ng pag-aaral nina Moreno et al. (2015), ayon sa kanila, kahit na marami pang ibang paraan ng pagtataya na maaaring gamitin para i-*assess* ang pagkatuto ng mga estudyante, ang pagpipili (*multiple choice)* parin ang pinakapangunahin at pinakakaraniwang ginagamit.

Sunod naman ang tama o mali (*true or false*) na may sampung porsiyento (10%) ng mga respondente na gumagamit dito bilang paraan ng pagtataya na katumbas ng “napakaliit na lawak” ng paggamit. Sunod ay ang pagtutugma (*matching type)*, na may 3.33 porsiyento (3.33%) ng mga respondente na gumagamit nito bilang paraan ng pagtataya na katumbas ng “napakaliit na lawak” ng paggamit, at sanaysay (*essay)* na nakakuha ng 0% o walang respondente ang gumagamit nito. Sa resultang ito, masasabing hindi makukuha ng mga estudyante ang mga benepisyo ng paggamit ng sanaysay (*essay)* dahil hindi ito ginagamit ng guro bilang paraan ng pagtataya. Sinuportahan ito ng pag-aaral na isinagawa ni Famin (2024), aniya, ang pagsulat ng sanaysay (*essay)* ay nakapagbibigay ng maraming benepisyo sa mga estudyante . Sa paglalahad ng kaisipan, *idea*, at pananaliksik sa pamamagitan ng pagsusulat ng sanaysay (*essay)*, mapauunlad ng mga estudyante ang kanilang kakayahan na hindi lamang mananatili sa silid-aralan. Ang proseso ng pagsasaayos, pagsusulat at pagrerebisa ng isang sanaysay (*essay)* ay nagpapalakas din sa kritikal na pag-iisip ng mga estudyante, na isa sa mahahalagang kakayahan para magtagumpay sa akademiks at propesyonal na larangan. Sa madaling salita, mas mainam na magbigay din ng sanaysay (*essay)* na pagtataya.

Lawak ng Paggamit ng mga Guro sa Performans na Pagtataya sa Asignaturang Filipino

Ipinapakita sa Talaan 1.2 ang lawak ng paggamit ng mga guro sa performans na pagtataya sa asignaturang Filipino. Makikita na may apat na kategorya ng performans na pagtataya. Una sa mga kategorya ang *project-based performance,* ang nakapaloob sa kategoryang ito ay ang *portfolio* na may *mean* (μ) na 3.63, ibig sabihin, “madalas” na ginagamit ang pagtatayang ito. Batay sa isinagawang pag-aaral nina Muin et al. (2020), anila, ang *portfolio* ay ginagamit bilang isang alternatibong pagtataya para sa pagkatuto ng mga estudyante, kaya mainam din na gamitin ito nang madalas. Ganito rin ang napatunayan sa pag-aaral nina Syzdykova et al. (2021), malawak na nagagamit ng mga guro ang pagtataya sa performans ng mga estudyante gamit ang *portfolio*. Kadalasan, ito ay naisasagawa sa makabagong paraan, ang pagbuo ng *e-portfolio* na mas nagigiliwang gawin ng mga estudyante sa makabagong henerasyon dahil sangkot nito ang teknolohiya.

Ang sunod na kategorya naman ay ang *speech performance* na nangunguna sa *average* na 3.97 o “madalas” na ginagamit ang pagtatayang ito. Ang nakapaloob sa *speech performance* ay ang (a) pagsasalaysay na may *mean* (μ) na 4.20, (b)

pagkukuwento na may *mean* (μ) na 4.03, at (c) talumpati na may *mean* (μ) na 3.67. Ang mga pagtataya na ito ay “madalas” na ginagamit. Kaugnay nito, ayon kay Grant (2022), ang performans na may kinalaman sa pagsasalita ay nagbibigay ng pagkakataon sa mga estudyante na tingnan ang kanilang sarili sa positibong perspektiba. Pinapalakas din nito ang kumpyansa sa sarili at hinuhubog ang iba pang kasanayan. Bukod dito, hinuhubog din ng pagsasalita ang kritikal na pag-iisip, na mahalaga para sa kinabukasan.

Ang sunod na kategorya ay ang *simulation,* ang nakapaloob sa kategoryang ito ay ang pagsasadula na may *mean* (μ) na 3.73, ibig sabihin “madalas” din itong ginagamit. Napatunayan sa pananaliksik ni Nazarov (2022), na mas madalas at malawak na nagagamit bilang pantasa sa performans ang pagsasadula at *simulation* ng mga estudyante kaugnay sa pagtuturo ng banyagang wika. Ito ang kadalasang nagagamit na pagsasanay sa mga estudyante sa pagsasalita.

Ang huling kategorya ay ang *written performance*, na may *average* na 3.47, o “madalas” na ginagamit ang performans na ito. Ang pagsulat ng maikling kuwento, mga teksto, tula, dula at talumpati ay madalas na ginagamit ng mga guro sa pagtataya sa *written performance* ng mga estudyante . Ito ay nangangahulugan na sa pagtatasa ng mga guro sa pasulat na kakayahan at kasanayan ng mga estudyante, malawak na nagagamit ng mga guro ang pagsulat ng maikling kuwento, dula, mga teksto, at talumpati upang magbigay ng detalyadong fidbak sa pag-unlad ng mga estudyante sa kanilang kakayahan sa pagsulat. Ito ang kadalasang ipinapagawa ng guro sa pagpapaunlad ng kasanayang interpretatibo at analitikal na aspeto ng mga estudyante.

Ganito ang napatunayan sa pananaliksik ni Suskie (2018), kaniyang inilahad na ang madalas na ginagamit ng mga guro sa pagtatasa sa pasulat na performans (*written performance*) ng mga estudyante ay sa mga anyong maikling kuwento at dula, pagsulat ng mga teksto, talumpati dahil nakatutulong ito sa pagpapabuti ng kasanayan ng mga estudyante sa pag-aanalisa, pagbigay interpretasyon at kung paano sila nakikisalamuha sa kanilang mga naisulat (McTighe & Ferrara, 2021).

Kaugnay ng nabanggit na resulta, isinaad mula sa pananaliksik nina Van Drie et al. (2021), na mas tinututukan ang pagkatuto sa pagsusulat ng iba’t ibang genre ng teksto o sulatin upang mapataas ang kasanayan sa literasiya ng mga estudyante, kaya maraming genre ng teksto ang ipinagagawa sa mga estudyante. Dagdag pa na dapat turuan ang mga estudyante kung paano bumasa at sumulat ng iba't ibang uri ng teksto mula sa iba't ibang larangan (Shanahan & Shanahan, 2008).

Lawak ng Paggamit ng mga Guro sa mga Paraan ng Pagtataya sa Quarterly Exam ng Asignaturang Filipino

Ipinapakita sa Talaan 1.3 ang lawak ng paggamit ng mga guro sa mga paraan ng pagtataya sa *quarterly exam* ng asignaturang Filipino. Ang *unified quarter exam* sa Filipino mula sa Dibisyon ng Negros Oriental ang ginamit sa pagkuha ng mga datos para sa talaan na ito. Nakuha ng *multiple choice* ang isandaang porsiyento (100%) ng mga

respondente na katumbas ng “malawak na malawak” na paggamit ng ganitong paraan ng pagtataya.

Makikita sa talaan na *multiple choice* lamang ang ginamit, ito ay alinsunod sa DepEd order No. 55, s. 2016 kaugnay sa *policy guidelines on the national assessment of student learning for the K to 12 basic education program*. Nakasaad sa kautusan na dapat masukat ng bawat aytem sa pagsusulit ang mga kasanayan sa wika gamit ang *learning area content* at *numeracy skills*; at ang pormat ng pagsusulit ay sa paraang *multiple choice*. Dagdag pa rito, ang Dibisyon ng Negros Oriental ay nagsagawa ng *unified* na *quarterly exam* sa Filipino mula unang markahan hanggang ikaapat na markahan at ang pagsusulit ay lahat nasa *multiple choice*.

Ipinapakita ng pananaliksik na ang mga pagpipili *(multiple-choice questions*) (MCQs) ay malawak na ginagamit ng mga guro, lalo na sa panahon ng *quarterly assessments*. Ito ay dahil sa ilang mga benepisyong hatid ng MCQs, tulad ng mabilis ang pagwawasto, kakayahang saklawin ang malawak na sakop ng nilalaman, natatasa ang iba’t ibang antas ng taksonomiya, at potensyal para sa obhektibong pagmamarka (Weimer, 2018; Villanueva,2023).

Alignment ng mga Summative na Pagtataya sa Kompetensi ng MELCs

Ipinapakita sa Talaan 2.1 ang *alignment* ng mga *summative* na pagtataya sa kompetensi ng MELCs. Ang kopya ng mga *summative* na pagtataya na ginamit at inalisa sa talaan na ito ay nagmumula sa mga gurong respondente. Makikita rito na sa 15 na aytem ay may 46.67% na hindi naka-*align.* Sa 20 na aytem, may 50% na hindi naka-*align,* habang sa 24 na aytem, may 75% na hindi naka-*align,* makikita na sa bawat aytem ito ang pinakamataas na hindi naka-*align*. Sa 25 na aytem naman, may 20% na hindi naka-*align,* at sa 30 na aytem, may 23.33% na hindi naka-*align.*

Sa pag-aaral na isinagawa ni Scott (2019), aniya, guro ang lumilikha ng mga pagsusulit at ang mga estudyante naman ang sumasagot sa mga ito. Kapag ang kinalabasan ng pagtataya ay naka-*align* sa inaasahang kalalabasan, ibig sabihin ang ibinigay na pagtataya ay indikasyon na may natutuhan sila. Kapag ang kinalabasan naman ng pagtataya ay hindi umayon sa inaaasahang kinalabasan, maaaring ipagpalagay na ito ay bahagi lamang ng performans para ma-*assess* ang kanilang kaalaman at natutuhan.

Ipinapakita ng pananaliksik na ang mga guro ay minsan nagsasagawa ng mga pagtatasa na hindi tumutugma sa mga kakayahang nais nilang sukatin. Halimbawa, ipinakita ng isang pag-aaral ng RAND na may mga hindi pagkakatugma sa paggamit ng mga guro sa mga *instructional materials* at ang kanilang pagsunod sa mga pamantayan o kompetensi ng estado. Ang *misalignment* na ito ay madalas na nagmumula sa magkakasalungat na mensahe tungkol sa kung ano ang bumubuo ng mga pamantayang nakahanay sa kasanayan, na nagreresulta sa paniniwala ng mga guro na sila ay sumusunod sa mga pamantayan kahit na maaaring sila ay gumagamit ng mas tradisyonal at mababaw na pamamaraan ng pagtuturo (Kaufman et al., 2018).

Bukod pa rito, isang pag-aaral na nakatuon sa K to 12 Humanities and Social Sciences (HUMSS) curriculum sa Pilipinas ay nagpakita ng mga hamon tulad ng hindi balanseng alokasyon ng oras para sa mga kakayahang pagkatuto at kakulangan ng mga espesyalistang guro at mga kagamitan na naaayon sa pagtatasa ng kompetensi. Ang mga isyung ito ay nag-aambag sa agwat sa pagitan ng mga layunin ng kurikulum para sa mas matibay na mga programang pang edukasyon upang matiyak ang mas mahusay na pagkakahanay ng pagtataya at ng kompetensing sinusuri sa ginagawang pagtataya sa kakayahan ng mga estudyante (Estrera, 2020).

Alignment ng mga Quarterly na Pagtataya sa Kompetensi ng MELCs

Ipinapakita sa Talaan 2.2 ang *alignment* ng mga *quarterly* na pagtataya sa kompetensi ng MELCs. Ang kopya ng *quarterly* na pagtataya na ginamit at inalisa sa talaan na ito ay nagmumula sa Dibisyon ng Negros Oriental, ginawa ng mga piling gurong manunulat sa Filipino mula sa iba't ibang distrito ng Dibisyon. May 48 na bilang ng aytem sa bawat pagtataya mula Filipino 7 hanggang Filipino 10. Sa naka-*align,* makikita na may 85.42% mula sa Filipino 9, 75% mula sa Filipino 10, 54.17% mula sa Filipino 7, at 52.08% mula sa Filipino 8. Sa bahagyang naka-*align* naman, may 47.92% mula sa Filipino 8, 45.83% mula sa Filipino 7, 25% mula sa Filipino 10, at 14.58% mula sa Filipino 9.

Ang resulta ay sinuportahan sa pananaliksik nina Fulay et al. (2023), kanilang napatunayan na ang pagkabuo ng *quarterly exam* ay may kaisahan (*aligned)* sa mga nakasaad na kompetensi ng MELCs sa kurikulum sa Matematika. Ibig sabihin ang mga pagtatasang ginawa ng mga guro ay may kaisahan (*coherence and aligned*) sa kahingian ng MELCs dahil mas fokus ang kurikulum na ito sa performans ng mga estudyante. Subalit sa pag-aaral nina Bastasa, Bernaldez, at Genita (2024), kanilang napatunayan na ang *quarterly* na pagtataya kaugnay sa paggamit ng di-pamilyar na bokabularyo, pagkakasunod ng mga pangyayari sa wika at panitikan ay may bahagyang pagkakaisa (*aligned*).

Ang *alignment* sa kurikulum ay maaaring makaapekto sa *learning outcomes* ng mga estudyante. Kapag nagkakatugma ang pagtataya sa mga layunin at kompetensi, tataas ang posibilidad na makakamit ang mga inaasahang kalalabasan (Anderson, 2005; FitzPatrick, Hawboldt, Doyle, & Genge, 2015; Ziebell & Clarke, 2018).

Lawak ng Nararanasang Hamon ng mga Guro sa Written Works na Pagtataya sa Paghahanay nito sa Kompetensi ng Paksa

Ipinapakita sa Talaan 3.1 ang lawak ng nararanasang hamon ng mga guro sa *written works* na pagtataya sa paghahanay nito sa kompetensi ng paksa. May limang aytem na inisa-isa kaugnay sa aspektong ito na nakakuha ng kabuoang komposit na 4.63 na katumbas ng "napakalawak" na nararanasang hamon sa pagtutugma o pag-*align* ng *written works* na pagtataya sa kompetensi at paksa. Pahiwatig lamang ito na hindi madali ang paglikha at pag-*align* ng mga pagtataya. Sa kabila ng mga hamon na nararanasan ng guro, kinakailangan pa rin na gawin niya ang pagtataya nang mas maayos upang

maging epektibo ito dahil ang kalidad na pagtataya ay kinakailangang balido at maaasahan (Rose & Johnson, 2020).

Ganito rin ang napatunayan sa pag-aaral nina Nguyen et al. (2022), anila na napakalaking hamon sa mga guro ang maghanda ng mga pagsusulit na balanseng natatasa ang kritikal na pag-iisip ng mga estudyante , pagtatasa sa panghabambuhay na kasanayan, at higit sa lahat ang gumawa ng mga katanungan na lumilinang sa *21st century skills.* Ang mga ito ay iilan lamang sa mga hamon na kinahaharap ng mga guro lalo na na marami rin silang obligasyong ginagampanan sa paaralan.

Lawak ang Nararanasang Hamon ng mga Guro sa Performans na Pagtataya sa Paghahanay nito sa Kompetensi ng Paksa

Ipinapakita sa Talaan 3.2 ang lawak ng nararanasang hamon ng mga guro sa performans na pagtataya sa paghahanay nito sa kompetensi ng paksa. May limang aytem na inisa-isa kaugnay sa aspektong ito na nakakuha ng kabuoang komposit na 4.49 na katumbas ng “napakalawak” na nararanasang hamon sa pagtutugma o pag-*align* ng performans na pagtataya sa kompetensi o paksa. Ang resultang ito ay sang-ayon sa pananaliksik nina Care et al. (2018), kanilang napatunayan na napakalaking hamon para sa mga guro ng wika at panitikan ang pagbuo ng pagtataya na may pag-uugnay sa pangangailangan para sa malinaw na pag-unawa sa kinakailangang kasanayan ng mga estudyante na nakakuha ng kanilang interes at ang pangangailangan para sa malinaw na paglalarawan ng iba't ibang antas ng kakayahan at mga kasanayan. Madami rin ang oras na dapat gugugulin sa pagbuo ng rubrik para sa pagtatasa.

Sa paggawa ng mga performans na pagtataya, hindi lamang mahalaga para sa isang guro na maunawaan ang mga hamon o limitasyon kapag binubuo o dinidesenyo ang mga pagsusulit, kundi dapat ding malampasan niya ang mga hamon at limitasyong ito (Hang & Van, 2020).

Kapag ang mga pagsusulit ay maayos na naisagawa, maipapakita nito ang tunay na antas o lebel ng tagumpay ng mga estudyante . Maraming guro ang nagbibigay ng malaking importansiya sa pagtuturo at pagbibigay ng pagsusulit o pagtataya (Sukardi, 2008; Husin et al., 2023).

Lawak ng Nararanasang Hamon ng mga Guro sa Quarterly na Pagtataya sa Paghahanay nito sa Kompetensi ng Paksa

Ipinapakita sa Talaan 3.3 ang lawak ng nararanasang hamon ng mga guro sa *quarterly* na pagtataya sa paghahanay nito sa kompetensi ng paksa. May limang aytem na naglalarawan kaugnay sa aspektong ito na nakakuha ng kabuoang komposit na 4.50 na katumbas ng “napakalawak” na nararanasang hamon sa pagtutugma o pag-*align* ng *quarterly* na pagtataya sa kompetensi o paksa. Ibig sabihin hindi rin masasabing madali ang paggawa at pag-*align* ng mga *quarterly* na pagtataya dahil sa mga hamon na nararanasan ng mga tagagawa nito.

May ibang pananaw sina Louzi et al. (2022), anila, ang mga guro na regular na nagsasagawa ng *formative assessments* ay mas handa na makapagbigay ng *quarterly assessments* na maayos na mailalarawan ang husay ng kanilang mga estudyante sa kurso. Ibig sabihin, magiging madali na lamang sa guro ang makapagbigay ng *quarterly* na pagtataya dahil regular ang pagbibigay nito ng mga *formative* na eksam. Ang nakuhang marka sa pagsusulit ay nakaaapekto rin sa antas ng kaalaman ng isang estudyante. Ang papel ng guro bilang tagagawa ng pagsusulit ay talagang mahalaga. Dagdag pa, dapat na handa ang guro na lumikha ng praktikal na *quarterly assessment* pagkatapos ng taon kapag sila ay makapaglikha ng angkop na *formative assessment* sa buong taon.

Inilarawan na isa sa mga hamon ang pagtiyak na ang mga *distractor* ay dapat malapit sa tamang sagot, kaugnay dito, sa natuklasan mula sa pananaliksik na isinagawa nina Nengsih et al. (2022) nakita nila na pagtapos ianalisa ang pagtataya, ang *distraction* na inilalagay sa bawat aytem ng pagsusulit ay hindi angkop. Ito ay dahil hindi inilagay nang maayos ng guro ang mga *distractions*, at ang mga *distraction* para sa mga estudyante na hindi makasagot sa mga tanong ay hindi rin angkop.

Kongklusyon

Batay sa mga nalikom na resulta, malinaw na lumalabas ang ilang mga isyu sa sistema ng edukasyon, lalo na sa paghahanda at pagpapatupad ng mga pagtataya. Napuna na may mga hindi akma na pagtataya sa mga layunin sa pagkatuto at nagbabagong kurikulum (MELCs) na maaaring maging dahilan upang hindi maisakatuparan ang paggamit ng kurikulum sa epektibong paraan. Ang pananaliksik ay nagpapakita rin ng lawak ng mga hamon na kinakaharap ng mga guro sa paghahanda ng mga pagtataya, kasama rito ang kakulangan ng sapat na panahon at kagamitan, teknikal na kaalaman sa paglikha ng makabuluhang mga pagtatasa, at ang pangangailangan para sa patuloy na pag-aaral upang maisama ang mga bagong mga kinakailangang mga kasanayan. Sa kabuoan, mahalagang tugunan ang mga nabanggit na hamon upang mapabuti ang kalidad ng edukasyon at pagpapahalaga sa tamang proseso ng pagtatasa na may kalidad at epektibo para sa lahat ng uri ng mga estudyante.

Rekomendasyon

Batay sa mga nakalap na mga datos, narito ang mga rekomendasyon upang tugunan ang mga isyu sa paghahanda at pagpapatupad ng mga pagtataya:

Para sa mga Guro

1. Mas mainam kung ang gagawing pagtataya ay tiyak na naka-*align* sa kompetensi ng paksa. Bago magdisenyo ng pagtataya, siguraduhing nauunawaan nang lubusan ang mga layunin na nais makamit. Alamin ang nais na masukat o masuri sa mga estudyante at tiyakin na ang mga tanong sa pagtataya ay nakatuon sa pag-abot ng mga layunin na ito. Mahalaga rin ang patuloy na pag-aaral at pagpapalawak ng kinakailangang mga kasanayan sa larangan ng pagtatasa.

Para sa mga Punong Guro

2. Magsagawa ng regular na *monitoring* at ebalwasyon upang matiyak na ang mga pagsusulit ay tumututok sa mga *learning objectives* at *academic standard*s. Mainam na mag-organisa ng mga *training sessions o workshops* sa paaralan upang maipamalas ng mga guro ang tamang *alignment* ng kanilang pagtataya sa layunin ng pagtuturo. Magbigay rin ng mga *resources* at *tools* na makatutulong sa kanila sa pagbuo ng epektibong pagtataya.

Para sa mga Superbisor at/o Administrador

3. Mahalaga na repasuhin at i-*adjust* ang mga kasalukuyang mga pagtatasa upang masiguro na ang mga ito ay tumutugma sa mga layunin sa pagkatuto at nagbabagong kurikulum (MELCs). Bigyan ng konstruktibong *feedback* at suporta ang mga guro upang masubaybayan nila ang tamang *alignment* ng kanilang mga pagtataya sa mga *learning objectives*. Hikayatin ang mga guro na mag-*collaborate* at magtulungan sa pagdevelop at pag-*review* ng mga pagtataya.

Para sa Departamento ng Edukasyon

4. Magpatupad ng malawakang *training programs* para sa mga guro at administrador kaugnay sa *assessment design* at *alignment*. Bigyang pansin ang *research* at *development* upang makahanap ng bagong metodo at *best practices* para sa assessment alignment.

Para sa mga Gurong Nagtuturo ng Filipino na Hindi dalubhasa sa Filipino

5. Sumali sa mga pagsasanay at pag-aaral sa wikang Filipino upang mapabuti ang kaalaman at kasanayan sa pagtuturo ng asignaturang ito. Mahalagang makipag-ugnayan sa mga kasamahan sa paaralan na may malalim na kaalaman sa asignaturang Filipino upang magkaroon ng suporta at gabay sa paggawa ng angkop na pagtataya.

Para sa Susunod na Mananaliksik

6. Magsagawa ng malaliman o komprehensibong pag-aaral sa *alignment* ng pagtataya sa kurikulum upang maunawaan pa lalo ang kasalukuyang estado ng kaalaman at matukoy ang *gaps* na kailangan pang punan. Pumili ng angkop na metodolohiya na makapagbibigay ng pinakamainam na datos para sa iyong pag-aaral. Isama sa pag-aaral ang epekto ng mga bagong teknolohiya sa pagtatasa tulad ng *online assessment tools, adaptive learning platforms,* at *data analytics* sa pagpapabuti ng kalidad at epektibong pagtatasa.

Etikal na konsiderasyon

Ipinakita ng mananaliksik ang mga kailangang etikal na konsiderasyon sa pagsagawa ng pag-aaral. Tiniyak ng mananaliksik na manatiling kompidensyal ang kasagutan ng mga respondente. Ang dignidad at pribadong punto sa mga kasagutan ay isinaalang-alang.

Ang mananaliksik ay sumunod din sa mga protokol ayon sa mga etikang nakasaad ng *Ethics Committee* ng Unibersidad ng *Foundation*. Isang malawakang konsultasyon ang isinagawa sa pagpili sa paksa para sa pananaliksik na ito at ang pagpili nito ay batay sa mga dahilang kailangang napapanahon at dahil hindi pa ganoon karami ang bilang ng mga nag-aaral sa paksang ito.

Pasasalamat

Taos-pusong ipinaaabot ng mananaliksik ang pasasalamat sa Poong Maykapal sa talino at kalusugan na ibinibigay upang maisagawa nang kalugod-lugod at matagumpay ang pananaliksik na ito. Nagtagumpay ang pananaliksik na ito dahil sa tulong ng sumusunod:

Dr. Cristina P. Calisang, tagapayo ng mananaliksik, dahil sa kaniyang walang sawang pag-unawa at pagtulong sa pamamagitan ng pagtama sa mga kamalian habang isinagawa ang pananaliksik. Ang mananaliksik ay sadyang mapalad na nagkaroon ng tagapayong tulad niya.

Dr. Maria Chona Z. Futalan, estatistisyan, dahil sa kaniyang mahalagang mga suhestiyon lalo na sa pagpaalala sa mga simulain upang maisakatuparan sa itinakdang panahon ang pananaliksik. Ang mananaliksik ay kumikilala ng utang na loob sa kaniya.

Sa mga panelista: Dr. Romario Ybañez, Dekano ng paaralang graduwado, Dr. Erlinda N. Calumpang, Tsirman ng MAEd Program, Dr. Felipe B. Sullera Jr., G. Shem Don C. Fabila, na nagbahagi ng kani-kanilang angking kakayahan at talino sa pamamagitan ng mga suhestiyon at komento upang mas maging mabuti ang pananaliksik.

Dr. Neri C. Ojastro, CESO V, *Schools Division Superintendent* ng Dibisyon ng Negros Oriental; Dr. Emelyn D. Bolongaita, Dev.Ed.D, *Public School District Supervisor* ng Tayasan I District, Gng. Jiji S. Taladua, *District in Charge* ng Jimalalud I District, Dr. Ernesto C. Paculanang, *Public School District Supervisor* ng Jimalalud II District, G. Randy D. Dunque, *Public School District Supervisor* ng La Libertad I District, Dr. Menchu T. Santos, *Public School District Supervisor* ng La Libertad II District; at, kina G. Diofel A. Cacas, Punong Guro ng Tayasan National High School, G. Ernewin B. Estoconing, Punong Guro ng Jimalalud National High School, Gng. Chengrose L. Otoc, Teacher In-Charge ng Jimalalud National High School- Tamao Extension, Gng. Malou D. Amaro, Teacher In-Charge ng Bangcal High School, G. Harry A. Vidal, Head Teacher ng Owacan Provincial Community High School, G. Claudio F. Macahilos, Punong Guro ng La Libertad

Technical Vocational School, Gng. Maria Joana L. Pacunla, Teacher In-Charge ng Pacuan National High School. Ang mananaliksik ay taos-pusong nagpapasalamat sa kanilang pahintulot na ibinigay upang maisagawa ang pananaliksik sa lokasyong napili.

G. Shem Don C. Fabila, Bb. Ritchel Elnar, at G. Kendrick Kitane, ang *external validators* ng mananaliksik, para sa pagsuri sa baliditi ng talatanungan at sa pagsilbi bilang inspirasyon ng mananaliksik. Malaki ang utang na loob na tinatanaw ng mananaliksik.

Dr. Rosela Abiera, sa kaniyang ibinahagi na *resources* na nagamit ng mananaliksik upang maisagawa ang *modified alignment tool*. Lubos na nagpapasalamat ang mananaliksik sa kaniya.

Bb. Arlene L. Decipolo at Gng. Ana Melissa V. Tubio , matalik na kaibigan ng mananaliksik, para sa pagtulong sa mananaliksik na maisagawa nang maayos ang *action plan* at sa hindi pag-aalinlangan na tumulong sa mananaliksik sa kahit anong oras. Inspirasyon sila ng mananaliksik na ipagpatuloy ang pag-aaral na ito. Malaki ang utang na loob at pasasalamat ng mananaliksik sa kanila.

Bb. Ritchel Elnar, matalik na kaibigan ng mananaliksik, sa kaniyang pagtulong at hindi pag-iwan sa mananaliksik sa panahon na kailangan ng matapos ang *manuscript* para sa *design hearing*. Walang katapusang pasasalamat ang ibinibigay ng mananaliksik sa kaniya.

Bb. Lourva Estrellanes, Bb. Leny An Estoconing, Bb. Marne Alberto at Gng. Clea De La Peña, sa kanilang suporta at matinding paniniwala sa mananaliksik na matatapos niya ang pag-aaral na ito. Nagsilbi silang dagdag na lakas sa mananaliksik.

Leizel F. Zaldarriaga, pinsan ng mananaliksik, sa kaniyang walang humpay na suporta at pagbibigay ng motibasyon sa mananaliksik na matapos nang matagumpay ang pag-aaral na ito. Inspirasyon siya ng mananaliksik na ipagpatuloy ang mga pangarap nito sa buhay.

Iniaalay ng mananaliksik ang kaniyang pagsisikap sa kaniyang pamilya G. Gannie T. Mongcopa, Gng. Erlinda L. Tilos, G. Cesario A. Tilos, Achilles L. Teofilo, Cyrell L. Tilos, Cindy L. Tilos, Earl John L. Tilos, Carl L. Tilos, at sa kaniyang yumaong kapatid (+) Lovely Mae L. Teofilo at yumaong ina (+) Jocelyn L. Mongcopa.

SANGGUNIAN

Alonzo, D., Leverett, J., & Obsioma, E. (2021). Leading an assessment reform: Ensuring a whole-school approach for decision-making [Original Research]. Frontiers in Education, 6(62). https://doi.org/10.3389/feduc.2021.631857

Anderson, L. W. (2005). Objectives, evaluation, and the improvement of education.

Studies in Educational Evaluation, 31, 102–113. https://doi.org/10.1016/j.stueduc.2005.05.004
Bastasa, L. J., Bernaldez, C., & Genita, S. (2024). Assessing Academic Progress and Intervention Needs in English Learning Competencies of Grade 3 Learners.
Care, E., Kim, H., Vista, A., & Anderson, K. (2018). Education System Alignment for 21st Century Skills: Focus on Assessment. Center for Universal Education at The Brookings Institution.
Damit, M. A. A., Omar, M. K., & Puad, M. H. M. (2021). Issues and Challenges of Outcome-based Education (OBE) Implementation among Malaysian Vocational College Teachers. International Journal of Academic Research in Business and Social Sciences, 11(3), 197-211. https://doi.org/http://dx.doi.org/10.6007/IJARBSS/v11-i3/8624
Estrera, E. B. (2020). A Perception-Based Curricular Review on the K to 12 HUMSS Strand Curriculum. IAFOR Journal of Education, 8(4), 25-44.
Famin, V. (2024, February 16). BENEFITS OF WRITING AN ESSAY. http://surl.li/pwgmfj
FitzPatrick, B., Hawboldt, J., Doyle, D., & Genge, T. (2015). Alignment of learning objectives and assessments in therapeutics courses to foster higher-order thinking. American Journal of Pharmaceutical Education, 79(1), 1–8. https://doi.org/10.5688/ajpe79110
Fulay, K. C., Furio, A. P., Dio, R. V., & Deri, R. A. (2023). Coherence Analysis of the Philippine Kto10 Numbers and Number Sense Most Essential Learning Competencies in the Time of Pandemic. EDUCATUM Journal of Science, Mathematics and Technology, 10(1), 18-27.
Grant, N. (2022, June 29). Why is Public Speaking Important for Students to Learn. Ivy Camps USA. http://surl.li/ajglwi
Hang, L. T., & Van, V. H. (2020). Building Strong Teaching and Learning Strategies through Teaching Innovations and Learners' Creativity: A Study of Vietnam Universities.International Journal of Education and Practice,8(3), 498-510.
Husin, A., Maharani, S. D., Raharjo, M., Yosef, Y., Sumarni, S., & Handrianto, C. (2023). Prospects for implementation of green campus ineducation and research pillars at edupark fkip Unsri become edutourism. International Journal of Professional Business Review, 8(4), e01597 https://doi.org/10.26668/businessreview/2023.v8i4.1597
Jones, K. (2022, November 10). Multiple-choice questions: pros and cons. Evidence Based Education. https://evidencebased.education/multiple-choice-questions-pros-and-cons/
Kaufman, Julia H., V. Darleen Opfer, Michelle Bongard, Joseph D. Pane, and Lindsey E. Thompson (2018). What Teachers Know and Do in the Common Core Era: Findings from the 2015–2017 American Teacher Panel. Santa Monica, CA: RAND Corporation, 2018. https://www.rand.org/pubs/research_briefs/RB10035.html.
Louzi, N., Alzoubi, H. M., Alshurideh, M. T., El Khatib, M., Ghazal, T. M., & Kukunuru, S. (2022). Psychological & Prototypical Model of Execution Management evaluation for the framework Development.Journal for ReAttach Therapy and Developmental Diversities,5(2s), 216-223

Lu, M., & Jiang, Y. Y. (2022). Implementing the Core Competencies of Curriculum: The Design and Practice of Unit Learning Program(落实学科核心素养: 单元学历案的设计与实践). Global Education,51(04), 71–83.
McTighe, J., & Ferrara, S. (2021). Assessing student learning by design: Principles and practices for teachers and school leaders. Teachers College Press.
Moreno, R., Martínez, R. J., & Muñiz, J. (2015). Guidelines based on validity criteria for the development of multiple choice items. Psicothema, 27(4), 388-394.
Muin, C. F. & Hafidah. (2020). Students' Perceptions on the Use of E-Portfolio for Learning Assessment: A Case Study. ELITE Journal, 3(1), 13-20.
Nasstrom, G., & Henriksson, W. (2017). Alignment of Standards and Assessment: A theoretical and empirical study of methods for alignment. Electronic Journal of Research in Education Psychology, 6(16). https://doi.org/10.25115/ejrep.v6i16.1296
Nazarov, R. I. (2022). Role-playing as a method of teaching a foreign language. Academic research in educational sciences, 3(TSTU Conference 1), 561-565.
Nengsih, Y. K., Handrianto, C., Nurrizalia, M., Waty, E. R. K., & Shomedran, S. (2022). Media and resourcesdevelopment of android based interactive digital textbook in nonformal education. Journal of Nonformal Education, 8(2), 185-191.https://doi.org/10.15294/jne.v8i2.34914
Nguyen, H. T. T Duong, C. B., Van Tran, N., Nguyen, A. H., Le, T. N., Ha, B. H.,& Do, C. N.P.(2022) Assessment and Feedback: Challenges and opportunities in the new normal.
Rose, J., & Johnson, C. W. (2020). Contextualizing reliability and validity in qualitative research: Toward more rigorous and trustworthy qualitative social science in leisure research.Journal of leisure research,51(4), 432–451.
Sukardi. (2008). EvaluasiPendidikan: PrinsipdanOperasionalnya. Jakarta: BinaAksara.
Suskie, L. (2018). Assessing student learning: A common sense guide. John Wiley & Sons
Scott, I. M. (2019). Beyond ‘driving’: The relationship between assessment, performance and learning. Medical Education, 54(1), 54–59. https://doi.org/10.1111/medu.13935
Shanahan, T. & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: rethinking content-area literacy. Harvard Educational Review, 78, 40-59. https://doi.org/10.17763/haer.78.1.v62444321p602101
Syzdykova, Z., Koblandin, K., Mikhaylova, N., & Akinina, O. (2021). Assessment of E-portfolio in higher education. International Journal of Emerging Technologies in Learning (Online), 16(2), 120.
Turan-Özpolat, E., & Bay, E. (2017). Analyzing the Curriculum Alignment of Teachers. Universal Journal of Educational Research,5, 1161–1181.
Van Drie, J., Van Driel, J., & Van Weijen, D. (2021). Developing students’ writing in History: Effects of a teacher-designed domain-specific writing instruction. Journal of Writing Research, 13(vol. 13 issue 2), 201–229. https://doi.org/10.17239/jowr-2021.13.02.01
Villanueva, L. M. (2023). Recommendations to Solve the Problem of Low MAP

Growth Reading Scores for Ninth and Tenth Grade Students at Christopher Columbus High School.
Weimer, M. (2018). Multiple-choice tests: Revisiting the pros and cons. Retrieved from Faculty Focus: https://www. facultyfocus. com/articles/teaching-professor-blog/multiple-choice-tests-pros-cons.
Yang, X. D. (2017). Competence-based Curriculum Standards Development for Basic Education(基于核心素养的基础教育课程标准研制). Global Education,46(10), 34–48.
Ziebell, N., & Clarke, D. (2018). Curriculum alignment: Performance types in the intended, enacted, and assessed curriculum in primary mathematics and science classrooms. Studia Paedagogica, 23(2), 175. https://doi.org/10.5817/sp2018-2-10

APA Citation:

Mongcopa, M. L., & Calisang, C. P. (2024). SIPAT-SURI: ALIGNMENT NG MGA KAGAMITANG PAMPAGTATAYA SA FILIPINO SA K TO 12 MOST ESSENTIAL LEARNING COMPETENCIES (MELCs). Ignatian International Journal for Multidisciplinary Research, 2(8), 793–815. https://doi.org/10.5281/zenodo.13310724

melle.mongcopa@deped.gov.ph
calisang.cristina @mdci.edu.ph

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

SNUMBOOK AS HOME TASKS FOR AN ENHANCED NUMERACY LEVEL OF GRADE 7 STUDENTS

Mary Grace M. Buenviaje, MAT

Mathematics Department, Guinayang National High School, San Mateo, Rizal, Philippines

https://doi.org/10.5281/zenodo.13291873

ABSTRACT

This study examines the effectiveness of SNUMBOOK, a home task tool, for non-numerate Grade 7 students at Guinayang National High School in San Mateo Suboffice, Division of Rizal, for the SY 2023-2024. It addressed the identification of least mastered numeracy topics, evaluates SNUMBOOK's content, format, presentation, organization, and accuracy by parents, teachers, and experts, and analyzes the differences in these evaluations. The study also assessed student engagement—cognitive, behavioral, emotional, and social—before and after using SNUMBOOK, and measures the pretest and posttest performance of students. Methodologically, a descriptive and quasi-experimental one-group pretest-posttest design was employed, involving 60 evaluators and 30 students. Data were gathered using questionnaires and pretest-posttest assessments, analyzed using statistical methods such as mean percentage, Wilcoxon Signed Rank Test, Kruskal-Wallis Test, and Spearman's Rho. Results indicated significant improvement in numeracy and engagement levels post-intervention. SNUMBOOK was highly rated across all evaluative criteria with no significant differences among respondent groups. The engagement levels increased significantly, correlating positively with academic performance. Enhanced practice, support, and communication were identified as areas of improvement. The study concludes that SNUMBOOK effectively enhanced numeracy and engagement, suggesting its broader implementation and potential adaptation across various disciplines.

Keywords: *SNUMBOOK, numeracy, student engagement, educational tool, pretest-posttest, home tasks*

INTRODUCTION

This study focused on the development and validation of SNUMBOOK for Grade 7 students classified as non-numerate and emerging numerate based on competencies identified from the Numeracy Assessment Tool of DepEd Rizal. The primary objective was to enhance the numerical abilities and engagement levels of students at Guinayang National High School in San Mateo District, Rizal. Implemented during the second quarter of the school year 2023-2024, SNUMBOOK aimed to improve basic numeracy skills in Mathematics. To ensure its effectiveness, the material was evaluated by twenty parents, twenty Math teachers, and twenty experts from public schools in San Mateo, Rizal.

Participants in this study included thirty Grade 7 students identified as non-numerates and emerging numerates during the academic year 2023-2024. The study focused on basic mathematical skills, with the SNUMBOOK used as home tasks validated using Department of Education evaluation tools. Student performance was measured using pre-tests (without SNUMBOOK) and post-tests (after using SNUMBOOK) based on the Numeracy Assessment Tool. Additionally, the level of engagement of respondents was evaluated before and after using the developed material.

Many students transitioning from primary to secondary education have been found to be below their expected numeracy level, a concern highlighted by DepEd's introduction of its MATATAG agenda. The first 'Ma' in MATATAG stands for "make the curriculum relevant to produce competent and job-ready, active, and responsible citizens" (Department of Education, 2023). This foundational principle underscores the necessity of this study. Research such as that of Songsirisak (2019) suggests that homework can improve student learning but may reduce free time. Tucker (2020) concluded about how home-based activities have been shown to enhance pupils' grades and foster independent and responsible learning. Inspired by these findings, the researcher of this study developed SNUMBOOK to increase student engagement in Mathematics and improve numeracy. Unlike the KUMON method, which focuses on a home-based individualized learning program, SNUMBOOK was tailored to meet the needs of public-school students lacking grade-level mathematical competency.

There are several literatures that supports the efficacy of home-based activities in enhancing academic skills. Burke (2020) notes that these activities allow students to explore their comprehension at their own pace, fostering diverse learning methods. This aligns with the study by McCormick et al. (2020) among low-income families which concluded that home learning activities can significantly improve academic skills, a finding pertinent to this study since many participants come from low-income families with limited access to technology and private tutoring. Layug ((2021) increased the numeracy of grade 7 students through different interventions such as provision of added materials and remedial classes.

Pelayo (2023) found that remedial lessons and learning support tools helped Grade 9 pupils with non-numeracy. This supports the current study's use of SNUMBOOK

for additional learning. Belleza (2023) showed that global learning packets with family involvement improved non-numerate students' numeracy, emphasizing the relevance of parental engagement and innovative resources. An intriguing study by Munro et al. (2021) found that home numeracy exercises increase children's math skills. Nelson (2023) had the same findings with a conclusion that home math activities with parents improve math achievement by 84%. Luna (2023) established that the MATHSANAY Numeracy Projects greatly enhanced non-numerate pupils' skills. This suggests SNUMBOOK could close numeracy gaps as well.

The current study aimed to address the research gap in effective interventions for non-numerate Grade 7 students. By developing and validating SNUMBOOK, the researchers seek to provide a practical and impactful solution to enhance students' numerical abilities and engagement in Mathematics.

Research Questions

This research determined the effects of SNUMBOOK on the level of engagement and performance of the grade 7 students of Guinayang National High School, San Mateo District, Division of Rizal during the second quarter period for the school year 2023-2024.

Specifically, this research answered the following questions:

1. What were the least mastered topics measured in the Numeracy Assessment that were developed in the SNUMBOOK?
2. What was the evaluation of parents, Mathematics teachers, and experts on the developed SNUMBOOK as home task for grade 7 students in terms of?
   a. Content;
   b. Format;
   c. Presentation and Organization; and
   d. Accuracy and up-to-datedness of information?
3. Were there significant differences in the evaluation of the SNUMBOOK by the three groups of respondents based on the aforementioned criteria?
4. What was the level of engagement of the students before and after the use of SNUMBOOK in terms of:
   a. Cognitive Engagement;
   b. Behavioral Engagement;
   c. Emotional Engagement;
   d. Social Engagement?
5. Was there a significant difference in the level of engagement of the students before and after the use of SNUMBOOK?
6. What was the performance of the students during the pretest and posttest with SNUMBOOK?
7. Was there a significant difference between the mean scores of the pretest and posttest of the students?

8. Was there a significant relationship between the mean scores of the level of engagement and mean scores of the academic performance of the students after the use of SNUMBOOK?
9. What were the areas improved through SNUMBOOK with Parental Involvement at Homes?
10. What were the comments and suggestions of the teachers and students in using SNUMBOOK?

METHODOLOGY

Locale of the Study

The study was conducted at a public secondary school in the San Mateo District, Rizal, during the second quarter of the school year 2023-2024. The focus was on Grade 7 students identified as non-numerate and emerging numerate based on competencies from the Numeracy Assessment Tool of DepEd Rizal.

Sampling Method and Respondents

Purposive sampling was used to select the study participants. The respondents included:

- **Parents:** Twenty parents of Grade 7 students.
- **Math Teachers:** Twenty Math teachers from public schools in San Mateo District.
- **Math Experts:** Twenty experts in Mathematics education.
- **Students:** Thirty Grade 7 students identified as non-numerate and emerging numerate.

Demographics of Respondents

The student respondents were assessed using the Numeracy Assessment Tool to determine their numeracy levels. The parents, Math teachers, and experts were chosen based on their involvement with the participating students and their expertise in Mathematics education.

Data Gathering Procedure

The data collection process involved several steps:

1. **Permission and Consent:**
    - Permission was obtained from the Research and Development Office, the Superintendent of Rizal Schools Division, and the principals of participating schools.
    - Informed consent was secured from the parents of student respondents.
2. **Development of SNUMBOOK:**
    - Home tasks were developed based on feedback from the researcher's adviser, critics, and Math experts.

- The revised SNUMBOOK was validated by five secondary education experts and further refined.

3. **Implementation:**
   - A pretest using the Numeracy Assessment Tool was administered to the students.
   - Students identified as non-numerate and emerging numerate were given the SNUMBOOK for home-based tasks.
   - After completing the SNUMBOOK exercises, a posttest and engagement survey were administered.
4. **Evaluation:**
   - Questionnaires were distributed to parents, Math teachers, and experts to evaluate the SNUMBOOK.
   - Interviews were conducted with parents to assess their involvement and the areas improved through SNUMBOOK.

Instruments Used

1. **Numeracy Assessment Tool (NUMAT):**
   - Utilized to measure students' numeracy levels as both pretest and posttest.
2. **Questionnaire-Checklist for Parents, Mathematics Teachers, and Experts:**
   - Evaluated content, format, organization, and accuracy of SNUMBOOK using a four-point Likert scale (Strongly Agree to Strongly Disagree).
3. **Interview Questionnaire for Parents:**
   - Assessed areas improved through SNUMBOOK.
4. **Math and Science Engagement Scales:**
   - Adapted from Ming Te Wang et al. (2016) to measure students' engagement levels before and after using SNUMBOOK.

Data Analysis

Statistical Treatments

1. **Weighted Mean:**
   - Used to assess the input of teachers, experts, and parents on SNUMBOOK.
2. **Mean Percentage Score:**
   - Calculated to determine the mastery level of students on specific topics.
3. **Wilcoxon Signed Rank Test:**
   - Evaluated the significant difference between pretest and posttest scores, as well as engagement levels before and after using SNUMBOOK.
4. **Kruskal-Wallis Test:**
   - Tested the significant difference among the evaluations of parents, Math teachers, and experts.
5. **Spearman Rho:**
   - Examined the relationship between students' engagement levels and academic performance.

Score Range and Verbal Interpretation for the Pretest/Posttest

76-100	Above Numerate
51-75	Numerate
25-50	Emergent Numerate
00-25	Non-numerate

Scope and Limitations

This study focused on developing and validating SNUMBOOK for Grade 7 students classified as non-numerate and emerging numerate. The implementation was limited to the second quarter of the school year 2023-2024 and was evaluated by a specific group of parents, Math teachers, and experts from public schools in San Mateo, Rizal. The study did not cover other grade levels or students outside the identified numeracy levels.

RESULTS and DISCUSSION

1. The least mastered topics measured in the Numeracy Assessment that were developed in the SNUMBOOK

Table 1: Mean Percentage Score and Mastery Level of Topics in the Numeracy

	TOPICS	MEAN PERCENTAGE SCORE	MASTERY LEVEL
ORAL TEST	Oral Counting	84.00	Near Full Mastery
	Rational Counting	75.40	Near Full Mastery
	Number Identification	89.40	Near Full Mastery
WRITTEN TEST	Number discrimination	60.00	Near Mastery
	Missing Number	65.40	Near Mastery
	Addition	54.70	Near Mastery
	Subtraction	46.70	Low Mastery
	Addition and Subtraction	49.30	Low Mastery
	Multiplication	30.70	Low Mastery
	Division	19.30	Low Mastery
	Multiplication and Division	15.00	Low Mastery
	Word Problems	4.00	Low Mastery
	Geometric Pattern	24.00	Low Mastery
	Geometric Visualization	6.00	Low Mastery

Table 2: Least Mastered Topics in Numeracy Assessment as the Basis for Developing the SNUMBOOK

	Topics
1	Number Discrimination
2	Missing Number
3	Addition

4	Subtraction
5	Multiplication
6	Division
7	Word Problems
8	Geometric Pattern and Visualization

As shown in Table 1, the results of the Numeracy Assessment for Grade 7 students show that the average score for topics covered in the written test is below 75%, indicating a level of near mastery and low mastery. The results indicate that the students found the topics covered in the written test as challenging. It identified specific areas where Grade 7 students should improve their abilities and acquire the needed skills. The least-mastered skills identified provided the basis for the topic necessary for students who had low numeracy levels in the development of the SNUMBOOK. On the other hand, Table 2 shows the least mastered topics identified using the Numeracy Assessment Tool provided by the Department of Education (DepEd) of Rizal. These topics present challenges that impede students' progress, resulting in difficulty in understanding previous concepts and limiting their ability to grasp new ones. The scores of the respondents reveal weaknesses in their numeracy skills for the written topics specified in Table 3. As a result, these topics have been included in the home tasks for the grade 7 students for the academic year 2023-2024 as part of the Mathematics Department's intervention program.

The topics covered address the essential numeracy abilities necessary for achieving numerical competency at the grade 7 level. The content begins with number discrimination and the identification of missing numbers, and then advances to fundamental mathematical operations. This is consistent with the findings of Padlan et al. (2023), who conducted research involving grade 10 participants. The investigation revealed that the average scores of the respondents in the areas of addition, subtraction, multiplication, and division were regarded as 'requiring improvement. SNUMBOOK progress further with the inclusion of word problems, geometric pattern, and visualization for the students to apply their skills in real-life scenarios and spatial reasoning.

2. The evaluation of parents, Mathematics teachers, experts, and parents on the developed SNUMBOOK in terms of content, format, presentation and organization, and accuracy and up-to-datedness of information.

Table 3. Respondents' Evaluations on the Developed SNUMBOOK in Terms of Content

Indicators	Respondents					
	Parents		Teachers		Master Teachers	
	WM	VI	WM	VI	WM	VI
1. Content is suitable to the student's level of development and has the potential to arouse the interest of the students.	3.85	SA	3.80	SA	3.85	SA

2. Material contributes to the achievement of specific objectives of the subject area.	3.75	SA	3.60	SA	3.70	SA
3. Material enhances the development of desirable traits such as higher cognitive skills, critical thinking skills, creativity, learning by doing inquiry, problem-solving, etc.	3.70	SA	3.65	SA	3.70	SA
Continuation of Table 3. Respondents' Evaluations on the Developed SNUMBOOK in Terms of Content						
4. Materials are free of ideological, cultural, religious, racial, and gender biases and prejudices.	3.60	SA	3.70	SA	3.70	SA
5. Adequate warning and cautionary notes are provided in the activities where safety and health are of concern.	3.85	SA	3.75	SA	3.80	SA
Overall Weighted Mean	**3.75**	**SA**	**3.70**	**SA**	**3.75**	**SA**
Standard Deviation	**0.48**		**0.50**		**0.44**	

Legend: WM –Weighted Mean VI – Verbal Interpretation SA – Strongly Agree

It can be observed in Table 3 that parents, Math teachers, and experts have an evaluation with a verbal interpretation of **'Strongly Agree'** on the content of the SNUMBOOK. This confirms that the content of the developed SNUMBOOK is suitable to the student's level of development, contributes to the achievement of specific objectives, enhances the development of desirable traits, is free of ideological, cultural, religious, racial, and gender biases and prejudices and has adequate warning and cautionary notes.

Table 4. Respondents' Evaluations on the Developed SNUMBOOK in Terms of Format

Indicators	Respondents					
	Parents		Teachers		Master Teachers	
	WM	VI	WM	VI	WM	VI
1. Size and spaces of letters are appropriate to the intended users.	3.65	SA	3.55	SA	3.60	SA
2. Printing is good quality.	3.65	SA	3.85	SA	3.75	SA
3. Illustrations are easily recognizable, properly labeled, and supplement the text.	3.75	SA	3.80	SA	3.70	SA
4. Layout is simple and pleasing.	3.55	SA	3.95	SA	3.75	SA
5. Harmonious blending of illustrations and text.	3.55	SA	3.70	SA	3.70	SA
Overall Weighted Mean	**3.63**	**SA**	**3.77**	**SA**	**3.70**	**SA**
Standard Deviation	**0.53**		**0.47**		**0.46**	

Legend: WM –Weighted Mean VI – Verbal Interpretation SA – Strongly Agree

It can be seen in Table 4 that the parents, Math teachers, and experts evaluated '**Strongly Agree'** on format of the developed SNUMBOOK. This shows that the format of the finished SNUMBOOK is appropriate, with the right font size, spacing, and illustrations. It also has simple and pleasing layout that is easy-to-understand and the illustrations and text have harmonious blending.

Table 5. Respondents' Evaluations on the Developed SNUMBOOK in terms of Presentation and Organization

Indicators	Respondents					
	Parents		Teachers		Experts	
	WM	VI	WM	VI	WM	VI
1. Presentation is engaging, interesting, and understandable	3.80	SA	3.80	SA	3.80	SA
2. There is a logical and smooth flow of ideas.	3.60	SA	3.70	SA	3.90	SA
3. Vocabulary level is adapted to the student's likely experience and level of understanding.	3.70	SA	3.75	SA	3.70	SA
4. Sentences are suitable to the comprehension level of the students.	3.55	SA	3.70	SA	3.70	SA
5. Sentences and paragraph structure are varied and interesting to the students.	3.70	SA	3.70	SA	3.80	SA
Overall Weighted Mean	**3.67**	**SA**	**3.73**	**SA**	**3.78**	**SA**
Standard Deviation	**0.47**		**0.47**		**0.42**	

Table 5 with weighted means that are verbally interpreted as 'Strongly Agree' validates that presentation and organization of the developed SNUMBOOK is interesting, engaging, and easy to understand; the ideas are reasonable and flow well; the language is appropriate for the students' level of understanding and experience; the sentences and paragraphs are well-structured and varied.

Table 6. Respondents' Evaluations on the Developed SNUMBOOK in terms of Accuracy and Up-to-Datedness of the Information

Indicators	Respondents					
	Parents		Teachers		Master Teachers	
	WM	VI	WM	VI	WM	VI
1. Activity sheet has no conceptual errors.	3.90	SA	3.90	SA	3.95	SA
2. Activity sheet has no factual errors.	3.75	SA	3.85	SA	3.95	SA
3. Activity sheet has no grammatical errors.	3.85	SA	3.80	SA	3.85	SA
4. Activity sheet has no obsolete information.	3.75	SA	4.00	SA	3.90	SA
5. Activity sheet has no typographical and other minor errors (e.g., inappropriate unclear illustrations, missing labels, and wring captions.	3.80	SA	3.75	SA	3.65	SA
Overall Weighted Mean	**3.81**	**SA**	**3.86**	**SA**	**3.78**	**SA**
Standard Deviation	**0.42**		**0.35**		**0.40**	

Legend: WM –Weighted Mean VI – Verbal Interpretation SA – Strongly Agree

Table 6, with weighted means that are verbally interpreted as 'Strongly Agree', validates that the content of the developed SNUMBOOK is suitable to its intended users. Precision of data is essential, particularly in the context of educational materials. Accurate and pertinent information improves understanding of the many concepts encompassed in the subject matter and enables more effective decision-making.

3. Test of differences in the evaluation of the SNUMBOOK by the three groups of respondents.

Table 7. Test of Difference in the Evaluation of the Three Groups of Respondents on the Developed SNUMBOOK

	Respondents						Kruskal-Wallis χ^2	P-value	Decision	VI
	Parents		Teachers		Experts					
	OWM	IV	OWM	IV	OWM	IV				
Content	3.75	SA	3.70	SA	3.75	SA	1.45	0.49	Fail to Reject Ho	Not Significant
Format	3.63	SA	3.77	SA	3.70	SA	0.50	0.78	Fail to Reject Ho	Not Significant
Presentation and Organization	3.67	SA	3.73	SA	3.78	SA	1.71	0.42	Fail to Reject Ho	Not Significant
Accuracy and up-to-datedness of the information	3.81	SA	3.86	SA	3.86	SA	0.06	0. 97	Fail to Reject Ho	Not Significant

Legend: WM –Weighted Mean VI – Verbal Interpretation SA – Strongly Agree

As shown in Table 7, the evaluations of parents, Math teachers and expert respondents on the SNUMBOOK as home tasks content, format, presentation and organization, accuracy, and up-to-datedness of the information do not show significant difference. This means that the respondents' evaluations are the same. Table 7 shows that in all categories, the respondents evaluated **strongly agreed** with the created SNUMBOOK, indicating that it meets the needs of students and is suitable. It can be concluded that the developed material shows an organized and systematic approach that corresponds to the Department of Education Curriculum requirements.

4. The level of engagement of the students before and after the use of SNUMBOOK in terms of Cognitive Engagement, Behavioral Engagement, Emotional Engagement, and Social Engagement

Table 8. Level of Mathematics Engagement of the Students Before and After the Use of SNUMBOOK as regards Cognitive Engagement

COGNITIVE ENGAGEMENT	Respondents			
	Before		After	
	OWM	VI	OWM	VI
1. I go through the work for math class and make sure that it's right.	1.80	ML	3.50	VHL
Continuation of Table 8. Level of Mathematics Engagement of the Students Before and After the Use of SNUMBOOK as regards Cognitive Engagement				
2. I think about different ways to solve a problem.	1.67	ML	3.37	HL
3. I try to connect what I am learning to things I have learned before.	1.83	ML	3.40	HL
4. I try to understand my mistakes when I get something wrong.	1.77	ML	3.63	VHL
5. I would have to do the work rather than be told the answer.	1.70	ML	3.63	VHL
6. I think that hard when I am doing work for class.	1.57	ML	3.40	HL
7. When work is hard, I study each parts carefully.	1.67	ML	3.40	HL
8. I consistently put in the effort required to meet the necessary standards.	1.43	LL	3.53	HL
Overall Weighted Mean	**1.68**	**ML**	**3.48**	**HL**
Standard Deviation	**0.49**		**0.60**	

Legend: OWM –Overall Weighted Mean VI – Verbal Interpretation LL-Low Level
ML- Moderate Level HL- High Level VHL-Very High Level

Table 8 illustrates the level of Mathematics engagement of students before and after the utilization of SNUMBOOK in terms of cognitive engagement. The overall weighted mean for cognitive engagement before using the SNUMBOOK was 1.68 with a verbal interpretation of '**moderate level**' with a standard deviation of 0.49. After the usage of SNUMBOOK, the overall weighted mean increased to 3.48 with standard deviation of 0.60 and yields a verbal interpretation of '**high level**'.

This result shows that students are more interested in working on math problems, thinking about different ways to solve them, making connections between what they are learning and real life, realizing their mistakes, doing the work instead of being told the answer, and working hard when they are working on classwork after the use of the developed SNUMBOOK.

Table 9. Level of Mathematics Engagement of The Students Before and After the Use of SNUMBOOK as regards to Behavioral Engagement

BEHAVIORAL ENGAGEMENT	Respondents			
	Before		After	
	OWM	VI	OWM	VI
1. I stay focused.	1.67	ML	3.67	VHL
2. I put effort into learning math.	1.80	ML	3.60	VHL
3. I keep trying even if something is hard.	1.87	ML	3.60	VHL
4. I complete my homework on time.	1.40	LL	3.20	HL
5. I talk about math outside of class.	1.57	ML	3.27	HL
6. I participate in class.	1.63	ML	3.30	HL
Continuation of Table 9. Level of Mathematics Engagement of The Students Before and After the Use of SNUMBOOK as regards to Behavioral Engagement				
7. I give my full attention in class and avoiding things.	1.47	LL	3.67	VHL
8. I seek the help of my teacher if I don't understand.	1.73	ML	3.57	VHL
Overall Weighted Mean	**1.64**	**ML**	**3.49**	**HL**
Standard Deviation	**0.57**		**0.66**	

Legend: OWM –Overall Weighted Mean VI – Verbal Interpretation LL-Low Level
ML- Moderate Level HL- High Level VHL-Very High Level

The level of mathematics engagement of students before and after the use of SNUMBOOK in terms of behavioral engagement is presented in Table 15 indicating a '**moderate level**' of engagement with overall weighted mean at 1.64 with standard deviation of 0.57 before the implementation of SNUMBOOK. the overall weighted mean increased to 3.49 with standard deviation of 0.66 and is interpreted as '**high level**'.

The rise in the results shows that the use of SNUMBOOK has improved students' focus and effort in math class, encouraged them to try new things even when they're difficult, pushed them to turn in their homework on time, increased their level of engagement outside of class, and encouraged them to ask their teacher for clarification when needed.

Table 10. Level of Mathematics Engagement of the Students Before and After the Use of SNUMBOOK as regards Emotional Engagement

EMOTIONAL ENGAGEMENT	Respondents			
	Before		After	
	OWM	VI	OWM	VI
1. I look forward to math class.	1.50	ML	3.67	VHL
2. I enjoy learning new things about math.	1.90	ML	3.73	VHL
3. I want to understand what is learned in math class.	1.83	ML	3.67	VHL

4. I feel good when I am in math class.	1.50	ML	3.70	VHL
5. I often feel happy in math class	1.97	ML	3.63	VHL
6. I think that math class is interesting.	1.70	ML	3.67	VHL
7. I want to be in math class.	1.30	LL	3.67	VHL
8. I care about learning math.	1.93	ML	3.70	VHL
9. I often feel excited when I am in math class.	1.43	LL	3.53	VHL
Overall Weighted Mean	**1.67**	**ML**	**3.66**	**VHL**
Standard Deviation	**0.78**		**0.57**	

In can be seen from Table 10 the level of mathematics engagement of the students before and after the implementation of SNUMBOOK in terms of emotional engagement. The overall weighted mean of the students pre-SNUMBOOK was at 1.67 with a verbal interpretation of '**moderate level**'. After the use of the developed material, the overall weighted mean increased to 3.66 and verbally interpreted as '**very high level**'. The findings indicate that the utilization of SNUMBOOK leads to increase of emotional engagement among students. The students now await math class with enthusiasm, get enjoyment from acquiring new mathematical concepts, and feel pleasure when engaging in arithmetic activities.

Table 11. Level of Mathematics Engagement of the Students Before and After the Use of SNUMBOOK as regards Social Engagement

SOCIAL ENGAGEMENT	Respondents			
	Before		After	
	OWM	VI	OWM	VI
1. I get confident when I learn new things about math.	1.80	ML	3.70	VHL
2. I build on others' ideas.	1.43	LL	3.40	HL
3. I try to understand other people's ideas in math class.	1.73	ML	3.50	VHL
4. I try to work with others who can help me in math.	1.70	ML	3.53	VHL
5. I try to help others who are struggling in Math	1.47	LL	3.33	HL
6. I care about other people's ideas	1.67	ML	3.53	VHL
7. When working with others, I share ideas	1.50	ML	3.23	HL
Overall Weighted Mean	**1.61**	**ML**	**3.46**	**HL**
Standard Deviation	**0.53**		**0.65**	

Prior to using SNUMBOOK, Table 11 reveals that the overall weighted mean was 1.61 with a standard deviation of 0.53 and a "moderate level" of verbal interpretation. With a verbal interpretation of "high level," the students' overall weighted mean improved to 3.46 with a standard deviation of 0.65 after the use of SNUMBOOK. The increase in results indicates that students are engaging in more social interactions after the use of SNUMBOOK. During group math activities, students actively participate by sharing their own ideas, actively expanding on the ideas of others, collaborating with classmates, and demonstrating enhanced confidence.

5. The significant difference in the level of engagement of the students before and after the use of SNUMBOOK

Table 12. Summary of Test of Difference in the Level of Math Engagement of the Students Before and After the Use of SNUMBOOK

	Before		After		z-value	p-value	Decision	Interpretation
	Mean	SD	Mean	SD				
Cognitive	1.68	0.20	3.49	0.38	4.79	0.000	Reject Ho	Significant
Behavioral	1.66	0.29	3.49	0.50	4.79	0.000	Reject Ho	Significant
Emotional	1.70	0.30	3.65	0.43	4.79	0.000	Reject Ho	Significant
Social	1.61	0. 30	3.46	0.44	4.79	0.000	Reject Ho	Significant

Presented in Table 12 the summary of the test of difference in the level of engagement before and after the use of the developed SNUMBOOK. The unanimous computed p- value of 0.000 across all areas is less than the level of significance at 0.05. Therefore, the null hypothesis is rejected statistically. This implies that the difference between the level of engagement before and after is significant.

There is evidence to suggest that the developed SNUMBOOK enhances level of cognitive, behavioral, emotional, and social engagement of students in math and promotes an enriched math learning experience.

6. The performance of the students during the pretest and posttest with SNUMBOOK.

Table 13. Performance of the Respondents During the Pretest and Posttest in the Numeracy Assessment

Score	Descriptor	RESPONDENTS			
		Pretest		Posttest	
		f	%	f	%
76 - 100	Above Numerate	0	0.0	17	56.67
51 - 75	Numerate	0	0.0	12	40.00
26 - 50	Emerging Numerate	28	93.33	1	3.33
0 - 25	Non-numerate	2	6.67	0	0
Total		**30**	**100.0**	**30**	**100.0**
Mean		**41.77**		**74.40**	
Standard Deviation		**7.46**		**12.54**	
Descriptor		**Emerging Numerate**		**Numerate**	

Note: f- frequency

Table 13 presents the distribution of students' scores during the pretest and posttest in learning basic math skills using the SNUMBOOK as home tasks.

As seen the Table 13, the pretest results show that 28 out of 30 students, or 93.33%, received scores ranging from 26 to 50, placing them in the emerging numerate level, while 2 out of 30 students, or 6.76%, received scores ranging from 0 to 25, placing them in the non-numerate level.

After being immersed to the developed SNUMBOOK, 17 out of 30 or 56.67% of the students fall under **Above Numerate Level.** There are 12 out of 30 or 40.00% of the students fall under **Numerate Level**. The number of participants fall under **Emergent Numerate Level** was reduced to 1 out or 30 or 3.33%, and none of the students of the students fall under **Non-numerate Level** in the posttest. Furthermore, the pretest performance of the students has a mean score of 41.77 and a standard deviation of 7.46, interpreted as **Emerging Numerate**. The posttest performance of the students has a mean score increased to 74.40 and a standard deviation of 12.54 with verbal interpretation of **Numerate.** It can be concluded that academic performance and the level of numeracy among students have increase.

The current study yielded the same result as the study of Belleza (2023) about the increase of the post-test scores of the students after utilizing learning packets at home with parental involvement. Just like this study, Belleza (2023) invited parents to be hands-on and take charge of the numeracy skills of their children when they do home-based activities. This result means that the developed SNUMBOOK enhanced the level of numeracy and academic performance of the students.

7. The significant difference between the mean scores of the pretest and posttest of the students.

Table 14. Test of Difference Between the Mean Scores of the Pretest and Posttest

Tests	Mean Score	SD	z-value	p-value	Decision	Interpretation
Pretest	41.77	7.49	4.78	0.000	Reject Ho	Significant
Posttest	74.40	12.19				

Note: α = 5%

As apparent from Table 14, the computed p- value of 0.000 is less than the level of significance of 0.05 resulting in the statistical decision to reject the null hypothesis. Therefore, there is sufficient evidence to support that there is a significant difference between the mean scores of the pretest and the posttest of the respondents There is proof to suggest that the students' numeracy level and academic performance increased after completing the SNUMBOOK.

The finding proves that SNUMBOOK is a beneficial tool for both teachers and students, successfully enhancing their mastery of numerical abilities, promoting academic progress, and enhancing numeracy level when utilized as tasks to be completed at home with the help of parents.

8. The relationship between the mean scores of the level of engagement and mean scores of the academic performance of the students after the use of SNUMBOOK

Summarized in Table 15, Spearman Rho coefficients (0.41, 0.57, 0.56, 0.47) reflecting the correlation between the level of engagement and academic performance of the students reveals a moderate positive correlation. With computed p-values (0.023, 0.000, 0.000, 0.009) less than the level of significance at 0.05, the statistical decision is to reject the null hypothesis. This shows a significant relationship between all aspects the level of engagement and academic performance after the utilization of SNUMBOOK.

Table 15. Test Relationship Between the Level of Engagement and the Academic Performance of the Students After the Use of SNUMBOOK

	Spearman-Rho Value	Strength	p-value	Decision	Interpretation
Cognitive Engagement Academic Performance	0.41	Moderate	0.023	Reject Ho	Significant
Behavioral Engagement Academic Performance	0.57	Moderate	0.000	Reject Ho	Significant
Emotional Engagement Academic Performance	0.56	Moderate	0.000	Reject Ho	Significant
Social Engagement Academic Performance	0.47	Moderate	0.009	Reject Ho	Significant

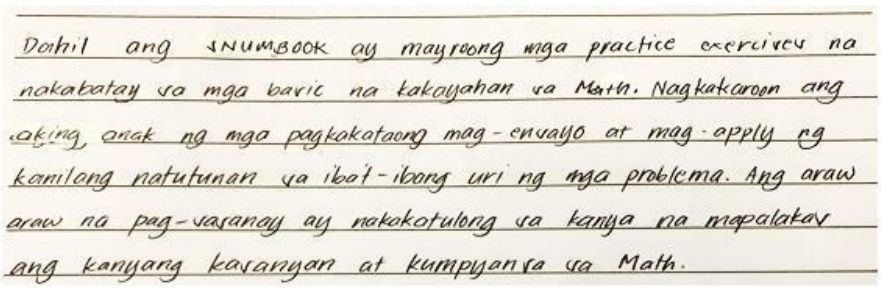
There is confirmation to suggest that as the level of cognitive, behavioral, emotional, and social engagement of students in math improves the students' academic performance also improves.

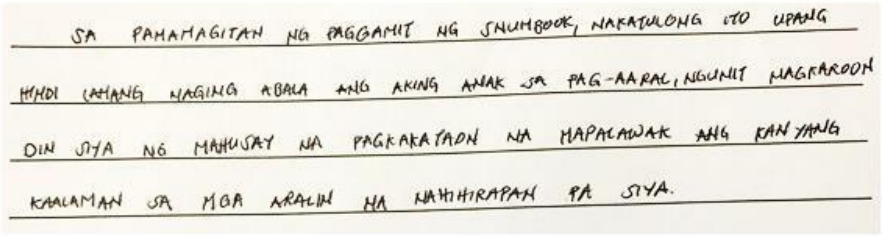
This confirms the SNUMBOOK could enhance the level of engagement and academic achievement of the students.

9. The areas improved through SNUMBOOK with Parental Involvement at Homes

The following are the answers of parents in the interview as regards to the areas
improved through the SNUMBOOK.

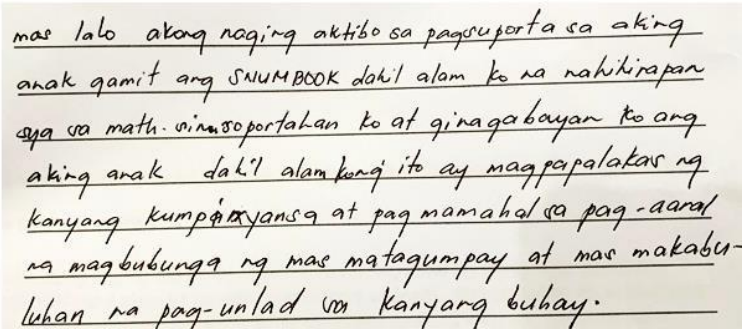
a. **Increased Practice and Reinforcement.** The answers of the parents that shows increased in practice and reinforcement as shown below:

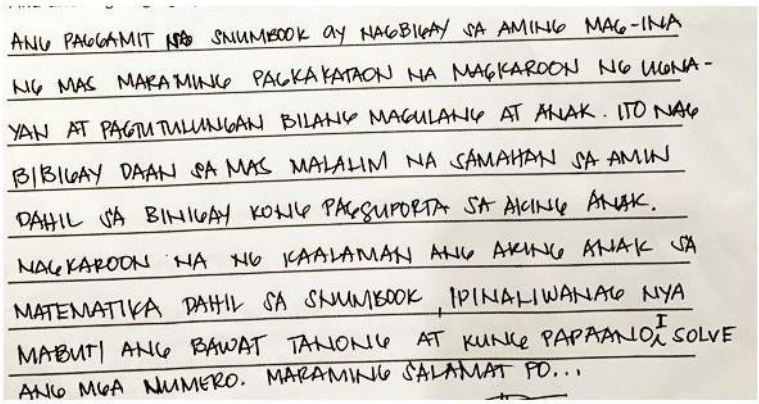

Dahil ang SNUMBOOK ay mayroong mga practice exercises na nakabatay sa mga baric na kakayahan sa Math. Nagkakaroon ang aking anak ng mga pagkakataong mag-enyalo at mag-apply ng kanilang natutunan sa iba't-ibang uri ng mga problema. Ang araw araw na pag-sasanay ay nakakatulong sa kanya na mapalakas ang kanyang kasanayan at kumpiyansa sa Math.


SA PAMAMAGITAN NG PAGGAMIT NG SNUMBOOK, NAKATULONG ITO UPANG HINDI LAMANG MAGING ABALA ANG AKING ANAK SA PAG-AARAL, NGUNIT MAGKAROON DIN SIYA NG MAHUSAY NA PAGKAKATAON NA MAPALAWAK ANG KANYANG KAALAMAN SA MGA ARALIN NA NATUTUHAN NA SIYA.

As seen in the answers the SNUMBOOK provided the students with additional practice materials that reinforced the development of their numerical skills. The parents noted that they appreciated how the materials kept their children busy while they were at home. They also appreciated the chance for their children to practice mathematics at home.

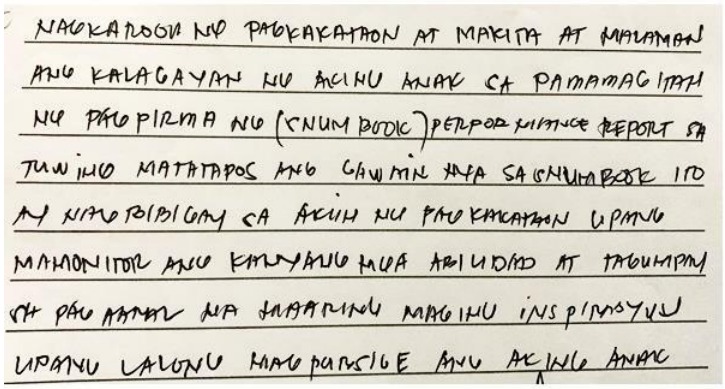
b. **Support and Encouragement.** The answers of the parents on the improved support and encouragement were presented below.

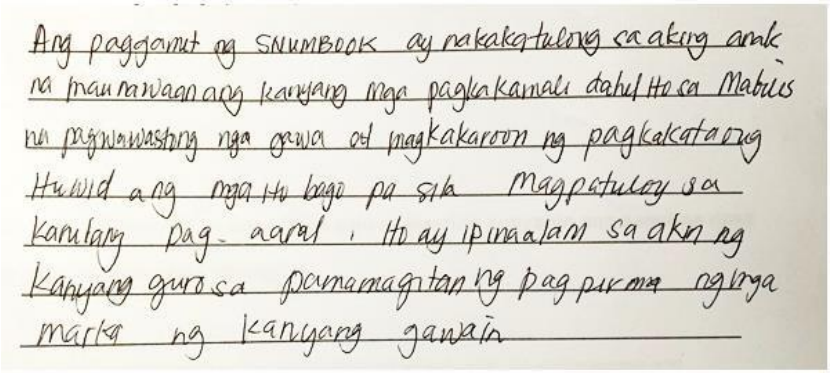

mas lalo akong naging aktibo sa pagsuporta sa aking anak gamit ang SNUMBOOK dahil alam ko na nahihirapan siya sa math. sinasoportahan ko at ginagabayan ko ang aking anak dahil alam kong ito ay magpapalakas ng kanyang kumpiyansa at pag mamahal sa pag-aaral na magbubunga ng mas matagumpay at mas makabuluhan na pag-unlad sa kanyang buhay.


ANG PAGGAMIT NG SNUMBOOK AY NAGBIGAY SA AMING MAG-INA NG MAS MARAMING PAGKAKATAON NA MAGKAROON NG UGNAYAN AT PAGTUTULUNGAN BILANG MAGULANG AT ANAK. ITO NAG BIBIGAY DAAN SA MAS MALALIM NA SAMAHAN SA AMIN DAHIL SA BINIGAY KONG PAGSUPORTA SA AKING ANAK. NAGKAROON NA NG KAALAMAN ANG AKING ANAK SA MATEMATIKA DAHIL SA SNUMBOOK, IPINALIWANAG NYA MABUTI ANG BAWAT TANONG AT KUNG PAPAANO I SOLVE ANG MGA NUMERO. MARAMING SALAMAT PO...

As gleaned in the answers the material improves the support and encouragement of the parents and the teachers. The students learned to ask questions from the teachers to understand their SNUMBOOK activities further. At home, the parents noted that they were often asked by their children to explain the tasks and guide them in accomplishing their tasks. Several parents shared how they fully supported their children and encouraged them to finish all tasks no matter how challenging the tasks were.

c. **Communication.** The answers of the parents on the improved communication were stated below:


NAGKAROON NG PAGKAKATAON AT MAKITA AT MALAMAN ANG KALAGAYAN NG AKING ANAK SA PAMAMAGITAN NG PAGPIRMA NG (SNUMBOOK) PERFORMANCE REPORT SA TUWING MATATAPOS ANG GAWAIN NYA SA SNUMBOOK ITO AY NAGBIBIGAY SA AKIN NG PAGKAKATAON UPANG MAMONITOR ANG KANYANG MGA ARIUNDIN AT TAGUMPAY AT PAG AARAL NA TAPATANG MAGING INSPIRASYON UPANG LALONG MAGPURSIGE ANG AKING ANAK


Ang paggamit ng SNUMBOOK ay nakakatulong sa aking anak na maunawaan ang kanyang mga pagkakamali dahil dito sa Mabilis na pagwawasto ng gawa at magkakaroon ng pagkakataong Huwag ang mga ito bago pa sila Magpatuloy sa Kanilang Pag-aaral. Ito ay ipinaalam sa akin ng Kanyang guro sa pamamagitan ng pagpirma ng kanyang Marka ng kanyang ganap

The teachers were able to clearly show to the parents about the mathematical skills of their children through the SNUMBOOK. The parents were able to share to the teachers as well about exactly which part of the SNUMBOOK their children are still hard up with. Generally, the implementation of the SNUMBOOK opened a communication between the parents and the teachers as they partnered up to help the students improve their mathematical skills.

This suggests that structured parental involvement in facilitating the SNUMBOOK has cumulative effects, resulting improvement in numeracy skills among learners with low numeracy level, allowing them to continue learning basic numeracy at home.

10. The comments and suggestions of the teachers and students in using SNUMBOOK.

The comments given by parents, mathematics educators, and experts on the utilization of SNUMBOOK to enhance the developed home tasks for Grade 7 are as follows:

The material was well thought of and could really help students. (b) The SNUMBOOK, will help the students to develop their skills and interest in learning the concept in Mathematics. (c) The SNUMBOOK is great and very engaging because of the creativity on how it is made. (d) The contents are amazing and appropriate to the level of the learner. (e) The presentation of the SNUMBOOK is engaging and the skills are applicable to slow and average students. It is highly recommended. (f) Suitable for non-numerates/ remedial students. (g) The materials are good activity supplement for the non-numeric students, and it is innovative that may catch the interest of the students. (h) The module is interactive and interesting. (i) It is well organized and easy to understand. (j)Congratulations! It was a good and entertaining SNUMBOOK. I hope that our future learners will utilize your skill numeracy booklets. (j)Your skill numeracy booklet was entertaining.

The student will surely love to answer this booklet. (k) The material has clear illustration and consistently formatted. This will help avoid confusion and make it for students to follow along. (l) Students will be able to study and appreciate mathematics at their own pace with the aid of this SNUMBOOK, with SuperNumboy's help the topics are presented in an interesting and understandable manner. (m) Excellent! Big help for students struggling in Math especially those who are non-numerate. (n) I am sure and confident that the developed material will greatly help the students to master their skills in mathematics and will encourage them to learn mathematics. Well done! Congratulations! (o) The SNUMBOOK, is appropriate for their developmental stage and can spark curiosity. (p) The arrangement is lovely rather than appealing. Overall, it's excellent.

The following **suggestions** were offered by the respondents on SNUMBOOK as home task for Grade 7 students with low numeracy level.

"I suggest adding some items that are more challenging or with hots questions." (b) Make the font size uniformed. (c) Use simple words and instructions. (d) Usage of bi-lingual instruction could be used for student to better comprehend the SNUMBOOK. (e) Avoid using dark and bright colors for illustrations on activities to give highlights in the text balloons. (f) If possible, consider incorporating interactive elements, such as foldout diagrams and pop-ups. (g) Don't overcrowd the page with too much information. (Use simple terminologies. (h) If possible, definition of terms or glossary maybe added for fully understanding of concepts especially the difference between subtraction and addition with and without regrouping. (i) I suggest you add more exercises for each skill to improve mastery. (j) Create an example box for each skill.

The SNUMBOOK can aid student in learning math, according to the respondents. It is entertaining due to its distinctive style and student-friendly information. The content is highly recommended because it engages both average and slow learners. Students that are remedial or non-numerate can benefit from SNUMBOOK. Students who don't like numbers will be interested in these imaginative activity additions. The curriculum required parents' direction in addition to the students' full engagement. It's easy to understand, interesting, and well-organized. However, they recommended include a few more difficult topics or questions with HOTS. Consistency in font sizes helps to simplify words and directions. Home tasks in two languages could aid in SNUMBOOK comprehension. It is not appropriate to use bright or dark colors while drawing text balloon highlights. It is advised to use foldout diagrams and pop-ups as interactive elements. Don't fill the entire page. Definitions or glossaries let students add and subtract without having to regroup.

Conclusions

Based on the results of the study, the following conclusions were drawn:

1. The evaluations of parents, Math teachers and experts on the developed SNUMBOOK do not differ significantly as to Content, Format, Presentation and Organization, and Accuracy and up-to datedness of the information. SNUMBOOK meets students' needs and is well-suited, organized, and methodical, aligning with the curriculum criteria set by the Department of Education.
2. The developed SNUMBOOK enhances the level of numeracy and is effective material to improve learning, as evidenced by the increase in the post test. As a result, the numeracy level of student is enhanced.
3. The cognitive, behavioral, emotional, and social engagement of students is improved after the usage of the developed the usage of SNUMBOOK. Thus, it promotes an enriched math learning experience.
4. There is a significant relationship exists between the level of engagement and the of the academic performance of the students after the use of SNUMBOOK. Therefore, this proves that if the level of engagement improves, the level of academic performance of the students also improves. Thus, students must be engaged to improve mastery and proficiency in Mathematics.

Recommendations

Based on the findings and conclusions drawn, the following are recommended:

1. Students who struggle with numeracy may utilize the SNUMBOOK due to its ability to accommodate individual learning speeds and enhance their numerical proficiency even at home.
2. Teachers may engage in collaborative efforts to apply the discoveries of the study towards the improvement and enhancing of home tasks.
3. School administrators may continue to provide their support, make any required modifications, and guarantee the full implementation of assigning home tasks, as it helps pupils improve their numeracy skills and actively participate in mathematics.
4. Other educational institutions in the district may utilize this resource as it has the capacity to assist the students to reach their desired level of numeracy and enhances mathematics engagement both within the classroom environment and at home.
5. Future researchers may carry out a comparative study in different academic disciplines and adapt or improve the content based on the students' requirements.

Compliance with Ethical Standards

The study followed the ethical guidelines for conducting research with the student respondents. Before commencing the data collection process, the researcher made certain that informed consent was acquired from the parents and the student participants. The participants were provided with information regarding the study's objective, the utilization of the data, and the voluntary aspect of their involvement. In addition, the participants' information was ensured to be confidential, and any identifiable data was eliminated during the data processing phase to safeguard their privacy.

Acknowledgments

The author wishes to thank the teachers of the Mathematics Department of Guinayang National High School for their help in the conduct and completion of this study. The SDS of the Division of Rizal, the PSDS of the District of San Mateo, and the School Head of Guinayang National High School where the study was conducted are also acknowledged for taking part in this academic endeavor. Reynaldo C. Rivera, Jr., Dr.

Edgardo G. Canda, Floro T. Del Pilar III, Dr. Jose A. Procalla, Jr., the husband and the family of the author who provided support and inspiration in the conduct of this study.

REFERENCES

Belleza, M. J. A. (2023) From Zero to Hero: Global Learning Packets with Parental Involvement at Homes on the Non-Numerates' Numeracy Level.

Burke, M. (2020). Academic Learning in Home-based Activity. From: https://genparenting.com/academic-learning-in-home-based-activities/

Layug, G., Velario, J. P., & Capones, J. (2021). Teachers' Interventions in Improving Numeracy Skills of Grade 7 Students in Baguio City National High School. In 4th International Conference on Advanced Research in Teaching and Education.

Luna, M. J. T. (2023). MATHSANAY: School initiatives on bridging learners' numeracy gap: A proposed math literacy project. World Journal of Advanced Research and Reviews, 17(2), 196-199.

McCormick, M. P., Weissman, A. K., Weiland, C., Hsueh, J., Sachs, J., & Snow, C. (2020). Time well spent: Home learning activities and gains in children's academic skills in the prekindergarten year. Developmental psychology, 56(4), 710.

Munro, K. J., Jose, P. E., & Huntsinger, C. S. (2021). Home-Based activities in support of New Zealand children's literacy and numeracy Skills. Journal of Educational and Developmental Psychology, 11(2), 17-28.

Nelson, G., (2023). Why is learning math at home so important for kids?.from: https://hedcoinstitute.uoregon.edu/blog/5/math-learning-home

Pelayo, A. G. C. (2023). Effectiveness of Remedial Sessions in Improving the Numeracy Level of the Identified Grade 9 Non-Numerates Students.

Songsirisak, Prommin & Jitpranee, Jutharat. (2019). IMPACT OF HOMEWORK ASSIGNMENT ON STUDENTS' LEARNING. 21. 1-19. From: https://www.researchgate.net/publication/334945642

Tucker, Trish & Zandvoort, Melissa & Burke, Shauna & Irwin, Jennifer. (2011). The influence of parents and the home environment on preschoolers' physical activity behaviours: A qualitative investigation of childcare providers' perspectives. BMC public health. 11. 168. 10.1186/1471-2458-11-168.

APA Citation:

Buenviaje, M. G. M. (2024). SNUMBOOK AS HOME TASKS FOR AN ENHANCED NUMERACY LEVEL OF GRADE 7 STUDENTS. Ignatian International Journal for Multidisciplinary Research, 2, 462–483. https://doi.org/10.5281/zenodo.13291873

marygrace.miguel001@deped.gov.ph

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

SOCIAL MEDIA MARKETING IN THE SELECTED ENTERPRISES IN THE CITY OF SAN PABLO, LAGUNA

Daryl Aimiel A. Amante, MBA[1]
Maria Kristina M. Cay, MBA, DPA, CHRA, CRS[2]

[1]Community General Hospital of San Pablo Inc.
C. Colago Ave. Brgy San Roque, San Pablo City, Laguna, Philippines
[2]Batangas State University
The National Engineering University- Alangilan Campus, Philippines

https://doi.org/10.5281/zenodo.13150893

ABSTRACT

The study was about the utilization of social media marketing in the selected enterprises in the City of San Pablo, Laguna. The quantitative approach is used in this study to ascertain social media marketing adoption in SMEs as well as marketing strategies and challenges and proportional random sampling technique to analyze 374 owners and managers of the SME's. Moreover, the research made use of a self-made survey questionnaire instrument in data gathering. The frequency count and percentage were utilized to ascertain the business profile of the respondents in terms of nature of business, years of operation, and monthly revenue of the business. Mean and Standard Deviation were used to determine the perception of the respondents in terms of the extent of utilization of social media marketing of the respondents. Kruskal Wallis Test was used to test the difference between the business profile and the utilization of social media marketing in SMEs. This research aims to evaluate the academic literature regarding the potential and difficulties of using social media marketing in the selected enterprises (SMEs), as well as to suggest marketing strategies and obstacles to decide the use of social media marketing in SMEs. The study recommended marketing best practices aimed to improve the use of social media marketing.

Keywords: *social media marketing, social media, interactivity, informativeness, personalization, trendiness, word of mouth.*

INTRODUCTION

In the fast-paced digital landscape of the 21st century, the emergence of social media has revolutionized the way businesses connect with their target audience. Social media marketing is already an essential component of contemporary marketing best practices enabling organizations to harness the power of online communities and platforms to promote products, services, and brands (Gamundoy et al, 2020). As a dynamic and ever-evolving field, social media marketing requires constant adaptation and creativity to effectively engage with the audience in an environment that is subject to rapid change (Smith, 2020). On the other hand, SME's find themselves at the intersection of opportunity and challenge. These nimble and innovative businesses, often constrained by limited resources, have been presented with a unique avenue for growth and market expansion through social media marketing. As SMEs navigate the complex landscape of modern commerce, harnessing the potential of social media platforms has become a pivotal strategy (Anderson, 2021).

Jamil et al (2022) stated that social media has the potential to serve as an effective promotional instrument for attracting visits to business pages. Meanwhile, in a study conducted by Cheung et al (2021), it was underscored that the utilization of social listening technologies enables the monitoring of online reach expansion through the examination of a business's connections, fans, and followers.

In a recent study conducted by Farivar and Richardson (2021), it was observed that customers' inclination to persist in using a certain product or service is significantly impacted by their level of pleasure after receiving the service. Based on research in the field of social media studies, it has been found that contentment plays a significant role in influencing individuals' intentions to continue using social media platforms. Consequently, subsequent to availing a service, a consumer will evaluate their level of satisfaction. As noted by Mahendra (2021), the level of consumer satisfaction has a significant impact on their likelihood to engage in repeat purchase intention. Based on the author, the satisfaction of a client with a product or service directly influences their inclination to engage in repeat purchases. The retail industry was significantly impacted by the explosive rise of internet purchasing, which forced traditional brick-and-mortar businesses to change to be competitive in the new retail landscape (McKinsey, 2020). Online revenue was increasing by April 2020, and it was obvious that this tendency will carry over into the post-quarantine era.

Online buying was easy and convenient, but firms needed to be motivated if they were to prosper, especially in eCommerce. Businesses needed to concentrate on their target market, make use of social media platforms, and cultivate consumer trust by offering high-quality content and first-rate customer support if they were to compete in the online marketplace. The term e-commerce, sometimes known as "electronic commerce," describes the buying and selling of goods and services online. As more people utilize the Internet for business and shopping, its popularity has expanded (McKinsey, 2020).

This study's main goal is to determine the difficulties faced by small and medium-sized businesses in San Pablo City, Laguna, as reported by respondents, managers, and business owners. It is anticipated that by better comprehending these obstacles, SMEs would become more competitive and, in due course, develop and expand their enterprises. Regarding the type of business, medium enterprise firm owners with a capitalization of at least 11,000 and ten years of operational experience are most likely to use the service type. They all acknowledged that the numerous requirements in company loan applications provide some challenges when trying to obtain funding. Additionally, because of the significantly lower prices that unregistered businesses are offering on the market, they are vulnerable to the increasingly fierce competition that develops among them. Certain SMEs in this instance have been unable to compete with the microbusinesses. They all dispute that the emphasis on support is solely for microenterprises, and they agree that the LGU does not have enough funding to assist in further developing the SME sector.

Research Questions

The study generally aimed to determine the social media marketing in the selected enterprises in the City of San Pablo, Laguna.

Specifically, the study sought answers to the following questions:

1. What is the business profile of the respondents, in terms of:
    - 1.1. nature of business;
    - 1.1. years in operation; and
    - 1.2. monthly revenue?

2. What is the extent of social media utilization with regards to:
    - 2.1. Interactivity;
    - 2.2. Informativeness;
    - 2.3. word of mouth;
    - 2.4. personalization; and
    - 2.5. trendiness?

3. Is there a significant difference between the utilization of social media marketing when grouped according to their business profile of the respondents?

4. What marketing best practices may be shared to enhance the social media in the selected enterprises in San Pablo City, Laguna?

METHODOLOGY

A quantitative method approach design was employed in this study. This method is used to utilized in examining the business profiles of respondents in San Pablo, Laguna, focusing on elements such as the nature of their businesses, years in operation, and monthly revenue. It would also be used in the exploration of variables related to the

utilization of social media marketing for selected enterprises of the City of San Pablo, Laguna in terms of interactivity, informativeness, personalization, trendiness, and word of mouth.

The study focused on the perspectives of the owners and managers of SMEs in San Pablo City regarding the utilization of social media marketing as part of their business strategies. The population size considered for the study was 14,680 registered SMEs. Based on a response distribution of 50%, the recommended sample size was determined to be 374 respondents.

The study parameters were established using the Raosoft calculator to ensure accurate results. The margin of error was set at 5%, indicating the acceptable degree of deviation from the true population parameter. The confidence level was set at 95%, indicating the level of certainty in the obtained results.

Proportional Stratified Random sampling techniques were employed in this research. This involves selecting a sample from a larger population in such a way that each individual or element has an equal chance of being chosen. This method helps ensure that the sample is representative of the entire population, making the results more generalizable and less prone to bias (Creswell, 2014).

The researcher conducted the study in San Pablo, which included selected enterprises and kiosk locations. This survey was carried out through the assistance of the Business Permit and Licensing Office (BPLO). This survey aimed to determine the total number of SMEs operating in the town of San Pablo. The formal request was submitted to the Business Permit and Licensing Office (BPLO) by means of an official written correspondence, which was thereafter transmitted electronically via email. Following the researcher's request for authorization to investigate the quantity of registered SMEs in the town of San Pablo, the survey results were subsequently provided at the San Pablo Capitol. Consequently, it was determined that the total population of SMEs numbered at 14,680 registered establishments classified as small and medium companies SMEs.

In order to collect information from small and medium enterprises in San Pablo City, Laguna, the research instrument for this study was a self-made survey questionnaire. There are two key components to the questionnaire, each of which addresses a different area of the study issue.

The first part is the Business Profile of the respondents. The purpose of this section is to obtain respondents' business-related information. It contains inquiries about the type of business, number of years in operation, and monthly revenue of the SMEs in San Pablo City, Laguna. The second part consists of Extent of Utilization of Social Media Marketing by the respondents. This section analyzes the utilization of social media marketing as perceived by the managers and owners of the SMEs. It includes a series of questions aimed to assess the respondents' thoughts about their preferred option.

A 4-point likerts scale was used to gauge the perception of Small and Medium Enterprises (SMEs) regarding the utilization of social media marketing.

A crucial aspect of this study is the creation of a survey questionnaire that is both valid and trustworthy. The establishment of its validity and reliability is crucial for the successful execution of the study. The initial step will involve doing a comprehensive assessment of existing literature and engaging in consultations with subject matter experts. These activities aimed to develop a questionnaire that effectively encompasses the pertinent constructs and variables. After the formulation of the questionnaire, a group of specialists conduct a comprehensive evaluation to determine its content validity, thereby verifying that the questions are aligned with the objectives of the study. Following the process of content validation, a pilot test is administered to a limited sample of small and medium-sized enterprise (SME) owners and managers in a nearby municipality in Laguna, in order to detect any potential ambiguities or concerns pertaining to the phrasing and structure of the questions. The feedback acquired from the pilot test were utilized to enhance and fine-tune the questionnaire. Additionally, internal consistency metrics such as Cronbach's alpha were obtained at 0.759 interpreted as acceptable.

The researcher carried out the subsequent actions to collect the primary data. Before conducting the study, the researcher first obtain approval from the Dean of the Graduate School of the Pamantasan ng Lungsod ng San Pablo. Once approved, the researcher formally asked for authorization to conduct a survey and personal interview of SMEs in the City of San Pablo, Laguna, with the support of the City Mayor. In parallel, the researcher simultaneously conducted surveys in the area of San Pablo City, Laguna, and retrieved completed questionnaires and interview transcripts the same day. The researcher examined, totaled, and summarized the responses before sending the information to the statistician for data analysis.

The quantitative data collected for this study were analyzed using descriptive statistical tools.

Frequency count and Percentage were used to determine the business profile of the respondents in terms of nature of business, years of operation, and monthly revenue of the business. While,

Mean and Standard Deviation were used to determine the perception of the respondents in terms of the extent of utilization of social media marketing of the respondents. And,

Kruskal Wallis Test was used to test the difference between the business profile and the utilization of social media marketing in SMEs.

In this study, the research objectives revolve around recognizing the utilization of social media marketing in the selected enterprises in San Pablo City, Laguna. The scope of social media platforms includes using Facebook, TikTok, Instagram, WhatsApp, Messenger, Twitter, and reels. The study assessed the level of utilization of social media marketing activities. The study involved a random 374 owners and managers of selected SME’s in San Pablo City, Laguna.

DISCUSSION

Table 3.1 ***Business Profile in terms of Nature of Business***

Nature of Business	***Frequency (f)***	***Percentage (%)***
Food Service and Accommodation	32	9
Insurance Activities and Financial	38	11
Human Health and Social Work	30	8
Information and Communication,	76	20
Manufacturing	80	21
Other Service Activities	16	4
Professional, Scientific and Technology	43	11
Real Estate Activities	12	3
Wholesale and Retail Trade; Rep	47	13
Overall Mean	**374**	**100.0**

The data from table 3.1 demonstrated the company profile in terms of the nature of business. The majority of the respondents were from the manufacturing sector with frequency of 80 (21%). While the sector of real estate has the least number of respondents with a frequency of 12 (3%).

This implies that San Pablo City is a hub of manufacturing business and companies in the regioned, considered as one of the advanced agro-industrial economies in CALABARZON based on DTI-4A data.

Table 3.2 ***Business Profile in terms of Years in Operation***

Years in Operation	***Frequency (f)***	***Percentage (%)***
10 years and below	203	54
11-20 years	77	21
21-30 years	94	25
Overall Mean	**374**	**100**

The data from table 3.2 illustrated the business profile in terms of Years in Operation, with the majority of businesses operating for less than 10 years with a frequency of 203 firms (54%). This result implies that many SME's in San Pablo City are still new which can indicate that the business landscapes in the city are promising for SME's.

The results are supported by Alayuddin (2008) study that the length of a business's operation is its duration and can have an impact on a person's zakat compliance behavior. This is so that a business's stability can be gauged by how long it has been in operation.

Meanwhile, Kamarudin (2018) provides an explanation of the duration of business finding financial stability is the biggest obstacle in the first three years of business

operation, according to operations based on a start-up business graph created by Syamsul Anuar and cited by Kamarudin, 2018 enterprising people now attempt to put their concepts into practice and market their goods. Consequently, business owners must effectively manage their funds at this point in running their company.

Table 3.3 ***Business Profile in terms of Monthly Revenue***

Monthly Revenue	**f**	**%**
₱250.000 and below	227	61
Above ₱ 2,000,000.00 to ₱ 8,000,000.00	20	5
Above ₱ 800,000.00 to ₱ 2,000,000.00	127	34
Overall Mean	**374**	**100**

The data from table 3.3 showed that most respondents earned less than ₱250,000.00 pesos monthly revenue with a frequency of 227 (61%). The second group earned between ₱800,000.00 and 2,000,000.00, with a frequency of 127 (34.0%). The final group earned between ₱2,000,000.00 and 8,000,000.00, with a frequency of 20 (5%).

The results imply that many businesses in San Pablo are considered as small scale enterprises because this is where business owners are visible and many are still starting from scratch, there are still more people with monthly incomes of 250,000 or less. In San Pablo City, Laguna, there are a lot of manufacturing companies that actually begin with a small investment and work their way up to a large income.

According to the Philippine Statistics Authority's (PSA) 2022 the country had 1,109,684 registered firms. Large firms account for 4,541 with MSMEs accounting for 1,105,143. The percentage of all establishments that are micro, 90.49% (1,004,195), small, 8.69% (96,464), and medium, 0.40% (4,484), are the next highest (DTI, 2021).

Table 4.1 ***Extent of Social Media Utilization in terms of Interactivity***

Indicators	**Mean**	**Std. Deviation**	**Interpretation**
I believe that utilizing social media…			
1. allows my business to communicate directly with my target audience through comments, direct messages, or live chat features.	3.93	0.25	Very High Extent

2. helps me to gather valuable feedback from my customers essential in understanding their preferences, concerns, and making improvements on my products or services.	3.83	0.37	Very High Extent
3. facilitates the creation of communities, groups, forums and dedicated hash tags where my customers can engage with each other.	3.60	0.49	Very High Extent
4. helps me to actively involve the audience and boosts engagement	3.65	0.48	Very High Extent
5. allow me to showcase my brand personality and engaging content, humor, and a conversational tone help in humanizing the brand.	3.83	0.38	Very High Extent
Overall Mean	**3.77**	**0.23**	**Very High Extent**

Legend: $3.51 - 4.00$ *Very High Extent;* $2.51 - 3.50$ *High Extent;* $1.51 - 2.50$ *Low Extent;* $1.00 - 1.50$ *Very Low Extent*

The data from table 4.1 presented an overall mean of 3.77 with an interpretation of “very high extent” on the extent of social media utilization in terms of interactivity. Allowing the business to directly communicate with the target audience is the highest indicator with a mean of 3.93 and a *sd* of 0.25. On the other hand, the lowest indicator is facilitating the creation of communities, groups, and forums to engage customers with a mean of 3.60 and a *sd* of 0.49.

The results imply that the lowest signal indicates how crucial it is for neighborhood groups to be aware of what is happening in one other's businesses, while the highest signal illustrates how advantageous it is for managers and business owners to communicate with customers more effectively over business conversations when they have problems.

The study is supported by Ismail (2018) who asserted that social media marketing facilitates consumer interaction, communication, and access to product imagery and information, hence increasing brand equity and ultimately improving product recognition. Social media marketing can be achieved through a wide range of channels, such as information sharing via blogs, forums, and online communities. In order to establish brand communities on the virtual level (sphere), a number of firms aim to increase the degrees of communication and interactions with customers.

Table 4.2 ***Extent of Social Media Utilization in terms of Informativeness***

Indicators	Mean	Std. Deviation	Interpretation
I believe that utilizing social media…			
1. helps me educate the audience about industry trends, products, and relevant topics.	3.92	0.27	Very High Extent
2. helps me provide educational content that is of value to my audience, tutorials, and other informative resources related to my products or services.	3.79	0.41	Very High Extent
3. by sharing customer testimonials and success stories on social media serves as reliable proof and create positive impact to customers.	3.59	0.49	Very High Extent
4. using frequently asked questions (FAQs) and conduct Q&A ensure that customers have access to relevant information and clarifications.	3.63	0.48	Very High Extent
5. helps me to promote and host webinars or online events and allow me to dive deeper into specific topics and engage with my audience in a more comprehensive way.	3.68	0.47	Very High Extent
Overall Mean	**3.72**	**0.24**	**Very High Extent**

Legend: $3.51 - 4.00$ *Very High Extent;* $2.51 - 3.50$ *High Extent;* $1.51 - 2.50$ *Low Extent;* $1.00 - 1.50$ *Very Low Extent*

The data from table 4.2 presented an overall mean of 3.72 with an interpretation of “very high extent” on the extent of social media utilization in terms of informativeness. Educating the audience about industry trends, products, and relevant topics revealed as the highest indicator with a mean of 3.92 and a *sd* of 0.27. The lowest indicator having access to relevant information and clarifications with a mean of 3.63 and a *sd* of 0.48.

The results imply that in terms of informativeness the best way to help business owners and managers become knowledgeable about new products, trends, and business-related subjects is to teach them how to educate themselves so that they can tell others about how these things will benefit their companies. On the other hand, the most detrimental way to be informative is to share customer success stories and testimonials on social media because they provide trustworthy evidence and have a good effect on customers.

Table 4.3 ***Extent of Social Media Utilization in terms of Personalization***

Indicators	Mean	Std. Deviation	Interpretation
I believe that utilizing social media…			
1. helps me provide tools to segment audiences based on demographics, interests, and behaviors that messages resonate with each group.	3.78	0.42	Very High Extent
2. allows me create and share customized content that aligns with the interests and preferences of my audience.	3.91	0.29	Very High Extent
3. encourages customers create and share content related to products or services not only serve as social proof but also personalize the brand experience.	3.55	0.50	Very High Extent
4. providing exclusive access new products or content creates a sense of exclusivity and makes customers feel valued and connected to the brand.	3.91	0.28	Very High Extent
5. helps me create a personalized email campaign to gather information from social media to inform the content.	3.81	0.39	Very High Extent
Overall Mean	**3.79**	**0.20**	**Very High Extent**

Legend: $3.51 - 4.00$ *Very High Extent;* $2.51 - 3.50$ *High Extent;* $1.51 - 2.50$ *Low Extent;* $1.00 - 1.50$ *Very Low Extent*

The data from table 4.3 presented an overall mean of 3.79 with an interpretation of “very high extent” on the extent of social media utilization in terms of personalization. As indicated by the findings, the highest indicator is the development and distribution of tailored content that corresponds to the preferences and interests of the target audience with the mean of 3.91 and the *sd* of 0.29. Conversely, the lowest indicator is granting customers exclusive access to new products or content in order to foster a sense of exclusivity, value, and connection to the brand with the mean of 3.91 and the *sd* of 0.28.

The results imply that they come from producing material that appeals to clients' desires and helps them relate to current trends. The least favorable aspect is that it promotes users to produce and disseminate information about goods and services that not only acts as social proof but also adds personality to the brand experience. The degree and simplicity with which customers can access information and services from a brand's social media pages is known as personalization.

In the study supported by Seo et al. (2018), the purpose of the personalization component is to foster customer happiness through interaction and communication between the specific user and the business. Peer-to-peer communication between the

company and the individual user can help the customer feel valued and different from competitors by giving them a sense of being heard.

Table 4.4 *Extent of Social Media Utilization in terms of Trendiness*

Indicators	Mean	Std. Deviation	Interpretation
I believe that utilizing social media…			
1. helps my business to track the performance of my content and identify what is working well and stay on top of trends.	3.69	0.46	Very High Extent
2. helps participate and boost my business by visibility and engagement creating content incorporating trending elements into my marketing strategies.	3.71	0.45	Very High Extent
3. to introduce new features and content formats regularly can leverage my business trends and interact with my audience.	3.83	0.38	Very High Extent
4. provide my business the ability to share real-time updates and allow quick adaptation to trends, industry news, and current events.	3.68	0.47	Very High Extent
5. by partnering with influencers who have a strong presence on social media will give my business access to a larger audience.	3.85	0.35	Very High Extent
Overall Mean	**3.75**	**0.23**	**Very High Extent**

Legend: $3.51 - 4.00$ *Very High Extent;* $2.51 - 3.50$ *High Extent;* $1.51 - 2.50$ *Low Extent;* $1.00 - 1.50$ *Very Low Extent*

The data from table 4.4 presented an overall mean of 3.75 with an interpretation of “very high extent” the extent of social media utilization in terms of trendiness. Collaborating with influential individuals to enable access to a larger audience is the most significant factor with a mean of 3.85 and a *sd* of 0.35. On the other hand, the ability to share real-time updates and quickly adapt to trends is the least important factor for social media utilization, with a mean of 3.68 and a *sd* of 0.47.

The results imply that social media platforms employ algorithms to determine hot subjects and keywords, which leads to trending content. These algorithms are made to examine the activity, including the quantity of shares, likes, comments, and searches. This identifies the subjects and content that are causing the most amount of interaction. A topic is designated as trending and prominently featured on the platform's homepage after it achieves a specific level of engagement.

Table 4.5 ***Extent of Social Media Utilization in terms of Word of Mouth***

Indicators	Mean	Std. Deviation	Interpretation
I believe that utilizing social media in marketing…			
1. leverages word of mouth marketing to promote our products and services.	3.90	0.30	Very High Extent
2. through social media influencers enhance the impact of word-of-mouth referrals.	3.67	0.47	Very High Extent
3. actively encourages our consumers to post positive experiences on social media platforms.	3.72	0.45	Very High Extent
4. assists in the proactive monitoring and response to consumer comments, reviews, and recommendations on social media platforms.	3.96	0.20	Very High Extent
5. leads to customer testimonials and shared experiences and become a means to augment our word-of-mouth marketing endeavors.	3.74	0.44	Very High Extent
Overall Mean	**3.80**	**0.16**	**Very High Extent**

Legend: $3.51 - 4.00$ *Very High Extent;* $2.51 - 3.50$ *High Extent;* $1.51 - 2.50$ *Low Extent;* $1.00 - 1.50$ *Very Low Extent*

The data from table 4.5 presented an overall mean of 3.80 with an interpretation of “very high extent” on the extent of social media utilization in terms of word of mouth. The highest indicator, with a mean of 3.96 and an *sd* of 0.20, is proactive monitoring and reaction to consumer comments, reviews, and recommendations on social media platforms. On the other hand, the least significant measure is the increase in the effectiveness of word-of-mouth recommendations through social media influencers, with an average score of 3.67 and an *sd* of 0.47.

The results imply that the best way to measure word-of-mouth marketing is to use it to support proactive social media platform monitoring and customer comments, reviews, and recommendations. Conversely, the weakest finding suggests that social media influencers amplify the effects of word-of-mouth recommendations.

The term "e-WOM" refers to any consumer-generated content, whether favorable or unfavorable, that is shared online with other consumers (Chu & Sung, 2018). Consumers talking to consumers about brands are known as e-WOM in social media usage

Table 5.1 ***Test of Difference between the Utilization of Social Media Marketing in SMEs when Grouped According to Nature of Business***

Variable	H-Value	P-Value	Decision	Interpretation
Interactivity	176.34	0.00	Reject Ho	Significant
Informativeness	173.97	0.00	Reject Ho	Significant
Word of mouth	127.19	0.00	Reject Ho	Significant
Personalization	159.73	0.00	Reject Ho	Significant
Trendiness	142.82	0.00	Reject Ho	Significant

Legend: $p < 0.05$ *Significant;* $p \geq 0.05$ *Not Significant*

The data from table 5.1 presented the results of a statistical test comparing the use of social media marketing in the selected enterprises based on their business nature. Given that the p-value for all variables is 0, the appropriate course of action is to reject the null hypothesis. All of these variables show highly significant differences between the groups.

Based on the data, it can be concluded that P values are zero (0) for all evaluated variables, such as interactivity, trendiness, personalization, informativeness, and word of mouth. This implies that there is no visible variation in the use of social media marketing based on the type of business.

The study supported by the List of Establishments report from the Department of Trade and Industry (2020) states that there are 957,620 registered commercial enterprises in the nation. Of them, 99.51% are MSMEs and 0.49% are major firms. 88.77% of MSMEs are microenterprises, 10.25% are small businesses, and 0.49% are medium-sized businesses. The top industry sectors, which accounted for approximately 83.77% of all MSME establishments, are (1) wholesale and retail trade; (2) accommodation and food service activities (134,046); (3) manufacturing (110,916); (4) other service activities (62,376); and (5) financial and insurance activities (45,558). Repair of motor vehicles and motorcycles (445,386) is another prominent industry sector. Before the pandemic, MSMEs created about 5.38 million jobs, or 62.66% of all occupations in the nation. Microenterprises accounted for 29.38% of these jobs, followed by 25.78% and 7.50%.

Table 5.2 ***Test of Difference between the Utilization of Social Media Marketing in SMEs when Grouped According to Years of Operation***

Variable	H-Value	P-Value	Decision	Interpretation
Interactivity	78.89	0.00	Reject Ho	Significant
Informativeness	113.05	0.00	Reject Ho	Significant
Word of mouth	53.91	0.00	Reject Ho	Significant
Personalization	90.51	0.00	Reject Ho	Significant
Trendiness	57.56	0.00	Reject Ho	Significant

Legend: $p < 0.05$ *Significant;* $p \geq 0.05$ *Not Significant*

The data from table 5.2 displayed the results of a test comparing the use of social media marketing in the selected enterprises based on the number of years they have been in operation. Since the p-value for all variables is 0, it is appropriate to reject the null hypothesis. Similarly, with the previous table, all of these variables show significant differences between the groups.

All of the variables that were tested in terms of the social media marketing activities show that. The choice is to reject the hypothesis because the P-values are zero. This suggests that the use of social media marketing does significantly differ based on the number of years of business.

The study supported by Shinozaki and Rao (2020) reported that 59.6% of the MSMEs surveyed had been in business for less than 5 yrs. (start-ups primarily micro-enterprises and in services). These were followed by those that had been in business for six to ten years (18.8%), eleven to fifteen years (8.5%), sixteen to thirty years (9.6%), and more than thirty years (3.4%). A female head was present in over half (56.1%) of the MSMEs surveyed. Women owned MSMEs made up 59% of micro-enterprises, 51% of small business, and 17% of medium enterprises, according to company size. They made up 56.0% of businesses in the manufacturing sector, which was followed by businesses in the service sector (58.1%). In the agricultural sector, women owned 44.4% of the businesses, a smaller ratio than in other industries.

Table 5.3 ***Test of Difference between the Utilization of Social Media Marketing in SMEs when Grouped According to Monthly Revenue***

Variable	H-Value	P-Value	Decision	Interpretation
Interactivity	127.97	0.00	Reject Ho	Significant
Informativeness	128.41	0.00	Reject Ho	Significant
Word of mouth	113.99	0.00	Reject Ho	Significant
Personalization	171.26	0.00	Reject Ho	Significant
Trendiness	91.32	0.00	Reject Ho	Significant

Legend: $p < 0.05$ *Significant;* $p \geq 0.05$ *Not Significant*

The data from table 5.3 presented the results of a statistical test comparing the use of social media marketing in the selected enterprises based on their monthly revenue. Considering that the p-values for all variables are zero, rejecting the null hypothesis is the appropriate statistical decision. All of these variables show highly significant differences.

The information suggests that the hypothesis should be rejected because the P-values for every variable examined interactivity, informativeness, personalization, trendiness, and word-of-mouth were below the P-value of 0.5. This implies that there is sufficient evidence to say that monthly income affects the utilization of SMM in SME's.

The study supported by Shinozaki and Rao's (2021) findings, over ½ (61%) of the companies reported average revenue wages of no more than 9,000 pesos. Then came

35.1%, whose average monthly salary fell between 9,001 and 18,000. Less than 5% of the sample consisted of companies paying an average monthly salary of more than 18,001. Notably, the average wage at more than 4/5 of the businesses in Region 1 (83.7%) and Region 9 (Zamboanga Peninsula, 82.8%) was less than 9,000. In contrast, the only regions with businesses reporting monthly pay of more than 27,000 were the NCR, Region 4-A, Region 5 (Bicol), and Region 10.

According to Abrigo (2020) asserts that as an organization grows in size, the average monthly wage tends to climb. From 3% for micro-enterprises to 11.0% for small and 20% for medium-sized enterprises, the percentage of businesses with average salaries above P18,000 grew. On the other hand, the proportion of businesses with an average salary of no more than P9,000 dropped from 67.6% for micro, to 29.9% for small, and to just 24.0% for medium-sized businesses. By sector, a comparable pattern was seen. From 72% in agriculture to 66% in manufacturing and 55% in services, the percentage of businesses with an average salary of less than P9, 000 decreased. On the other hand, almost 50% of the businesses in all three sectors stated that their average salary was no higher than P9, 000.

Conclusions

The study determined the utilization of social media marketing in the selected enterprises in the City of San Pablo, Laguna. This study presented the business profile of the respondents namely, nature of business, years of operation and monthly revenue toward social media marketing activities in terms of interactivity, informativeness, personalization, trendiness and word of mouth. A researcher made a questionnaire administered to the 374 respondents, both owners and managers of SME’s.

Based on the results the majority of respondents in the nature of business category belonged to the manufacturing sector, followed by those with 10 years or less of operation, and finally, those with monthly revenue under 250,000.00 and below. This information was derived from the owners' and managers' business profiles.

All of the variables that measured the extent that social media marketing was used interactivity, informativeness, personalization, trendiness, and word-of-mouth had higher composite means and were interpreted as highly significant.

The generated computed probability values on the utilization of social media marketing when grouped according to their business profile of respondents where nature of business, years in operation and monthly revenue is .000,.000,.000,.000,.000 respectively. The null hypothesis was rejected because the five variables' estimated probability values were less than the 0.05 level of significance. Therefore, there were significant differences in the perceptions of the respondents when grouped according to business profile nature of business in terms of interactivity, informativeness, personalization, trendiness, and word of mouth.

Based on the aforementioned findings of the study, the data analysis leads to the conclusion that the results validate the hypothesis that was developed for this investigation. The stated hypothesis is there is a significant difference between the utilization of social media marketing when grouped according to the business profile of the respondents. It has been confirmed that social media marketing in the selected enterprises in the City of San Pablo, Laguna, was perceived to have benefits including interactivity, informativeness, personalization, trendiness, and word of mouth to a very high extent. Nonetheless, the majority of users say they are happy with the tools that social media marketing offers and want to maintain the techniques that are attainable but not measurable for their businesses to a very high extent.

Recommendations

Based on the findings and conclusions drawn from the study on the utilization of social media marketing in the selected enterprises in the city of San Pablo, Laguna the following recommendations are provided:

SMEs Owners and Managers. Make use of the various accessible business strategies. Utilize social media marketing strategies for your company to help it expand into new markets for goods, services, and innovation. It generates prospects for accumulating wealth and increasing income. It fosters freedom and initiative while also creating opportunity.

Local Government Unit of San Pablo City, Laguna. The researcher recommends that local collaborations for economic growth be supported by the government. The municipal administration should plan how to work with the chosen businesses to form alliances for regional economic growth. These alliances may make it easier for the businesses to buy items and services together, which would raise demand for those goods and services.

Future researchers. Make use of this study as a platform for other research endeavors. It has the potential to be a further source of information that researchers who wish to organize a study on a related topic can use as a reference for their next research.

Compliance with Ethical Standards

The researchers obtained informed consent of the respondents and notified them of their freedom to withdraw from the study at any time. Their anonymity was maintained and their well-being was protected. There was no conflict of interest in the conduct of the study. Plagiarism was strictly avoided and there was no bias in the interpretation of the findings. Finally, the results were used purely for research.

Acknowledgments

The success of this study required the help of various individuals; without them, the researcher might not have met his objectives in doing this study. With much pride and

joy, the researcher extended his heartfelt appreciation and gratitude to the following people for their invaluable help and support.

First and foremost, it is the researcher's pleasure to express his appreciation to:

President of Pamantasan ng Lungsod ng San Pablo, for his excellent advice, dedication, and genuine concern;

Dean of Graduates School, for her great recommendation, time, effort, and utmost concern;

To my Research Adviser who gave her a chance to prepare this meaningful research with endless patience for reading the manuscript and guidance for every revision and changes;

To my Subject Specialist, for imparting his knowledge, valuable assistance and suggestions;

To my Technical and Language Critic, for sharing his ideas for the improvement of this study, and for his patience, understanding and encouragement and for his concern;

To my Statistician, for her sincere guidance and professional assistance of the data and for educating the researcher about the whole process of this study;

To my External Panel, who motivated the researcher to finish this study, giving thoughts, advice, and ideas for the improvement of the study;

Above all, to Jesus Christ, Lord and Savior, for giving the wisdom, strength, support and knowledge in exploring things; for the guidance in helping the researcher surpass all the trials he encountered and for giving determination to finish this study.

REFERENCES

Abrigo, M. R. M., Quimba, F. M. A., & Vizmanos, J. F., V. (2020). *Poverty, the middle class, and income distribution amid COVID-19*. https://www.econstor.eu/handle/10419/241011

Alayuddin, C. H. (2008). Pematuhan zakat dan cukai di kalangan syarikat-syarikat bumiputera. Paper presented at the Persidangan Zakat dan Cukai Peringkat Kebangsaan 2008, Kuala Lumpur.

Anderson, L. M. (2021). Social Media Marketing in Small business and challenges Strategies for Small and Medium Enterprises. *Journal of Business Innovation, 17*(2), 87-104.

Bulgin, D. (2018). Retrieved from DOI:10.1080/01612840.2018.1443530

Cheung, M. L., Pires, G. D., Rosenberger, P. J. III, Leung, W. K. S., and Ting, H. (2021). Investigating the role of social media marketing on value co-creation and engagement: An empirical study in China and Hong Kong. *Australian Marketing Journal, 29*, 118–131. doi: 10.1016/j.ausmj.2020.03.006

Chu, S., & Sung, Y. (2018). *Using a consumer socialization framework to understand electronic word-of-mouth (eWOM) group membership among brand followers on Twitter*.https://www.semanticscholar.org/paper/Using-a-consumer-socialization-framework-to-(eWOM)-Chu-Sung/8d13f0e7b7ec6f5eab0190e1cbc3214f11896a48

Creswell, J. W. (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage.

Ebrahim R. S. (2020). The role of trust in understanding the impact of social media marketing on brand equity and brand loyalty. *J. Relat. Marke.* 19 287–308. 10.1080/15332667.2019.1705742

Escueta, G. (2023). Physical Store Owners' Perception On E-Commerce in San Pablo City: Input For E-Commmerce Adoption. Retrieved from DOI:http://doi.org/10.26480/bosoc.01.2023.15.21

Farivar F., Richardson J. (2021). Workplace digitalisation and work-nonwork satisfaction: the role of spillover social media. *Behav. Inform. Technol.* 40 747–758. 10.1080/0144929x.2020.1723702

Gamundoy, L. a. U., Bucal, R. J., & Em, F. S. (2020). *Challenges of Small and Medium Enterprise towards Progress*. https://ejournals.ph/article.php?id=15660

Godey, B., (2016). Social media marketing efforts of luxury brands: Influence on brand equity and consumer behavior. *Journal of Business Research*, *69*(12), 5833–5841. https://doi.org/10.1016/j.jbusres.2016.04.181

Ismail, A. R. (2018). The influence of perceived social media marketing activities on brand loyalty. *Asia Pacific Journal of Marketing and Logistics*, *29*(1), 129–144. https://doi.org/10.1108/apjml-10-2015-0154

Jamil K, Dunnan L, Gul RF, Shehzad MU, Gillani SHM and Awan FH (2022) Role of Social Media Marketing Activities in Influencing Customer Intentions: A Perspective of a New Emerging Era. *Frontiers in Psychology, 12*, 808525. doi: 10.3389/fpsyg.2021.808525

Kamarudin, F. (2018). Length of business operation and its relationship with compliance behaviour of business zakat among owners of SMEs. *Uitm*. https://www.academia.edu/77005354/Length_of_business_operation_and_its_relationship_with_compliance_behaviour_of_business_zakat_among_owners_of_SMEs

Kim, A. J., & Ko, E. (2012). The impact of design characteristics on attitude brand attitude and purchase intention: Focus on luxury fashion brands. *Journal of the Korean Society of Clothing and Textiles*, *34*(2), 252–265.

Ko, E., Kim, K. H., & Zhang, H. (2008). Purchase intention and strategies A cross cultural study of antecedents of purchase intention for sports shoes in Korea and China. *Journal of Global Academy of Marketing Science*, *18*(1), 157–177.

Mahendra P. T. (2021). Improve Customer Satisfaction through Product Innovation in Social Media. *Hum. Soc. Sci.* 4 3719–3729. 10.1007/s11356-021-14885-4

McKinsey & Company. (2020). Diversification: Capturing opportunities, mitigating risks. Retrieved from https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/diversification-capturing-opportunities-mitigating-risks

Seo E.-J., Park J.-W. (2018). A study on the effects of social media marketing activities on brand equity and customer response in the airline industry. *J. Air Transp. Manag.* 66 36–41. 10.1016/j.jairtraman.2017.09.014

Shinozaki, S., & Rao, L. (2021). *COVID-19 Impact on Micro, Small, and Medium-Sized Enterprises under the Lockdown: Evidence from a Rapid Survey in the Philippines*.https://www.semanticscholar.org/paper/COVID-19-Impact-on-

Micro%2C-Small%2C-and-Medium-Sized-a-Shinozaki-Rao/264b538788a15ec7a00038990307b85d5e238fb2
Smith, A. N. (2020). The Impact of Social Media Marketing on Modern Businesses. *Journal of Marketing Insights, 12*(3), 45-58
Teo, S. H. (2005). Usage and effectiveness of online marketing tools among business-to-consumer (B2C) firms in Singapore. *International Journal of Information Management*, *25*(3), 203–213.Teo, S. H. (2005). Usage and effectiveness of online marketing tools among business-to-consumer (B2C) firms in Singapore. *International Journal of Information Management*, *25*(3), 203–213.
Yadav M., Rahman Z. (2018). The influence of social media marketing activities on customer loyalty. *Benchmarking* 25 3882–3905. 10.1108/BIJ-05-2017-0092
Zhou, L., & Wang, T. (2014). Social media: A new vehicle for city marketing in China. *Cities*, *37*, 27–32.

APA Citation:

Amante, D. A. A., & Cay, M. K. M. (2024). SOCIAL MEDIA MARKETING IN THE SELECTED ENTERPRISES IN THE CITY OF SAN PABLO, LAGUNA. Ignatian International Journal for Multidisciplinary Research, 2(8), 27–45. https://doi.org/10.5281/zenodo.13150893

Corresponding author: *darylaimielamante@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

SOLID WASTE MANAGEMENT AWARENESS AND PRACTICES AMONG JUNIOR HIGH SCHOOL STUDENTS

Aira V. Corporal, LPT, Charles M. Pangilinan, LPT, Bryan DC. Gabriel, PhD

Graduate School Department – Bulacan Agricultural State College
San Ildefonso, Bulacan, Philippines

https://doi.org/10.5281/zenodo.13329911

ABSTRACT

This paper examines the solid waste management awareness and practices among junior high school students, using non-experimental quantitative research design specifically, the descriptive and comparative research designs, utilizing adopted structure survey questionnaire about Awareness of Students on Waste Management and Practices on Solid Waste Management. Participants of this study were selected using stratified random sampling. Findings of this study revealed that junior high schools exhibit a commendable awareness about solid waste management (mean=4.36). The results also revealed that in terms of segregation and reduce practices students demonstrate excellent performance (mean=3.09), (mean=3.25), respectively. The results showed that there is a highly significant difference among the awareness and practices of junior high school students.

Keywords – *solid waste management awareness, solid waste management practices, descriptive research design, comparative research designs*

INTRODUCTION

Context and Rationale

Globally, poor solid waste management is a major contributor to both plastic pollution, which harms the marine environment and is projected to cost $13 billion

annually, and climate change, which accounts for 5% of worldwide carbon emissions. Inadequate Municipal Solid Waste Management (MSWM) systems are the source of about 80% of plastic found in the ocean. According to Bundhoo (2018), growing amounts of solid waste are a global concern, with least developed countries (LDCs) being disproportionately impacted by inadequate waste management systems. This exponential growth in the generation of solid waste is even more concerning. In the most impoverished nations, it is predicted to triple by 2050 and to double in large and medium-sized cities. With the lack of sanitary landfills, recycling centers, and incinerators in low-income nations, this is particularly concerning. As such, the majority of their garbage is disposed of in open dumps, badly managed, and without treatment (Vergara and Jammi 2023).

Solid waste management practices have always been a major concern in the community on a daily basis. It is seemingly impossible to implement the practices and consciousness in regard to having no commitment and support from the local authorities. It should start from the foundation of education to further implement such practices and consciousness in regard to having no commitment and support from the local authorities. It should start from the foundation of education to further implement such practices and, students are the one who shapes the current generations and generations to come. This study focused on assessing how the junior high school students perceive the essence of solid waste management and practices and how they practically help the community. The students are commonly subjected to the production of waste management, in some other aspect of being uneducated in realizing the effects of it. As stated by Molina and Catan (2021), many of them have not enough knowledge regarding the effects of improper waste disposal, solid waste prohibited activities and even school initiatives toward the practices of a clean and safe environment.

According to the World Bank (2024), the globe annually produces 2.01 billion tonnes of municipal solid garbage, of which, at the very least, 33 percent are not managed in a way that is safe for the environment. The amount of waste produced daily per person in the world varies greatly, ranging from 0.11 to 4.54 kg on average. High-income nations produce almost 34%, or 683 million tonnes, of the world's trash, but making up only 16% of the global population. Overall, waste production and income level are positively correlated. Compared to low- and middle-income countries, where it is anticipated to increase by at least 40%, high-income countries are predicted to see a 19% increase in daily per capita trash creation by 2050. When income levels rise, waste creation rises more quickly at low income levels than it does at high income levels after first declining at the lowest income levels. By 2050, it is anticipated that the overall amount of garbage produced in low-income nations will have increased by more than three times.

As such, the process of managing waste has been a huge control of humans in light of a day-to-day cleaning drive. It is a humanitarian concern in which should focus our minds and attention to prevent the disease it can bring to the general public. If it can’t practice the proper ways of disposing of products, it can lead to a socio-economic problem that needs to be recalibrated and changed. According to Ike et al. (2018), solid waste is an environmental concern and challenge of today’s generation. Solid waste

management sometimes ascribed from poor collection of waste and disposal methods and lack of dangers in poor sanitary areas. Furthermore, if we can no longer contain the waste disposing every day, we will fail to plan the waste management system and can nearly affect the public health of the people. Solid waste is a serious problem that world is facing on a daily basis. It is a constant improper practice of humans, disposing of their trash in a winding way. Yet, it is one of the most pressing issues that needs to be changed.

Partly, the collaboration within the people in the community broadens the scope of awareness and practices which can improve the habit and attitude of people toward solid waste. It is something that concerns the community, on how they navigate the importance of waste management, in making unwanted waste to be more convertible and equitable towards a healthier environment (Schiavo, 2021).

This carries the objective of identifying students' awareness and practices on waste management. Along with this, the research determines the level of awareness about waste management in terms of regulations, standards, and health and environmental effects. Additionally, this determines the level of solid waste management practices of students in terms of segregation and reduction. Furthermore, this will compare the level of awareness and practices about waste management among junior high school students. Lastly, it will develop a program that will contribute to students' awareness and practices in waste management.

As specified by Akintunde (2017) with increased knowledge, individuals tend to make environmentally friendly decisions and take responsible steps towards achieving a sustainable environment. Thus, the people in the society will live in a healthy and pollution free environment.

Review of Related Literature and Studies

One of the main duties of municipal administrators and a useful stand-in for good governance is solid waste management, or SWM. Sustainable urban management (SWM) reduces negative effects on the environment and public health, preserves resources, and makes cities more livable. SWM practices that are not sustainable, however, have a detrimental effect on environmental sustainability and public health. This problem is further worsened by fast urbanization as well as institutional and budgetary constraints (Abubakar et al, 2022).

According to Muljaningsih and Galuh (2018), waste is an inevitable by-product of human activities. Nature of waste is determined by the material being consumed by the people and waste management is linked to human lifestyle. Absence of proper waste management is one of the pressing environmental issues that is directly influenced by modern lifestyle (Kumar & Kumar, 2020).

As specified by Asteria and Haryanto (2021), integrated waste management highlights the 3R rule consisting of reduce, reuse, and recycle followed by incineration

and final disposal which is ideally conducted where waste material originates. Subsequently, 3R faced challenges when society had limited awareness regarding classifying and segregating waste. (Muljaningsih & Galuh, 2018). Lack of awareness and practices can hinder effective waste management.

In the study of Pujara et al. (2019), a popular approach for disposing of MSW in most Indian cities, except metro areas, is open dumping. Due to the direct burning and/or degradation of wastes, this method emits harmful and greenhouse gases (GHGs), which pose serious dangers to the environment and human health. Consequently, there is a great demand for integrated solid waste management (ISWM), which uses a variety of techniques including incineration, composting, anaerobic digestion, refuse-derived fuel, material recovery facilities, and sanitary landfilling. As stated by Debrah et al. (2021), the issue of solid waste management (SWM) is complex and involves elements of politics, socioeconomics, institutions, and the environment. Metropolitan spaces in emerging countries are facing a major difficulty due to exponential increase in metropolitan areas. The disparity in environmental awareness between young and old people in developing nations causes problems with waste management or ecology, which leads to unsustainable development and has serious repercussions in low- income countries. As stated by Bautista (2019), many environmental issues facing the planet must be addressed on a personal level, necessitating the development of awareness among people that will lead them to adopt ecologically friendly behaviors.

Conceptual Framework

This study was used Input-Process-Output Model. The focus of this research was to determine the students' level of awareness and practices on solid waste management.

For input, it is about waste management awareness and solid waste management practices. Waste management awareness has three indicators which are awareness on regulations, awareness on standards, and awareness on health environmental effects. On the other hand, solid waste management practices has two indicators which are segregation and reduce.

For process, descriptive analysis was used to describe the level of waste

management awareness of students and comparative analysis was used to compare the level of solid waste management practices among junior high school students.

For output, the research proposed a program named Waste Wise: Promoting Sustainable Practices in Solid Waste Management.

Research Questions

The purpose of this study is to know the level of solid waste awareness and practices among junior high school students.

Specifically, this study answer the following questions:

1. How may the solid waste management awareness of junior high school students be described in terms of:
   1.1 Awareness on regulations;
   1.2 Awareness on standards; and
   1.3 Awareness on health environmental effects?
2. How may the solid waste management practices of junior high school students be described in terms of:
   2.1 Segregation; and
   2.2 Reduce?
3. Are there significant differences in solid waste management awareness and practices among the different grade levels of junior high school?
4. What program on solid waste management awareness and practices can be developed based on the results of the study?

Hypothesis

This study was guided and tested the hypothesis below:

There are no significant differences in solid waste management awareness and practices among the different grade levels of junior high school.

Significance of the Study

This study was essential and important in the field of science education. It shows the level of awareness and practices among junior high school students on the importance of solid waste management. As for students, the strategy to conduct activities in the study may help the students in providing them an opportunity and chance to dig deeper about one's eco- consciousness in the impact of solid waste management on the student's level of awareness. Next is the teachers, the result of the study served as a guide to implement programs and practices to help reduce wastes in proper way of disposal. Thus, extend the knowledge on solid waste management practices to further disseminate the information in public to provide feasible activities on solid waste problems. As for the school administrators, the study's conclusions helped administrators run their own institutions and provided a platform for motivating educators to adapt different programs and practices to instill the importance of solid waste management in the general public.

The Department of Education (DepEd) will serve as a bridge to improve the existing curriculum that will disseminate information about solid waste management to develop public awareness of the solid waste problem with the integration of environmental awareness and knowledge in their curricula. Lastly, the future researchers feel that this study's findings assisted later researchers in performing a similar study with additional factors or in-depth investigation. In addition, the researchers will implement programs to instill the awareness of having good solid waste management and further develop strategies and programs to help ensure the continuing education and information on solid waste management.

METHODOLOGY

Research Design

This research utilized the non-experimental quantitative research design using descriptive and comparative research designs to develop and propose a program on solid waste management and practices. Descriptive evaluation quantitative research design is an approach that provides a detailed description about the experiences or perspective of respondents. Descriptive comparative quantitative research design is an approach that involves comparing the behavior of different groups. Descriptive evaluation quantitative research design was used to describe the level of students' solid waste management awareness and practices. Additionally, descriptive comparative quantitative research design was employed to compare the solid waste management awareness and practices among the different grade levels of junior high school.

Respondents and Sampling

A total of 112 junior high school students participated in the study, of which 26 are Grade 7 students, 29 are Grade 8 students, 28 are Grade 9 students and 29 are Grade 10 students. They were chosen because they are capable of providing information that is being asked in the study. Informed consent was used in accordance with ethical guidelines. Informed permission forms were given to the participants, who were asked to indicate to them whether or not they were willing to participate in the study.

Furthermore, a stratified random sampling method was used to randomly select the students per level of junior high school students. Thus, the probability of selecting a cluster is commensurate with its size.

Instrumentation

Awareness of Students on Waste Management. Data on students' level of awareness in waste management was collected using a structured questionnaire adapted from a research study entitled Student's Awareness on Waste Management: Their Effect on Waste Management Practices by Annaliza Panganiban-Santos, MaEd and Ray Rudolf Pastrana (2021). The questionnaire is composed of three indicators

such as awareness on regulations, awareness on standards, and awareness on health and environment effects. Awareness on regulations have three statements. Awareness on standards composed of six statements. Awareness on health and environment effects have two statements.

The survey questionnaire entitled Awareness of Students on Waste Management was composed of five indicators and rating scale these are very great extent (5), great extent (4), moderate extent (3), least extent (4), and none at all (1).

Practices on Solid Waste Management. Data on students' level of waste management practices was collected using a structured questionnaire adapted from the research study entitled Level of Awareness and Practices on Solid Waste Management among Students in Iligan National High School, Iligan City by Cahoy (2013). The questionnaire is composed of two indicators which are segregation and reduce. Practices on solid waste management in terms of segregation and reduce have five statements each.

The survey questionnaire entitled Practices on solid waste management in terms of segregation and reduce was composed of four indicators and rating scale these are always (4), often (3), seldom (2), and never (1).

Data Gathering Procedure

The researchers prepared all the necessary documents such as letter of approval and survey questionnaire. After getting permission, the researchers met with the students, gave them the assent and consent form, and explained to them why the study was being conducted. They were also informed that the answers they provided on the questionnaire would be kept completely confidential and used only for that purpose. First, the researchers gave the letter of approval to the school of the participants asking for the permission to conduct the study. Next, the survey questionnaires were distributed and momentarily answered by the students. Last, the collection of survey questionnaires. After the student answered the questions, the researchers explained the nature of the checklist in view of the awareness and practices on solid waste management. The assessment took only 60 minutes.

Data Analysis

After collecting all the questionnaires, data were organized, tallied, tabulated and analyzed using some statistical tools. Descriptive statistics such as mean and standard deviation were used to describe the students' level of awareness and practices in solid waste management. One-Way Anova was performed to compare solid waste management awareness and practices among the different grade levels of junior high school.

RESULTS AND DISCUSSION

In this study, 112 respondents from junior high school were included in descriptive statistics and one-way anova analyses. The results aimed to assess and compare the level of solid waste management awareness and practices among junior high school students. Descriptive statistics were used to analyze the awareness and practices of students on waste management. One-way anova was used to test if there is a significant differences in solid waste management awareness and practices among the different grade levels of junior high school.

Table 1.
Awareness of Students on Waste Management

Awareness of Students on Waste Management	**Mean**	**Verbal Interpretation**
Awareness on Rules	3.77	Great Extent
Awareness on Standards	4.50	Very Great Extent
Awareness on Health and Environment Effects	4.81	Very Great Extent
Overall	**4.36**	**Great Extent**

Legend:
4.50-5.00 Very Great Extent
3.50-4.49 Great Extent
2.50-3.49 Moderate Extent
1.50-2.49 Least Extent
1.00-1.49 None at all

The data in Table 1 shows the mean and verbal interpretation on the Awareness of Students on Waste Management in terms of regulations, standards, and health and environmental effects was great extent as shown by the overall mean value of 4.36. Among the three indicators students poses high level of awareness on health and environmental effects as shown in the table (mean=4.81). On the other hand, they demonstrate great extent of awareness on rules (mean=3.77).

The results implies that the junior high school students possess satisfactory level of awareness about solid waste management. The findings of this study support the studies conducted by Paghasian (2017), according to their study the students have enough knowledge about solid waste management. It is also parallel to the study of Panganiban-Santos and Pastrana (2021), revealed that junior high school and senior high school students have very great extent awareness in terms of solid waste management.

Table 2.
Practices on Solid Waste Management in Terms of Segregation and Reduce

Practices of Students on Waste Management	**Mean**	**Verbal Interpretation**
Segregation	3.09	Good

Reduce	3.25	Very Good
Overall	**3.17**	**Good**

Legend:
3.25-4.00 Very Good
2.50-3.24 Good
1.75-2.49 Fair
1.00-1.74 Poor

The Table 2 shows the practices on solid waste management in terms of segregation and reduce among the junior high school students. The total mean score response of segregation got 3.09 with a verbal interpretation of 'Good' in which revealed that students perform so well in segregating mixed-waste processes suggesting that these students really segregate the waste properly, because the students classify the waste properly and at the same time, they keep separate containers of trash based on its physical properties and students oftentimes segregate non-harmful waste from toxic waste to prevent failing to segregate trade waste that ends up mixed in the bins. On the other hand, the mean score interpretation regarding the practices on solid waste management in terms of reduce among the junior high school students got the overall total mean interpretation response of 3.25 with a verbal description of "Very Good' suggesting that the students still practiced the reduction of materials on solid waste management. Implying that most students practiced reducing waste materials in order to not contribute in building up waste products and still indicates that the students had a good practice for waste reduction through bringing reusable water bottles than buying water in one-used.

Overall, the overall total mean interpretation got 3.17 with a verbal description of 'Good' suggesting that students maintain a clean environment and support the prevention of contamination. These outcomes suggest that most of the students segregating and reducing their waste into respective containers and classify the waste based on its type. Segregation of waste is still being practiced to recycle and help treat waste directly. In line in supporting the waste segregation process, the study findings of Verma and Borongan (2022) suggests that the existing solid waste collection routes require route optimization. We have determined the distance between the central garbage collection office and the bin using the shortest path routing method, ensuring that the collection vehicle visits more bins along the route. In order to maximize fuel efficiency and provide affordable collection management, the collection route is optimized. In result of this, waste management in the city is made easier by employing this technique.

Moreover, this also implies that the students are more environmentally aware to reduce their usage of materials in all aspects of living. As stated by Dahlawi and Sharkawy (2021) that a good program for the practical use of this rubbish, starting with sorting and recycling, reduces the quantity of waste that ends up in landfills, preserves resources, and promotes recyclable materials. In result, waste combinations that aren't necessary can be seen and can help with appropriate segregation techniques.

Table 3.
One –way Analysis between Awareness and Practices of Students on Waste Management

Groups	F	P	Interpretation	Decision
Awareness	20.13	0.001	Highly Significant	Reject the HO
Practices	3.08	0.034	Highly Significant	Reject the HO

The table 3 shows the result of one –way analysis of variance among the awareness and practices of students on waste management. The results show that students' awareness sig. one-way (0.001) is less than alpha value of (0.01). This means that the null hypothesis is rejected which signifies that there is a highly significant difference among the awareness of junior high school students. However, students' practices in solid waste management has a p-value of (0.034) which is less than the alpha value of (0.01). This means that the null hypothesis is rejected which signifies that there is a highly significant difference among the practices of junior high school students.

The results of the study regarding the solid waste management practices, attitudes, and awareness of university staff and students are closely related, which implies that education is a strategic way to successfully implementing a solid waste management program. In order to ensure that the goals for the well-being of people and the environment are realized, schools have a significant role to play in raising people's awareness of the implications of their activities. More precisely, through good environmental education, academic community members develop positive attitudes, become more worried about the growing problem of solid waste, and are motivated to work together to mitigate the issue (Madrigal and Oracion, 2018). Results of this study was parallel to the study of Molina and Catan (2021), revealed that senior high school students in Zamboanga City, Philippines demonstrate good solid waste management in terms of segregation and reduce.

Table 4.
Waste Wise: Promoting Sustainable Practices in Solid Waste Management

Component	Objective	Strategy	Person Responsible	Budget
Education and Awareness	• Increase awareness about sustainable waste management	• Conduct school seminars • Distribute brochures • Integration of solid waste	Teacher and School Administrator	Php 1000.00

	practices among junior high school students.	management in school curriculum		
Implementation of Sustainable Practices	• Promote recycling projects	• Provide recycling bins • Create recycling organization and sell it	School Administrator, Utility Worker, and School Club Officers	Php 1000.00
Community Engagement	• Engage the community in eco-friendly activities	• Organize a clean-up drives activities • Encourage students to create a youth-led organization	Community Officer, Community, and School Administrator	Php 500.00
Monitoring and Evaluation	• Assess the state of solid waste in the community	• Conduct a monitoring activities thrice a week • Conduct a research on how to solve solid waste management challenges	Monitoring Team and Researcher	Php 2000.00

The results of the study may be an important baseline in improving and expanding the existing solid waste management awareness and practices programs and initiating new programs to reduce system waste scantines. These initiatives will enable the nearby communities and schools to encourage them how to manage the garbage and actively divert waste to promote waste reduction.

Conclusions

The solid waste management methods and awareness among junior high school students are presented in this study. The findings showed that students understand the meaning of solid waste, the consequences of improper disposal, activities that are prohibited when it comes to solid waste, school initiatives related to solid waste, the significance of solid waste management, and students' duties. Students, however, know very little about the several rules that are pertinent to solid waste management. These results imply that extensive informational campaigns about rules pertaining to solid waste management should be carried out by educational institutions and other interested parties. The following factors can be blamed for the amount of solid waste management awareness: friends, peers and school. This research implies that the government can use

these channels to spread knowledge about intensively solid waste management. In terms of segregation, reduction, reuse, recycling, and disposal, the results also showed that students follow good solid waste management procedures in having environmental awareness on a day-to-day basis. The researchers proposed a program named Waste Wise: Promoting Sustainable Practices in Solid Waste Management.

Recommendations

Based on the findings of the study, several recommendations are proposed such as encouraging students to participate in recycling programs, incorporating educational programs about solid waste management awareness and practices into school curriculum at all levels to possess environmentally behaviour at an early age, developing solid waste management policies for school to maintain the cleanliness of school. Furthermore, future researchers may utilized this a basis for their research study about solid waste management awareness and practices.

Acknowledgements

Recognition is owed to individuals whose most significant support and influence made a lasting mark on our work. They have volunteered their assistance, made a significant contribution, and deserved respect. The study's completion is appreciated by the researchers. Without those individuals' assistance, the research would not be able to be completed. First and foremost, we are grateful to God Almighty for His unending love, care, and blessings, which have enabled the researchers to confidently and courageously tackle every challenge that lies ahead in finishing this study. The next person we spoke with for advice on how to carry out this study was our thesis adviser, Bryan Gabriel, PhD. He is available to help every step of the way as we conduct this research. He highlights the things that we still ought to have done, and that was a huge assistance. Finally, thank you to our family, friends, and coworkers for your encouragement and support in seeing this project through to the end. The researchers are appreciative of their motivation and spiritual support.

Compliance with Ethical Considerations

To adhere to ethical considerations in conducting this research, all participants were required to read and sign a consent form indicating their voluntary agreement to participate in this study. To safeguard participants' confidentiality, names, addresses, and other personal details were not included in the study. Data collected from the volunteered participants were stored only in the temporary folder on the researchers' laptop. Access to the data was strictly limited to the researchers themselves to ensure security. All the data were handled with utmost care such that only the researchers were able to analyse them to avoid the unauthorized transfer or access of data. After finalizing the paper, the researchers waited until the full completion of the study, after which the researcher deleted all files in the personal laptop and the researchers did not keep any copy of the respondents' data.

REFERENCES

Abubakar, I.R.; Maniruzzaman, K.M.; Dano, U.L.; AlShihri, F.S.; AlShammari, M.S.; Ahmed, S.M.S.; Al-Gehlani, W.A.G.; Alrawaf, T.I. Environmental Sustainability Impacts of Solid Waste Management Practices in the Global South. *Int. J. Environ. Res. Public Health* 2022, 19, 12717. https://doi.org/10.3390/ijerph191912717

Akintunde, E. (2017). Theories and Concepts for Human Behavior in Environmental Preservation. *Journal of Environmental Science and Public Health*. Vol. 1, Issue 2. https://www.fortunejournals.com/articles/theories-and-concepts-for-human-behavior-in-environmental-preservation.pdf

Asteria, D. & Haryanto, J. T. (2021). Empowerment key factors in shaping women's awareness of household waste management. *Global Journal of Environmental Science and Management (GJESM),* 7(3), 1-14.

Bautista, P. (2019). Level of Awareness and practices on solid waste management (SWM) among college students. Journal of Biodiversity and Environmental Sciences. Vol. 14, No. 1, p. 131-138. http://www.innspub.net

Bundhoo, Z.M.A. Solid waste management in least developed countries: current status and challenges faced. *J Mater Cycles Waste Manag* 20, 1867–1877 (2018). https://doi.org/10.1007/s10163-018-0728-3

Cahoy, A. Z. (2013). Level of Awareness and Practices on Solid Waste Management among Students in Iligan National High School, Iligan City (Undergraduate thesis). Mindanao State University – Iligan Institute of Technology. & Otoma, S. (2013). https://www.atlantis-press.com/article/25883492.pdf

Dahlawi, S. and El Sharkawy, M.F. (2021), "Assessment of solid waste management practice in the university campus", *International Journal of Sustainability in Higher Education*, Vol. 22 No. 3, pp. 561-575. https://doi.org/10.1108/IJSHE-05-2020-0183

Debrah, J.K.; Vidal, D.G.; Dinis, M.A.P. Innovative use of plastic for a clean and sustainable environmental management: Learning cases from Ghana, Africa. Urban Sci. 2021,5, 1–11. https://doi.org/10.3390/recycling6010006

Ike, C., Ezeibe, C., Anijiofor-Ike, C. S. & Daud, N. N. (2018). Solid Waste Management in Nigeria: Problems, Prospects, and Policies. *International Society of Waste Management, Air and Water (ISWMAW).* https://doi.org/10.5276/JSWTM.2018.163

Kumar, P. and Kumar, A. (2020). Role of Education in Waste Management. *Iconic Research and Engineering Journals, 42), 68-72*

Madrigal, D. and Oracion, E. (2018). Solid Waste Management Awareness, Attitude, and Practices in a Phillipine Catholic Higher Education Institution. *Recoletos Multidiscplinary Research,* 5(2), https://www.researchgate.net/publication/327177428_Solid_Waste_Management_Awareness_Attitude_and_Practices_in_a_Philippine_Catholic_Higher_Education_Institution

Molina, R. and Catan, I. (2021). Solid Waste Management and Awareness and Practicess among Senior High School Students in a State College in Zamboanga City, Philippines. *Aquademia.* 5(1). https://doi.org/10.21601/aquademia/9579

Muljaningsih, S. & Galuh, A. K. (2018). Intention model of waste management education concept based on green campus in Brawijaya University. *Indonesian Journal of Environment and Sustainable Development,* 9(2), 129-139. doi:

10.21776/ub.jpal.2018.009.02.10
Paghasian, M. (2017). Awareness and Practices on Solid Waste Management among College Students in Mindanao State University Maigo School of Arts and Trades. *Advances in Social Science, Education and Humanities Research,* 128
Panganiban-Santos, A. & Pastrana, R. (2021). Students' Awareness on Waste Management: Their Effect on Waste Management Practices. *International Journal Academic Pedagogical Research,* 5(5), 9-36. http://ijeais.org/wp-content/uploads/2021/5/IJAPR210503.pdf
Pujara, E., Pathak, P., Sharma, A. & Govani, J. (2019). Review on Indian Municipal Solid Waste Management practices for reduction of environmental impacts to achieve sustainable development goals. *Journal of Environmental Management*, Vol. 248. https://doi.org/10.1016/j.jenvman.2019.07.009
Schiavo R. (2021). Community engagement: why it matters. Multiple workshops and presentations at professional meetings/conferences on behalf of Health Equity Initiative, and Strategies for Equity and Communication Impact. *Taylor & Francis Online*. Volume 14, 2021- Issue 2.
Vergara, Victor, and Ramachandra Jammi. "Towards a Circular Economy: Addressing the Waste Management Threat." *Ieg.worldbankgroup.org*, 7 Apr. 2022. https://5h3r10k.github.io/random/twp/writing.html
Verma, R.L.; Borongan, G. Emissions of Greenhouse Gases from Municipal Solid Waste Management System in Ho Chi Minh City of Viet Nam. *Urban Sci.* 2022, *6*, 78. https://doi.org/10.3390/urbansci6040078
The World Bank, (2024). Trends in Solid Waste Management. *The World Bank-IBRD◦IDA.* https://www.worldbank.org/en/research

APA Citation:

Corporal, A. V., Pangilinan, C. M., & Gabriel, B. D. (2024). SOLID WASTE MANAGEMENT AWARENESS AND PRACTICES AMONG JUNIOR HIGH SCHOOL STUDENTS. Ignatian International Journal for Multidisciplinary Research, 2(8), 931–944. https://doi.org/10.5281/zenodo.13329911

Corresponding author: *airacorporal11@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

SPECIAL SCIENCE SCHOOL SYSTEM (SSSS): IMPLEMENTATION AND CHALLENGES

Cristine M. Cagas
Vera A. Villocido, MA

Holy Name University, Janssen Heights, J. A. Clarin Street Dampas District 6300 Tagbilaran City, Bohol, Philippines

https://doi.org/10.5281/zenodo.13193564

ABSTRACT

This study explores the implementation of the Special Science School System (SSSS) in public elementary and secondary schools in Valencia District, Bohol, Philippines, during the school year 2023-2024. It uses a mixed-methods approach, combining quantitative survey questionnaires, qualitative key informant interviews (KIIs), and focus group discussions (FGDs) to completely analyze the amount of implementation and obstacles faced by school administrators and teachers. The findings reveal differences in perspectives between administrators and teachers, with administrators generally having more positive attitudes towards Special Science School System. Resource limits, time constraints, and reluctance to creative instructional practices are some of the challenges. Nonetheless, both groups emphasize the importance of cooperation, professional growth, and community connections in facilitating implementation. The study emphasizes the importance of continuous evaluation, specialized training, and longitudinal studies to track the program's progress and efficacy. The study recommends regular assessments, targeted professional development initiatives, and longitudinal research to ensure the SSSS's successful implementation and sustainability, to improve scientific education and contribute to the nation's sustainable development objectives.

Keywords: *Science education, Special Science School System*

INTRODUCTION

The ultimate aim of science education is to cultivate scientific literacy among learners, equipping them to meet the demands of a rapidly evolving global landscape. However, the Philippines faces substantial challenges in achieving this goal, as reflected in the country's performance in international assessments. Filipino students' achievements in science have consistently lagged behind their global peers, with the Trends International Mathematics and Science Study (TIMSS) 2007 and the Programme for International Student Assessment (PISA) 2018 indicating significant difficulties in basic scientific skills. Notably, the PISA 2018 report revealed that 81% of Filipino students struggled with fundamental math skills, reading comprehension, and scientific reasoning. This trend continued in the PISA 2022 results, where the Philippines ranked 77th out of 81 countries, showing minimal improvement.

According to Parojenog and Pabalan (2024), despite ongoing efforts by the Philippine government to enhance education quality, the country is facing an educational crisis, particularly in science education, which is vital for personal and national development. The persistent gap in science achievements highlighted by TIMSS 2007 and PISA assessments underscores the urgent need for reforms in science education.

In response to these challenges, Philippine Basic Education emphasized the necessity for a revised curriculum that aligns with the nation's aspirations. This revised curriculum aims to develop lifelong learners with 21st-century skills, discipline, and patriotism. It seeks to prepare students for higher education, employment, and global competitiveness.

The Schools Division of Bohol (SDO-Bohol) introduced the Special Science School System (SSSS) to address these issues. This initiative includes elementary and secondary schools with advanced teachers and minimal facilities to support Special Science Classes (SSC). The SSSS is designed to offer enhanced science education to talented learners, fostering their skills in advanced subjects such as Enhanced Math, Enhanced Science, Creative Technology, and Science Research.

This study is grounded in three prominent curriculum evaluation models: Stake's Responsive Evaluation Model, the Context, Input, Process, Product (CIPP) Model, and Goal-Based Evaluation Theory. Stake's Responsive Evaluation Model, developed by Robert Stake in the 1970s, emphasizes addressing stakeholder needs and understanding diverse perspectives, supporting a collaborative approach to evaluating and improving the SSSS implementation. The CIPP Model, created by Daniel Stufflebeam in the 1987, provides a comprehensive framework for evaluating educational programs through context, input, process, and product components. This model will guide the assessment of the SSSS by analyzing contextual factors, evaluating resource adequacy, examining program delivery, and assessing overall effectiveness.

Based Evaluation Theory, pioneered by Ralph W. Tyler, focuses on evaluating the extent to which a program achieves its predetermined goals and objectives. This theory will be used to measure the SSSS's success in meeting its intended outcomes.

Division Memorandum No. 0322 series of 2023 and DepEd Order No. 55 series of 2010 provide legal support for this study. They outline policies and guidelines for strengthening science and mathematics education and ensuring that the SSSS adheres to national standards.

The implementation of the SSSS presents both opportunities and challenges. Previous studies, such as those by Montebon (2014) and Beasley (1999), highlight the potential of new programs to enhance learning but also emphasize the importance of careful implementation and continuous evaluation. Professional development for teachers and support from school administrators is crucial for the program's success. The research will draw insights from related studies by Atchuela (2019), Sumardani (2021), Bangcaya and Alejandro (2015), Macaranas and Robles (2023), Decenorioa et al. (2016), and Madani (2020) to address the challenges and opportunities in implementing the SSSS.

This research aimed to provide a comprehensive investigation into the implementation of the SSSS in the Valencia District of Bohol, focusing on how the special science classes were rolled out, the challenges encountered, and the program's overall impact. By identifying both the advantages and disadvantages of the SSSS, the study offered actionable recommendations for enhancing science education. The ultimate goal was to better prepare learners for science careers and contribute to sustainable national development. By leveraging theoretical frameworks and practical insights, this research provided valuable contributions to improving science education and supporting the development of scientifically literate individuals in the Philippines.

Research Questions

This study aimed to assess the implementation of the Special Science School System (SSSS) in both elementary and secondary public schools within the Valencia District, while also identifying the challenges encountered during the initial stages of its implementation.

Specifically, it sought to answer the following questions:

1. What is the extent of implementation of the SSSS as perceived by the administrators, and teachers in terms of:
    - 1.1. curriculum implementation;
    - 1.2. instructional program; and
    - 1.3. instructional support?
2. What is the level of the challenges encountered by the school administrators, and teachers in implementing the SSSS in terms of:
    - 2.1. pedagogical content knowledge;
    - 2.2. curriculum and planning; and
    - 2.3. assessment and reporting?

3. Is there a significant difference between the administrators' and teachers' perceptions in terms of:
    3.1. extent of implementation; and
    3.2. level of challenges?
4. Based on the results of the study, what can be proposed to improve the implementation of the SSSS?

METHODOLOGY

Research Design

This study employed a concurrent parallel mixed-method approach, or triangulation design, combining qualitative and quantitative data collection and analysis. This mixed-method design was well-suited for investigating the new special science class program's implementation and challenges, as it provided a more comprehensive understanding of the research problem than qualitative or quantitative approaches alone.

Research Environment

The study was conducted at Valencia Technical Vocational High School (VTVHS) and Valencia Central Elementary School (VCES), both public schools in Poblacion Oriental, Valencia, Bohol. These schools, representing the entire district of Valencia, were approved for adopting the SSSS curriculum. Their selection was based on their capacity to offer the special science program by the requirements outlined by the division's supervision committee, following an on-site inspection and a thorough review of facilities and inventories.

Research Participants

The study focused on school administrators and teachers from public secondary and elementary schools as its main participants. Purposive sampling was employed to ensure key stakeholders were included in establishing the Special Science School System (SSSS). The sample comprised ten personnel from the district's participating schools, including two school principals, two program coordinators, a head teacher, and five master teachers. These individuals played crucial roles in overseeing and implementing the SSSS at their schools. Additionally, the study included all twenty teachers who represented the curriculum in Valencia's primary and secondary schools. These teachers were responsible for handling subjects within the Special Science Class (SSC) and adhering to the guidelines of the SSSS.

Table 1. Distribution of Participants of the Study.

Grade Level	School Administrators	Teachers	Total
Elementary (VCES)	5	8	13
Secondary (VTVHS)	5	12	17
Total	**10**	**20**	**30**

Research Instrument

The study employed a survey questionnaire, key informant interviews (KIIs), and focus group discussions (FGDs) to assess the implementation of the Special Science School System (SSSS). The survey questionnaire, designed based on Macaranas and Robles (2023), evaluated curriculum implementation, instructional program effectiveness, and support systems. It measured participants' perceptions of SSSS implementation across three categories: curriculum and planning, assessment and reporting, and topic knowledge and pedagogy.

For qualitative insights, KIIs and FGDs used adapted guide questions from the survey to explore specific observations and challenges related to SSSS implementation. These guide questions addressed discrepancies in survey responses regarding implementation extent and encountered difficulties.

A panel of experts—the researcher's school principal III, the district's SSSS program coordinator, and a master teacher in science—reviewed the questionnaire to ensure its content validity. Their feedback led to refinements of the questionnaire. The researcher's thesis adviser also reviewed the final version to ensure it aligned with the research objectives.

To evaluate the instrument's clarity and effectiveness, a pilot test was conducted with 15 participants (5 school administrators and 10 science teachers) from a comparable district. Feedback from this pilot test was used to make further improvements.

Data Gathering Procedure

The researcher obtained permission for the study from the Schools Division Superintendent of Bohol. An endorsement letter was then sent to the selected school administrators. The science coordinator, master teachers, and head teachers were informed about the study to secure their support and guidance.

Prior to data collection, a request letter and manuscript were submitted to Holy Name University's Ethics Review Board (ERB) for ethical review. After receiving approval, the researcher adhered to the ERB's guidelines and protocols.

Survey questionnaires and focus group discussions (FGDs) were conducted over a six-day period: two days for distribution, three days for completion, and one day for retrieval. Separate FGDs for administrators and teachers, each lasting 60 minutes, used open-ended questions to discuss SSSS implementation and challenges. FGDs were conducted impartially, and manual transcription of discussions ensured accuracy. Participants reviewed transcripts for transparency. Those unable to attend FGDs were interviewed via key informant interviews (KIIs).

Data Analysis

The study employed both quantitative and qualitative methods to ensure result validity and reliability. Quantitative data was organized and analyzed using Microsoft Excel for descriptive statistics and the Statistical Package for the Social Sciences (SPSS) for advanced analysis. T-tests compared mean scores between teachers and school administrators to identify significant differences in perceptions of SSSS implementation.

Qualitative data, being categorical, were analyzed using thematic analysis. This process involved transcribing data, generating codes to capture key responses and themes, and refining these codes through cross-referencing with transcripts. This approach enabled the integration of qualitative insights with quantitative survey results, providing a comprehensive understanding of the SSSS implementation.

Treatment of Data. The study used both quantitative and qualitative methods to evaluate the administrators' and teachers' assessed implementation levels of the Special Science School System (SSSS) and the difficulties they encountered during the initial year of operation.

The following are the statistical treatments that were employed in achieving the research objectives:

To determine both the extent of implementation of the Special Science School System (SSSS) and the level of challenges encountered throughout its implementation process, the researchers applied the weighted mean formula:

$$WM = \frac{\sum \text{fx}}{\text{N}}$$

Where :

WM = Weighted Mean
$\sum fx$ = the sum of frequencies and its weight
N = the number of participants

The computed weighted mean was interpreted using the following scales:

Scale	Description
3.26 - 4.00	Fully Implemented
2.51 - 3.25	Mostly Implemented
1.76 - 2.50	Partially Implemented
1.00 - 1.75	Not at all implemented

Scale	Description
4.21 - 5.00	Extremely Challenging
3.41 - 4.20	Very Challenging
2.61 - 3.40	Moderately Challenging
1.81 - 2.60	Slightly Challenging
1.0 - 1.80	Not at all challenging

In order to ascertain any meaningful distinctions between the perspectives held by administrators and teachers concerning the extent of the implementation of the Special Science School System (SSSS), as well as their perceptions regarding the level of challenges faced during its implementation, the t-test formula was used:

t-value

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

$\bar{x}_1$: Mean value of the first group
$\bar{x}_2$: Mean value of the second group
n_1 : Size of the first group
n_2 : Size of the second group
s_1 : Standard deviation of the first group
s_2 : Standard deviation of the second group

Thematic analysis served as the qualitative method utilized to interpret the data obtained from the focus group discussions to distinguish the specific observations the administrators and teachers have about the implementation of SSSS, employing manual transcription to transcribe the spoken words into written text. Throughout this process, the administrators' and teachers' interview responses were carefully refined and merged, focusing on finding commonalities in their concepts. These combined answers were then arranged into discrete themes and descriptions that captured the main aspects of their perspectives. The final themes were collated, totaled, and evaluated in accordance with the issue statement, which made it possible to fully comprehend the data and enable more in-depth comprehension of the study goals.

RESULTS

This chapter discusses the school administrators' and teachers' responses which were summarized using descriptive statistics (weighted mean) and inferential statistics (t-test) for quantitative data. Content analysis was applied for qualitative data in which responses were organized according to themes. Discussion notes from transcriptions were woven into the form of narratives.

Table 2. Extent of Implementation in Curriculum Implementation.

Curriculum Implementation	Administrators		Teachers	
	WM	Description	WM	Description
Admission – Meeting the standard admission policies that are clear and easy to follow based on the issuances and guidelines.	3.40	Fully Implemented	3.00	Mostly Implemented
Retention – Meeting the standard and clear policy in student retention in the program.	3.00	Mostly Implemented	2.95	Mostly Implemented
Curricular Programs – Complying with the learning competencies intended for Special Science School System (SSSS) implementing schools.	3.40	Fully Implemented	2.80	Mostly Implemented
Co-curricular Programs – Providing co-curricular programs that are clear, accepted by learners, and do not disrupt instructional time.	3.10	Mostly Implemented	2.65	Mostly Implemented
Composite Mean	3.23	Mostly Implemented	2.85	Mostly Implemented

LEGEND: 1.0-1.75 Not all Implemented; 1.76-2.50 Partially Implemented; 2.51-3.25 Mostly Implemented; 3.26-4.0 Fully Implemented

Table 2 shows the extent of implementation of the Special Science School System (SSSS) as perceived by the participants in terms of curriculum implementation.

The results indicate that administrators perceive a higher degree of curriculum implementation compared to teachers. Administrators rated the implementation with a weighted mean of 3.23, ranging from 3.00 to 3.40, suggesting they view it as meeting expectations from "mostly implemented" to "fully implemented." In contrast, teachers rated it lower, with a composite mean of 2.85, ranging from 2.65 to 3.00, indicating that while they view the SSSS implementation positively overall, some areas do not fully meet their expectations.

Regarding admission policies, administrators reported a higher level of implementation (weighted mean of 3.40) compared to teachers (3.00). Administrators emphasized fairness and thoroughness in admissions, using multiple assessment methods and ensuring inclusivity. In contrast, teachers expressed concerns about the lack of transparency and inadequate communication in the admissions process, noting that unclear guidelines and limited assessment procedures affect the effectiveness of student selection.

Both administrators and teachers rated retention rules and curricular programs reasonably well, though administrators gave slightly higher scores. Co-curricular

programs were rated lower by both groups, with administrators scoring 3.10 and teachers scoring 2.65, indicating a need for improvement to fully meet expectations.

These findings align with Atchuela's (2019) study, which also reported positive perceptions of curriculum implementation due to the effective application of objectives and instructional methodologies. The consistency of these results underscores the importance of these aspects in achieving successful curriculum implementation.

Table 3. Extent of Implementation in Instructional Program.

Instructional Program	Administrators		Teachers	
	WM	Description	WM	Description
Faculty Development – Giving seminars and training attended by teachers are related to the needs of the special science school system.	2.70	Mostly Implemented	1.95	Mostly Implemented
Teachers Qualification – Ensuring that the academic preparation of the teachers matches the requirements of the curriculum.	3.60	Fully Implemented	2.85	Mostly Implemented
Instructional Strategy – Instructional activities that show systematic organization, implementation, and evaluation following a class size for quality and excellence through sound classroom management.	3.10	Mostly Implemented	2.75	Mostly Implemented
Composite Mean	3.13	Mostly Implemented	2.52	Mostly Implemented

LEGEND: 1.0-1.75 Not all Implemented; 1.76-2.50 Partially Implemented; 2.51-3.25 Mostly Implemented; 3.26-4.0 Fully Implemented

Table 3 presents the extent of the Special Science School System (SSSS) implementation in terms of the instructional program as perceived by administrators and teachers.

Administrators rated teachers' qualifications highest, with a weighted mean of 3.60, indicating they view this component as well-implemented. They emphasized the importance of professional development and qualified teachers for the Special Science Class (SSC), with one administrator noting, "We prefer teachers with academic skills, allowing only master teachers and those with advanced degrees to teach this class." Another administrator highlighted the need for action research among SSC teachers to enhance instruction. This underscores administrators' commitment to supporting continuous teacher improvement.

Teachers rated qualifications with a weighted mean of 2.85, reflecting their recognition of the importance of qualified educators, though slightly lower than administrators' ratings.

Both groups rated faculty development lowest, with administrators scoring 2.70 and teachers 1.95, indicating a belief in its implementation but also suggesting room for improvement.

Instructional strategies were rated similarly by both groups, around 3.10, indicating general agreement that these strategies are implemented effectively. Administrators emphasized their comprehensive approach to performance evaluation and support, including monitoring, feedback, and professional development. They also valued professional learning communities and mentorship.

The composite means are 3.13 for administrators and 2.52 for teachers, both within the "mostly implemented" range. Administrators generally perceived a higher level of implementation than teachers, though both groups identified areas for improvement. These results align with Sumardani's (2021) study, which also indicated effective teaching approaches, but highlighted faculty development issues not covered in that research, suggesting differing views on training and support.

Table 4. Extent of Implementation in Instructional Support.

Instructional Support	Administrators		Teachers	
	WM	Description	WM	Description
Laboratory Facilities, Equipment, and Supplies – Providing appropriate lab equipment apparatuses, considering advances in science and technology which allow for small group work.	3.0	Mostly Implemented	2.55	Mostly Implemented
Library Facilities and Services – Providing relevant and updated book selections with extensive collection of science and math- oriented books which meet the demands of the special science school system program.	2.4	Mostly Implemented	2.20	Mostly Implemented
ICT Integration – Teachers develop science lessons by designing informative PowerPoint, web pages, flash animations, and digital video productions.	3.40	Fully Implemented	2.90	Mostly Implemented

Physical Facilities (School Site, Buildings, and Classrooms) – A well-planned campus with adequate buildings for the social, cultural, and sports activities of learners with enough tables, chairs, and technology.	3.20	Mostly Implemented	2.50	Mostly Implemented
Composite Mean	3.0	Mostly Implemented	2.54	Mostly Implemented

LEGEND: 1.0-1.75 Not all Implemented; 1.76-2.50 Partially Implemented; 2.51-3.25 Mostly Implemented; 3.26-4.0 Fully Implemented

Table 4 presents the extent of implementation of the Special Science School System (SSSS) as perceived by participants regarding instructional support. Overall, perceptions are positive but vary between administrators and teachers.

Both administrators and teachers rated laboratory resources as "mostly implemented," with weighted mean (WM) scores of 3.0 and 2.55, respectively. However, teachers' lower scores suggest areas needing improvement in laboratory equipment. Similarly, library services and facilities received moderate scores of 2.4 and 2.20, indicating challenges in maintaining current and relevant book selections.

Administrators perceived ICT tool usage in science lessons as "fully implemented," with a WM score of 3.40, reflecting their commitment to integrating technology and enhancing learning experiences. This contrasts with teachers, who emphasized the need for more interactive, experiential learning approaches to boost engagement. Teachers also highlighted the importance of collaborative professional learning communities, aligning with research on effective leadership and stakeholder involvement in education.

The data reveals a dynamic SSSS implementation process, underscoring the need for continuous adaptation to technological advancements. Both administrators and teachers agreed that physical facilities were "mostly implemented," with WM scores of 3.20 and 2.50, indicating the general adequacy of school infrastructure. This suggests that while the SSSS has made significant strides, ongoing professional development, and support are necessary to integrate technology and enhance instructional practices fully.

Table 5. Level of Challenges in Pedagogical Content Knowledge.

Pedagogical Content Knowledge	Administrators		Teachers	
As an administrator/teacher, I face challenges in…	WM	Description	WM	Description
1. Supporting teachers in applying knowledge of content within and across curriculum teaching areas.	3.40	Moderately challenging	3.10	Moderately challenging

2. Ensuring teachers have extensive knowledge of content beyond their area of specialization.	3.10	Moderately challenging	3.20	Moderately challenging
3. Encouraging teachers to motivate learners to investigate content to expand knowledge and satisfy curiosity.	3.30	Moderately challenging	3.30	Moderately challenging
4. Helping teachers make intra- and interdisciplinary content relationships.	3.20	Moderately challenging	3.30	Moderately challenging
5. Confirming teachers address content accurately aligned to discipline.	2.90	Moderately challenging	3.40	Moderately challenging
Composite Mean	3.18	Moderately challenging	3.26	Moderately challenging

Legend: 1.0-1.80 Not at all challenging, 1.81-2.60 Slightly challenging, 2.61-3.40 Moderately challenging, 3.41-4.20 Very Challenging; 4.21-5.0 Extremely challenging

Table 5 illustrates the perceived challenges administrators and teachers face in implementing the Special Science School System (SSSS) related to pedagogical content knowledge. Both groups reported similar difficulties, with weighted mean scores ranging from 2.90 to 3.40, indicating "moderately challenging" conditions.

Administrators found confirming teachers' alignment of content to discipline the least challenging, with a WM score of 2.90, while supporting teachers in applying content knowledge across curricula was the most challenging, with a WM score of 3.40. An administrator noted that the absence of centralized teaching materials and lack of prior training sessions hindered teachers' development, and another pointed out teachers' limited engagement in embracing new approaches. Administrators also reported being overwhelmed by other tasks, affecting their focus on supervising the SSSS.

Conversely, teachers viewed ensuring content accuracy and alignment with core ideas as the most challenging, with a WM score of 3.40. They struggled with balancing depth of understanding against curriculum coverage within tight time constraints and keeping up with evolving scientific knowledge. They also faced difficulties in integrating new discoveries into their teaching.

Both administrators and teachers faced challenges in assisting with intra- and interdisciplinary content relationships and motivating students, with a WM of 3.30. Overall, the composite mean scores for administrators and teachers were 3.18 and 3.26, respectively, reflecting a "moderately challenging" view of SSSS implementation in pedagogical content knowledge.

These findings align with studies by Atchuela (2019) and Macaranas and Robles (2023), highlighting the importance of effective implementation strategies and addressing

challenges in content alignment and application within specialized science education programs.

Table 6. Level of Challenges in Curriculum and Planning.

Curriculum and Planning	Administrators		Teachers	
As an administrator/teacher, I face challenges in…	WM	Description	WM	Description
1. Supporting sequenced teaching and learning processes to meet curriculum requirements.	3.0	Moderately challenging	3.60	Very challenging
2. Ensuring teachers plan well-structured lessons connecting concepts.	3.30	Moderately challenging	3.15	Moderately challenging
3. Confirming teachers sequence activities to scaffold learning objectives.	3.10	Moderately challenging	3.30	Moderately challenging
4. Helping teachers connect outcomes to previous and future learning.	2.80	Moderately challenging	3.25	Moderately challenging
5. Providing appropriate teaching and learning resources including ICT.	3.10	Moderately challenging	3.25	Moderately challenging
Composite Mean	3.06	Moderately challenging	3.31	Moderately challenging

Legend: 1.0-1.80 Not at all challenging, 1.81-2.60 Slightly challenging, 2.61-3.40 Moderately challenging, 3.41-4.20 Very Challenging; 4.21-5.0 Extremely challenging

Table 6 presents the perceived challenges administrators and teachers face in implementing the Special Science School System (SSSS) concerning curriculum and planning.

There are notable differences in how administrators and teachers perceive these challenges. Administrators find supporting sequenced teaching and learning processes less difficult than teachers, who rate it as extremely challenging. Teachers struggle to relate outcomes to past and future learning, whereas administrators find this task less challenging. The composite mean scores of 3.06 for administrators and 3.31 for teachers indicate that both groups view curriculum and planning challenges as moderately challenging.

Administrators rated supporting sequenced teaching and learning processes as moderately challenging, with a weighted mean score of 3.0. They face difficulties in

collaborative planning due to varying faculty objectives and time constraints. One administrator highlighted the need for a more inclusive approach by stating, "Others like teachers and staff represent us in overseeing the new program."

In contrast, teachers found implementing sequenced teaching and learning processes to meet curriculum requirements challenging, with a weighted mean of 3.60. Due to limited instructional time, teachers struggle to make science concepts relatable and face issues with rushed, superficial treatment of topics. This highlights the difficulty in balancing curriculum demands with maintaining instructional quality.

Weighted mean scores ranging from 2.80 to 3.30 reflect challenges from "moderately challenging" to "very challenging." Administrators rated assisting teachers in connecting results to past and future learning moderately challenging (WM = 2.80), while teachers found it more challenging (WM = 3.25). Both groups agreed that planning well-structured lessons and sequencing activities to support learning objectives were relatively challenging, with a WM of 3.30.

The differing perceptions between administrators and teachers on various curriculum and planning difficulties align with findings from Macaranas and Robles (2023) and Atchuela (2019), which emphasize the need to address challenges in curriculum planning and implementation within specialized science education programs.

Table 7. Level of Challenges encountered in Assessment and Reporting.

Assessment and Reporting	Administrators		Teachers	
As an administrator/teacher, I face challenges in…	WM	Description	WM	Description
1. Implementing diagnostic, formative, and summative assessments consistent with curriculum.	3.10	Moderately challenging	3.20	Moderately challenging
2. Supporting teacher use of assessment strategies for learner self-monitoring.	2.90	Moderately challenging	3.35	Moderately challenging
3. Ensuring assessments are embedded and aligned with content standards.	3.10	Moderately challenging	3.25	Moderately challenging
4. Monitoring and evaluating learner progress and achievement.	3.0	Moderately challenging	3.20	Moderately challenging

5. Facilitating communication of learners' progress to stakeholders.	3.10	Moderately challenging	3.20	Moderately challenging
Composite Mean	3.04	Moderately challenging	3.24	Moderately challenging

Legend: 1.0-1.80 Not at all challenging, 1.81-2.60 Slightly challenging, 2.61-3.40 Moderately challenging, 3.41-4.20 Very Challenging; 4.21-5.0 Extremely challenging

Table 7 outlines the perceived challenges faced by administrators and teachers in implementing the Special Science School System (SSSS) related to assessment and reporting. Both groups view these challenges as moderately difficult, with composite mean scores of 3.04 for administrators and 3.24 for teachers.

Teachers identified using assessment strategies for learner self-monitoring as the greatest challenge, with a weighted mean of 3.35. Administrators, however, rated this challenge as the least difficult, with a weighted mean of 2.90. Other challenges, such as integrating assessments with content standards and communicating learner progress to stakeholders, were similarly rated by both groups, with mean scores of 3.10 to 3.25.

Further insights from key informant interviews (KIIs) and focus group discussions (FGDs) reveal that administrators face logistical issues, such as ensuring access to necessary resources and managing various administrative tasks, which impact the assessment process. Conflicts and resource constraints also hinder effective teacher-student conferences and the monitoring of student performance.

Teachers highlighted the need for adaptive teaching methods to address varying levels of prior knowledge among students, emphasizing the importance of differentiated instruction and engaging assessment strategies. These challenges underscore the need for ongoing support and professional development to enhance assessment practices within the SSSS.

These findings align with Sumardani's (2021) study, which stresses the importance of addressing assessment challenges and ensuring conformity with content standards for effective SSSS implementation.

Table 8. Difference between participants' perceptions on implementation.

Variable	Mean$\pm SD$	Computed T-value	P-value	Decision on Ho	Interpretation
Extent of Implementation of administrators & teachers	Teacher: 2.65 ± 0.35 Administrator: 3.12 ± 0.34	-7.03	0.003	Reject Ho	Significant

Table 8 shows a significant difference between administrators' and teachers' perceptions of the Special Science School System (SSSS) implementation. Administrators reported a higher mean perception score (3.12 ± 0.34) compared to teachers (2.65 ± 0.35). The computed t-value of -7.03 and p-value of 0.003 indicate statistical significance, leading to the rejection of the null hypothesis.

This suggests that administrators perceive a higher extent of SSSS implementation than teachers. The discrepancy may be due to administrators' broader oversight and access to institutional data, which influences their view of implementation effectiveness. In contrast, teachers are more focused on daily classroom issues and interactions. Administrators have access to additional information, such as resource distribution and professional development programs, which shapes their understanding of the SSSS implementation.

Table 9. Difference between participants' perceptions on the level of challenges.

Variable	Mean$\pm SD$	Computed T-value	P-value	Decision on Ho	Interpretation
Level of challenges of administrators & teachers	Teacher: 3.27 ± 0.12 Administrator: 3.09 ± 0.14	3.27	0.013	Reject Ho	Significant

Table 9 reveals a significant difference between administrators' and teachers' perceptions of the challenges encountered in implementing the Special Science School System (SSSS). Teachers reported a higher mean score of 3.27 compared to administrators' mean score of 3.09. The computed t-value of 3.27 and p-value of 0.013 indicate statistical significance, leading to the rejection of the null hypothesis.

This difference suggests that teachers view the challenges of implementing the SSSS as more significant than administrators do. This disparity reflects the distinct experiences and roles of the participants, with teachers having a more nuanced understanding of the obstacles due to their direct involvement in curriculum delivery and instruction. Teachers face practical difficulties in the classroom that administrators may not encounter firsthand.

DISCUSSION

Findings

The following are the highlights of the study:

1. Administrators and teachers have differing perspectives on the extent of the implementation of the SSSS. Teachers report a lower mean of 2.65, indicating a less favorable view, but administrators report a higher mean of 3.12, indicating a relatively strong assessment of implementation. Specifically,

1.1. In terms of curriculum implementation, administrators generally rated the implementation higher than teachers across various aspects such as admission policies, retention rules, curricular programs, and co-curricular programs with a composite mean of 3.23 for administrators and 2.85 for teachers. The lower composite mean from teachers indicates that some areas fell short of their expectations.

1.2. In terms of the instructional program, both groups prioritized teachers' qualifications. Administrators scored it as "fully implemented" with a composite mean of 3.60, while teachers, rated it as "mostly implemented" with a composite mean of 2.85. This highlights mutual acknowledgment and recognition that ensuring teachers' academic preparation coordinates with the curriculum requirements is critical for effective SSSS implementation.

1.3. In terms of instructional support, administrators and teachers generally perceived the implementation positively, with some variations. The composite mean for instructional support was 3.0 for administrators and 2.54 for teachers. The divergence of perceptions stems from differing vantage points of school administrators and teachers. The variation stresses the need for continued efforts in bridging the gap between organizational aspirations and classroom realities.

2. The level of challenges encountered by school administrators and teachers in implementing the Special Science School System (SSSS) is perceived to be moderately challenging, with administrators rating the challenges slightly lower with a mean of 3.09 than teachers with a mean of 3.27. Specifically,

2.1. In terms of pedagogical content knowledge, both administrators and teachers rated the challenges with a composite mean of 3.18 and 3.26, respectively. The contrast in the identification of the most challenging task underscores the varying priorities among participants in which school administrators focused on cross-curricular integration while teachers grappled with the complexities of content delivery.

2.2. For curriculum and planning, administrators rated the challenges with a composite mean of 3.06, while teachers rated them slightly higher at 3.31. It was easier for school administrators to support sequenced teaching and learning processes than teachers who find it extremely difficult. The contradiction of perceptions reveals different realities faced by administrators focusing on curricular alignment while teachers were occupied with the integration of conceptual understanding across learning experiences.

2.3. In assessment and reporting, administrators and teachers rated the challenges with composite means of 3.04 and 3.24, respectively. Results highlight the need for professional development and resource allocation, empowering teachers with strategies to integrate monitoring assessments.

3. There is a significant difference between the administrators' and teachers' perceptions of the extent of implementation of the SSSS. Administrators conveyed a higher mean perception score (3.12 ± 0.34) compared to teachers

(2.65 ± 0.35). The computed t-value of -7.03 and the p-value of 0.003 indicate statistical significance.

4. There is a significant difference between the administrators' and teachers' perceptions of the level of challenges encountered in the implementation of the SSSS. Administrators reflected a lower mean perception score (Mean±SD: 3.09±0.14) compared to teachers' (Mean±SD: 3.27±0.12). The computed t-value of 3.27 and a p-value of 0.013 indicate statistical significance.

Conclusions

The implementation of the Special Science School System (SSSS) in qualified schools was a significant milestone, with the introduction of transparent admission rules, efficient screening processes, and inclusive admission practices. However, the implementation process was not without obstacles. Resource restrictions, time constraints, and reluctance to innovative educational methodologies surfaced as major roadblocks. Despite these challenges, administrators and teachers emphasized teamwork, professional development, and community collaborations to improve the implementation process emphasizing the necessity of adaptability and ongoing support in overcoming obstacles and ensuring the successful implementation of the SSSS program. It indicates that implementation techniques must be evaluated and refined on an ongoing basis to handle emerging issues and maximize the SSSS's efficacy in improving scientific education.

Recommendations

The following are hereby recommended:

1. School administrators in the Division Office should undertake regular assessments of the SSSS implementation process to monitor perception changes and address differences between administrators and teachers. Surveys, focus group discussions, and key informant interviews can be used to acquire qualitative information on their thoughts.
2. Administrators and teachers should be provided with specialized professional development opportunities to address specific implementation problems. Workshops, seminars, and training sessions can focus on curriculum preparation, instructional methodologies, and collaborative practices to help teachers apply the SSSS more effectively.
3. Other schools or districts that are planning or already implementing the SSSS should establish mechanisms for continuous feedback, monitoring, and evaluation. Regular assessment and collaborative analysis can facilitate a shared problem-solving approach that enhances the quality and effectiveness of the SSSS implementation.
4. Future researchers should consider undertaking longitudinal studies to monitor the progress and efficacy of SSSS adoption over time. By gathering data at numerous periods in time, researchers can obtain insight into the program's

sustainability, detect developing difficulties, and assess the long-term impact on student outcomes.

Compliance with Ethical Standards

Any ethical concerns that could have risen throughout the study were resolved by securing necessary permits. Also, the researcher personally handed the research tools to the schools, with the assistance of the administrators, which included the informed consent form and questionnaires. Before data collection began, all research terms and conditions were fully disclosed to maintain transparency. Despite receiving clearance from the school principals and administrators, the researcher obtained informed consent from participants by individually requesting them to participate and providing thorough information about the study, including potential risks and benefits, as well as privacy safeguards. Each participant was asked to review and sign the informed consent form, indicating their comprehension and willingness to be involved in the study. It was optional to provide the participants' names, which were coded to preserve their identity. To safeguard data, further confidentiality measures were put in place, such as limiting access to physical and electronic resources. The study closely followed data privacy and research ethics guidelines, and participants were made aware of their freedom to withdraw from the study at any moment without facing consequences.

PROPOSED ENHANCEMENT PROGRAM

Rationale

The Department of Education initiated the implementation of the Special Science School System (SSSS) aimed at advancing science education within the region's secondary schools (DepEd Order No. 55 series 2010). Although significant progress has been made, there are still underlying issues that need to be addressed in order to guarantee the program's long-term viability and effectiveness. The developmental plan that has been suggested aims to tackle these obstacles and use prospects to improve the execution of the SSSS.

Through a strategic emphasis on critical domains such as the need for clearer admission requirements, diverse screening processes, and enhanced faculty support. These insights emphasize the importance of refining existing practices and fostering a collaborative environment to overcome implementation hurdles and ensure the program's success. The plan aims to cultivate an atmosphere that promotes program success and students' overall growth. The strategy prioritizes these areas in an effort to foster an atmosphere that will facilitate the successful implementation of the SSSS. The school offering Special Science Class (SSC) may overcome obstacles and fully implement the SSSS, boosting scientific instruction and supporting learners' holistic development, by working together and implementing focused interventions.

Objectives

The primary goal of this Enhancement Program is to improve the operation of the Special Science School System (SSSS) in implementing schools by focusing on critical areas for development. Specifically, the initiative seeks to:

1. Create and implement targeted professional development programs for teachers to improve instructional methodologies, classroom management approaches, and methods for engaging unmotivated learners;
2. Provide a forum for continued dialogue and cooperation amongst community people, educators, parents, and school administration to address issues, get input, and promote a feeling of responsibility and support for the SSSS implementation;
3. Give administrators access to mentorship and leadership development programs to improve their capacity to oversee implementation processes, resolve issues, and foster a welcoming and inclusive school environment that promotes student achievement; and
4. Prioritize areas that administrators and teachers have recognized as vital when evaluating resource allocation and usage methods to ensure adequate provision of materials, technology, and support services required for successful SSSS implementation.

Matrix

Objectives	Activities	Persons Involved	Timeframe	Success Indicators
Create and implement targeted professional development programs for teachers	1. Conduct needs assessment to identify areas for improvement in instructional methodologies	School administrators, Department of Education	3 months	Increased teacher competency in identified areas
	2. Develop curriculum for professional development workshops	Curriculum developers, Teacher trainers	2 months	Completion of workshop curriculum
	3. Facilitate workshops and training sessions	Facilitators, Subject matter experts	Year round	Attendance and participation rates
	4. Provide follow-up support and resources for continued professional growth	Teachers, Professional development coordinators	Year round	Feedback from teachers on usefulness of support
Provide a forum for continued dialogue and cooperation amongst stakeholders	1. Establish regular meetings or forums for stakeholders to discuss SSSS implementation issues	School administrators, Teachers, Community members	Year round	Increased collaboration and communication
	2. Encourage active participation and feedback from all stakeholders	Facilitators, Moderators	Year round	Number of meetings held, attendance rates

	3. Implement mechanisms for collecting and addressing concerns raised during meetings	School administrators, Department of Education	Year round	Timely resolution of issues raised
Give administrators access to mentorship and leadership development programs	1. Identify experienced mentors or leadership coaches to provide guidance and support	Department of Education, Experienced teachers	1 month	Availability of mentors/ coaches, selection criteria
	2. Develop leadership training curriculum focusing on oversight, issue resolution, and inclusivity	Curriculum developers, Leadership trainers	2 months	Completion of curriculum development
	3. Facilitate leadership training sessions	Trainers, Facilitators	Year round	Attendance and participation rates
	4. Provide ongoing support and feedback for administrators' growth and development	Teachers, Professional development coordinators	Year round	Feedback from administrators on usefulness of support
Prioritize areas for resource allocation and usage based on identified needs	1. Conduct comprehensive evaluation of current resource allocation and usage practices	School administrators, Department of Education	2 months	Identification of areas for improvement
	2. Gather input from teachers and administrators on resource needs and challenges	School administrators, Teachers	1 month	Feedback from stakeholders on resource allocation
	3. Develop revised resource allocation plan addressing identified needs and challenges	Resource allocation committee	1 month	Completion of revised resource allocation plan
	4. Implement revised resource allocation plan and monitor effectiveness	School administrators, Department of Education	Year round	Improved access to necessary resources

REFERENCES

Atchuela, C. V. (2019). The extent of the implementation of special science curriculum: The case of Maddela Comprehensive High School. Ascendens Asia Journal of Multidisciplinary Research Abstracts, 3(2M).

Bangcaya, P. S., & Alejandro, G. J. D. (2015). School-related factors contributing to the delivery enhancement of the Special Science Program in Western Visayas, Philippines. European Journal of Science and Mathematics Education, 3(2), 177-184.

Beasley, W. (1999). Meeting the needs of science teachers and students: The Philippines experiment. In Science and Environment Education: Views from Developing Countries (pp. 151-162).

Decenorioa, N. M., Erum, V. O., & Reyes, E. A. (2016). The intended and the implemented curriculum: The case of special science high schools in South Central Mindanao, Philippines. IAMURE International Journal of Education, 18(1), 1-1.

Department of Education. (2010, May 17). DO 55, s. 2010 – Policies and guidelines on strengthening science and mathematics education at the secondary level. https://www.deped.gov.ph/2010/05/17/do-55-s-2010-policies-and-guidelines-on-strengthening-science-and-matematics-education-at-the-secondary-level/

Department of Education. (2022, March 11). *On Philippines' participation in PISA 2022.* https://www.deped.gov.ph/2022/03/11/on-philippines-participation-in-pisa-2022/

Macaranas, C., & Robles, A. C. M. O. (2023). Evaluation on the responsiveness of science technology engineering (STE) program in Region XII, Philippines. East Asian Journal of Multidisciplinary Research, 2(5), 1995-2008.

Madani, R. A. (2020). Teaching challenges and perceptions on STEM implementation for schools in Saudi Arabia. European Journal of STEM Education, 5(1), 3.

Montebon, D. T. (2014). K12 science program in the Philippines: Student perception on its implementation. International Journal of Education and Research, 2(12), 153-164.

National Center for Education Statistics. (n.d.). Program for International Student Assessment (PISA)-Welcome to PISA 2018 results. https://nces.ed.gov/surveys/pisa/pisa2018/

On Philippines' participation in PISA 2022. (2022, March 11). Department of Education. https://www.deped.gov.ph/2022/03/11/on-philippines-participation-in-pisa-2022/

Parojenog, R., & Pabalan, A. P. (2024). Enhancing basic education standards: A framework for quality advancement. Available at SSRN 4801978.

Pahang, A., & Pahang, A. (2023, July 11). DM No. 0322, s. 2023 - DepEd Bohol. DepEd Bohol - In DepEd Bohol, we care for all! https://www.depedbohol.org/?p=47955

Stake, R. E. (1978). The case study method in social inquiry. Educational Researcher, 7(2), 5-8.

Stufflebeam, D. L. (1987). Professional standards for assuring the quality of educational program and personnel evaluations. International Journal of Educational Research, 11(1), 125-143.

Sumardani, D. (2021). Philippines: Strength and weakness of science curricula. SEJ

(Science Education Journal), 5(2), 99-106.
TIMSS International Study Center. (n.d.). TIMSS 2007 international mathematics and science reports. https://timssandpirls.bc.edu/timss2007/intl_reports.html
Tyler, R. W. (2019). The Tyler rationale. In Curriculum windows: What curriculum theorists of the 1950s can teach us about schools and society today (pp. 139).

APA Citation:

Cagas, C. M., & Villocido, V. A. (2024). SPECIAL SCIENCE SCHOOL SYSTEM (SSSS): IMPLEMENTATION AND CHALLENGES. Ignatian International Journal for Multidisciplinary Research, 2(8), 259–281. https://doi.org/10.5281/zenodo.13193564

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

STATUS OF HEALTH PROGRAMS, ACTIVITIES AND CHALLENGES EXPERIENCED OF PERSONS DEPRIVED OF LIBERTY (PDLS) IN THE CORRECTIONAL FACILITIES IN METRO MANILA

Ma. Ellaine Keith F. Dela Paz, Elrick Arnel G. Acevedo, Clover D. Mendoza, Jannah Nicole M. Rosales, Martin Angelo G. Sales, Elwyn Brian Javier, RN, MMEM

College of Nursing, World Citi Colleges, Quezon City, Philippines

https://doi.org/10.5281/zenodo.13292646

ABSTRACT

The health and well-being of Persons Deprived of Liberty (PDLs) in the Philippines are the focus of this nursing research. PDLs encompass individuals in detention facilities awaiting trial, serving sentences, or under various custody forms, reflecting an international commitment to human rights within criminal justice systems. This study evaluates cell conditions, food quality, cleanliness, and overall well-being among PDLs while exploring international best practices to enhance their living conditions and mental health. Concerns such as elevated suicide rates and drug misuse underscore the critical mental health challenges faced by PDLs, exacerbated by prolonged incarceration. By providing insights into these issues, the research aims to inform prison administrators and policymakers on improving PDLs' well-being and treatment. The ultimate goal is to promote a humane and rights-based criminal justice system in the Philippines, thereby enhancing the health and quality of life for PDLs. Emphasizing the importance of comprehensive policies addressing health and well-being across structural and social dimensions, this study advocates for creating a supportive prison environment that prioritizes PDLs' health and facilitates their successful reintegration into society.

Keywords: *Persons Deprived of Liberty, prison conditions, mental health, Philippines, criminal justice reform*

INTRODUCTION

The health of Persons Deprived of Liberty (PDLs) in the Philippines is an urgent matter that has to be addressed. The overall health issues that inmates in the nation deal with

have been the subject of several studies. Persons Deprived of Liberty (PDLs) environment should be a top-tier priority due to the overwhelming crowd inside the prison. Unsafe cells have far-reaching consequences. Prison (un)safety is instrumentally alarming because it implies future increases in criminal reoffending and public health problems. Higher reoffending rates are associated with lower prisoner health and poorer prison living quality (Auty & Liebling, 2020). Furthermore, prison health is public health. Considering the conditions under which they are being held, the persons deprived of liberty (PDLS) are still human and deserves humane treatment. Authorities have deteriorated already inadequate health, preventing access to healthcare and productive activities (Ismail, 2019). PDLs health is deteriorating, which is critical for behavior change and has serious consequences for re-entry results.

Rehabilitation starts at their health changes and strategies how the coping mechanism they have in their environment. Prison systems often neglect physical activities, resulting in unhealthy living conditions due to overcrowding and limited opportunities. Despite this, many inmates who do engage in sports, dancing, and games report significant physical and mental benefits. Research indicates that the psychological and relaxing effects of these activities are positively correlated with participation in games and sports (Baldonado et al., 2022). The prison environment significantly impacts inmates' physical and mental health. Challenges include safety concerns for transgender inmates (Brown, 2014), stigma and anxiety for sexual offenders (Blagden et al., 2014), and overall stress and anxiety due to the restrictive and unease-inducing nature of prison life. The environment also hampers effective communication and access to healthcare, particularly for those with disabilities or special needs (Perrett et al., 2019; Dodd et al., 2022). These conditions hinder social skills and reintegration into society post-release (Januin et al., 2023).

Emotional well-being is crucial for inmates, especially older individuals with mental health conditions (Lima et al., 2022). Studies highlight the importance of addressing the emotional challenges faced by aging prisoners and the need for supportive relationships to enhance self-efficacy and overall well-being (Lorito et al., 2017; Crewe et al., 2013; Noujaim et al., 2017). A comprehensive approach to emotional support within the prison system is necessary. Access to healthcare in prisons is limited by various barriers, including judicial obstacles and the impacts of the war on drugs (Shortis et al., 2022; Beckett et al., 2005). Ensuring community-equivalent healthcare and addressing transitional care between prison and the community are crucial for the well-being and rehabilitation of inmates (Simpson et al., 2021; Abbott et al., 2017).

The availability and accessibility of healthcare facilities within prisons are critical. Spatial accessibility to medical services, including maternity services for women, plays a significant role in ensuring adequate healthcare (Tao et al., 2020; Paynter et al., 2020). Evaluating and improving the distribution of these facilities can help address healthcare disparities (Jin et al., 2019). Providing necessary medical services, especially for managing infectious diseases like HIV/AIDS, is essential (Pedroso et al., 2023). Addressing the physical activities, environmental conditions, emotional wellness, healthcare access, and facility availability in prisons is vital for improving the health and well-being of inmates. This requires a comprehensive and empathetic approach that recognizes the unique needs of different inmate populations.

This study also aims to learn more about the conditions within the cells, the cleanliness of the surroundings, and the well-being of the PDLs. The study also hopes to discover different approaches used by other nations in dealing with situations of this nature, and it hopes to implement any ideas or strategies learned there to aid the Philippines' environment and PDLs. According to a report by the National Library of Medicine, "suicide rates among prisoners are six times higher than those of the general population, raising concerns about their mental health." This is more common for PDLs who have been in jail for more than a year; they claim that they misused drugs for their self-control or to relax; many of them have poor mental health which causes anger, frustration, and anxiety. They also claimed that they misused drugs for their self-control.

Understanding the larger environmental and organizational variables that lead to poor mental health in prisons should be given more thought. Additionally, this data can be utilized to guide administrators and decision-makers in the jail system.

Research Questions

The study generally aims to evaluate and determine the public health challenges faced by the Filipino Persons Deprived of Liberty or PDLs of Metro Manila. Specifically, this research aims to provide answers to the following questions:

1. What is the current state of PDLs in Correctional Facilities in Metro Manila, and its impact to their overall well-being?

2. What healthcare activities are implemented in the Correctional Facilities in Metro Manila?

3. What are the primary obstacles encountered by Persons Deprived of Liberty (PDLs) in the Correctional Facilities of Metro Manila?

4. What are the recommended comprehensive measures and strategies to effectively address the various health concerns of persons deprived of liberty (PDLs) in Metro Manila's correctional system, while promoting a holistic and rehabilitative approach?

METHODOLOGY

The researchers utilized a descriptive qualitative research approach to assess an overview of the current health programs, activities, and obstacles in Metro Manila facilities. Semi-structured interviews were utilized to gather data with the aim to gather valuable insights directly from healthcare professionals, enhancing the understanding of the health-related conditions within the correctional facility. The study followed with a phenomenological design involving coding key concepts, organizing codes into themes, and refining them for meaningful insights, particularly in exploring human experiences and perspectives.

The research locale was conducted within Metro Manila (Parañaque City), Philippines. The study targets Healthcare workers and nurses who have a minimum of one year of experience working with PDLs in correctional facilities, have a comprehensive understanding of the health programs in place, and can provide insights into the well-being of PDLs and officers who have a minimum of one year experience and roles in the day-to-day functioning of the correctional facilities. Their perspectives are essential for understanding the overall conditions within the facilities. Lastly, supervisors and chief wardens hold leadership positions within the facilities. Purposive sampling was used to determine data saturation, guaranteeing a comprehensive representation of diverse perspectives. Data sources, such as healthcare providers and administrators, bolster the study's credibility. The participants are provided with the findings to validate and ensure that their viewpoints are faithfully portrayed.

Furthermore, the research used a Roy's Adaptation Model (1976) framework to interpret the data acquired. Data consists of things that may be assessed based on respondents' perceptions. Before the questionnaire was ready for the interview, the researchers underwent an evaluative assessment, which assured the guided questionnaire's validity with three (3) validators who checked for content adequacy, lack of bias, and relevance. Feedback on potential modifications was encouraged. The documents and authorization letter required for data gathering have been managed.

Before data collection, the researchers sought assistance from the Bureau of Jail Management and Penology in the National Capital Region, Philippines, to reach potential participants. With the assistance of officers and wardens, the researchers found participants needed for data collection. The data-gathering procedure was conducted from April 3rd and April 26th, 2024. For ethical considerations, Informed Consent was given before proceeding with the interview. Finally, the researchers coded key concepts, organized codes into themes, and analyzed the participants' responses.

RESULTS

Comprehensive Wellness rehabilitation program for PDL's

This theme describes the Person Deprived of Liberty (PDL) and the need for proper access to services that can help their health and well-being. The facilities offer activities and programs that address the physical, mental, emotional, and sometimes spiritual needs of the PDLs. Regular exercise and indoor and outdoor sports aim to encourage physical health and teamwork. The monthly Frolics program is arranged to promote social interaction, enjoyment, and closeness through these events. Mental health needs are catered to through therapeutic interventions and counseling sessions, offering support to address psychological needs and personal challenges. The implementation of the livelihood program gives the PDLs opportunities to develop skills and improve their personal lives. These programs provide vocational training and job readiness courses based on the needs of the person by providing PDLs with practical skills. To improve their possibility of finding work and reintegrating into society after they are released. It also

helps build a purpose and self-worth, motivating them to make positive changes in their life.

1. Comprehensive Wellness Rehabilitation Program at the Correctional Facilities in Metro Manila

Table 1. Comprehensive Wellness rehabilitation program for PDL's

Themes	**Subthemes**
Comprehensive Wellness and Rehabilitation	Regular Exercise Regimen
	Monthly Frolics Program
	Scheduled Sport Activities
	Therapeutic Intervention and Community Programs
	Comprehensive Health Strategy
	Counseling and Psychological Interventions
	Variety of Recreational Options
	Comfortable Accommodations
	Routine and Structure
Cultivating Health and Building Resilience	Improved physical health
	Improved mental health
	Positive outlook in life
Holistic Wellness and Engagement Activities	Regular morning exercise and sunning
	Implementation of Livelihood programs
	Sport activities
	Board games for entertainment

As stated by the participant " *Mas hinahanap na nila yung activities kasi nabu-bored sila sa loob ng jail, sa loob ng cell. So, yung mga activities, pag-gising pa lang sa umaga, nagkakaroon na sila ng activities. Exercises, minsan umiikot sila sa loob ng cell, minsan sa buong floor.Tapos, naglilinis, may kanya-kanya silang mga responsibilities. Tapos, after nun, pagkatapos ng mga prayer, yan. So, ano yun, sa psychology, nakakatulong sa kanila yun…Pag dating naman ng gabi, yan pa rin. Madalas, ah, pelikula na naka save, mga movies. Yun. So, yun matakaw sila dyan sa panunood.*" The participant said that PDLs are more likely to look for distractions and activities so they do not get bored throughout the day. Sports are the foundation of a healthy life, and physical activity is necessary for physical and mental health (Warburton & Bredin, 2017) (White et al., 2017).

As stated by Jail Officer "*Meron din naman tayong ginagawa na program every month yan. May naman tayong naka-structured na mga program. And yung mas-awaited na program, yung National Correctional Consciousness Week, it's a one-week na activity yun ng BJMP na parang that is correctional week. Parang foundation day natin…. Every month kasi may mga ano eh, ang tawag dito, meron tayong mga occasions. So as much as possible, meron tayong program per month.* "According to the officer, the more they are engaged in program activities, the less they can think of bad things like running away. Participation in monthly programs and activities encourages social interaction and a sense of building closeness and brotherhood inside (Elena & Nansy, 2022). Regular socializing lessens the feeling of loneliness and isolation and leads to better mental health for the PDLs.

Implemented Health Care Activities in the Correctional Facilities

The following theme describes the Person's Deprived of Liberty (PDL) involvement in holistic and wellness activities. These activities involve implementing various procedures and programs in correctional facilities that address the PDL's overall health. These programs aim to meet patients' mental, emotional, and occasionally spiritual requirements in addition to their physical wellness. Correctional facilities strive to create an environment that supports rehabilitation and personal development by providing access to programs and services that include physical exercise regimens, mental health counseling, educational opportunities, artistic expression outlets, social connection initiatives, and accommodations for diverse spiritual or religious practices. These all-encompassing strategies aim to lower recidivism rates by enabling people to overcome obstacles, create healthy coping strategies, and learn skills that enable a smooth transition back into society.

Balancing Privacy and Practicality explores how to navigate privacy laws to ensure respectful communication and resource access. Breaking Barriers in Facing Stigma and Health Disparities seeks to combat discrimination against (PDLs) and marginalized genders, fostering equality in healthcare. Transparency in restroom design is also promoted. Physical fitness programs and activities encourage paid labor and inclusive sports participation. They also support frequent outdoor activities like sunbathing to improve general health.

2. Health Care Activities

Table 2. Implemented Health Care Activities in the Correctional Facilities

Themes	**Subthemes**
Breaking Barriers in Facing Stigma and Health Disparities	Stigma among PDLs
	Attitude toward marginalized gender
Balancing Privacy and Practicality	Privacy laws
	Consent and communication
	Transparent restroom
Physical fitness activities / program	Sports programs
	Compensated labor
	Regular sunning

Jail Officer in Male Dorm mention about the stigma among PDLs is about HIV and the participant said is ‘’Well basically, *yung rule of law natin na bawal silang ipagkalat, yung confidentiality natin number one yun. And then...With regular, kasi maintenance na kasi ininom nila eh. So continuous, yes continuous yung medications nila. In the follow up check up kasama nila*.” Healthcare providers play a crucial role in the lives of PLHIV, but stigma and discrimination among medical care providers towards HIV patients can hinder effective prevention and treatment efforts (Elamin et al., 2019). Discrimination by healthcare providers, such as administering HIV tests without consent, refusing treatment, or disclosing confidential information, can lead to negative consequences (Dong et al., 2018). Additionally, discrimination due to adolescent HIV can indirectly impact retention in care through increased internalized stigma (Pantelic et al., 2020).

As stated by Jail Officer 2 shares about the attitude toward marginalized gender that *“Uhh, ideally dapat talaga naka-naka-separate ng pdl with special needs Bakit sila nagsama dun sa special needs? Kasi syempre meron silang*
special attention na pwedeng dapat na pinoprovide natin sa kanila so ang mga senior citizen nakahiwalay yan, ang mga kinaklasify kasi natin dito sa jail pagdating na na dito, kinaklasify natin sila. Ito para sa mga petty crimes lang, o mababa lang mga kaso nito. Ito para sa mga gantong age range. Ito para sa mga matataas ang mga kaso nito sa dorm nito.Dito ang mga senior citizens, and PWD para sa sama sila. Sigurong, kinaklasify din natin. Pero with regards to the transgender, hindi natin sinaseperate, nahiwalay. Sinasama natin sila, doon pa rin sa mga cells. Pero if open naman ang jail management,

kung may mga violation against them, halimbawa, may harassment na ginagawa sa kanila".

It is essential to consider the influence of education and prior experiences on attitudes towards marginalized groups, as training programs and exposure to diverse perspectives can help foster more inclusive attitudes (Nayak, 1999; Özkan & Küçükkelepçe, 2019). Additionally, societal attitudes toward gender roles and norms can affect perceptions of marginalized genders, highlighting the importance of promoting egalitarian views (Beji & Murat, 2022; Trogrlić et al., 2020). Factors such as age, gender, and personal experiences have been identified as significant influences on attitudes toward various social issues, including substance use disorders (Abuhammad et al., 2022).

As stated by the Jail officer in the male dormitory, *"Monthly may tinatawag kami ang Frolics. Frolics yung parang... Parang.. Masayang program. Para malibang sila. Then afternoon may schedule kami dito sa taas, sila naglalaro sila ng volleyball, badminton, basketball, and yung mga activities sila dito."* Implementing sports programs in correctional facilities has been shown to impact the physical and mental well-being of incarcerated individuals positively. Research indicates that sports can improve prisoners' general health, emotional management, and self-perception (Arana et al., 2018). Furthermore, sports-based interventions have been found to motivate imprisoned individuals in reentry programs, ultimately aiming to reduce reoffending rates (Meek & Lewis, 2013). These programs promote physical activity and promote health initiatives within prison settings (Meek & Lewis, 2012).

As stated by Jail Officer in Male Dormitory *"From the deped, meron tayong ALS. And ano tesda, pumapasok dito. So they already have the skills bago lumabas."* In the Philippines, providing education to individuals deprived of liberty, such as those in prison, is crucial for rehabilitation and reintegration into society. The Department of Education (DepEd), Commission on Higher Education (CHED), and Technical Education and Skills Development Authority (TESDA) have been recommended to expand their community services to enhance the delivery of the Alternative Learning System (ALS) among incarcerated individuals (Petrola et al., 2022). ALS is a non-formal education program that can help prisoners acquire essential skills and knowledge.

As stated by Chief Jail Nurse Male mentions that *"Yung privacy kasi parang mawawala sa'yo kung ikaw ay nakulong. Paano ba yan? Parang pila-pila ang pag punta sa CR minsan, sabay-sabay pa. I mean, LIGO. Hindi naman yung pupunta sa CR mismo, as in comfort room, sa ligoan. Minsan may oras yung pagligo, minsan sabay-sabay".* In providing a transparent restroom for a person deprived of liberty, it is essential to consider the ethical implications and human rights aspects associated with such facilities. Persons deprived of liberty, whether in prisons, healthcare facilities, or other settings, often face challenges in accessing essential services, including healthcare (Pedroso et al., 2023).

As stated by Jail officer 2 Male Dormitory mentions that "On a regular basis there are sunning as well as sports fest for physical activities". In the context of persons deprived of liberty in the Philippines, engaging in physical activities can be a beneficial and constructive approach. Research has shown that individuals deprived of their liberty often

face challenges related to health, access to proper nutrition, and limited physical exercise opportunities (Hattori et al., 2020). Encouraging physical activity among this population can help address these issues and promote overall well-being. A study conducted in a district jail in the Philippines aimed to determine the types of physical activities available to persons deprived of liberty and their level of satisfaction with these activities (Baldonado et al., 2022). Implementing structured physical activity programs within correctional facilities can improve physical health and contribute to mental well-being and social interaction among inmates.

Chief Jail Nurse Female dormitory mentions that *"May consent siyempre. May consent. Di namin sila pinipinit. Kasi isang ano yun eh, diba bawal."* In the Philippines, obtaining consent for HIV screening among persons deprived of liberty is crucial to uphold their rights and dignity. International human rights laws emphasize the importance of obtaining consent before subjecting individuals to HIV testing. This requirement aligns with the need to respect the liberty and security of individuals, especially those in vulnerable situations such as incarceration (Eba, 2015). Providing healthcare services, including HIV testing and treatment, to persons deprived of liberty is essential for their well-being and is mandated by laws in various countries (Pedroso et al., 2023; Cardoso et al., 2022; Bossonario et al., 2020).

Primary Obstacles encountered by PDLs at the Correctional Facilities in Metro Manila

Within correctional institutions, PDL presents particular healthcare difficulties that need careful attention to protocol enforcement, schedule adherence, and the creation of rules to maintain orderliness. Even with these initiatives, there are still obstacles to receiving healthcare, such as a shortage of specialized clinics, inadequate medical equipment, and budgetary limitations. Court rulings requiring proper medical treatment emphasize how urgent it is to solve these issues. In addition, pregnant people in correctional settings must get compassionate treatment according to the principles of maternal health equity.

According to certain participants, health aid is available inside the cell for them 24 hours a day, and they also mentioned whether or not there was a sick person inside the cell. They added that the PDLs consistently adhered to the facilities' timetable and procedures and always respected the area's cleanliness and regulation. Some participants also mentioned that they did not have enough medicine for PDLs who depended on it for daily requirements. Indeed, the area needs more money to meet PDLs' needs in some areas. Regarding the prenatal checkup, they stated that it is scheduled and that hospital support is always available nearby.

3. Primary Obstacles

Table 3. Primary Obstacles encountered by PDLs at the Correctional Facilities in Metro Manila

Themes	Subthemes
Protocol enforcement	Schedule and routine
	Policy for orderliness
Addressing Healthcare Barriers and Improving Access in Correctional Facilities	Lack of medical equipment
	Lack of clinic
	Court order for adequate medical care
	Financial constraints
Ensuring and Compassionate Care in Maternal Health Equity	Prenatal Checkup
	Lactation area
	Hospital assistance
	Prenatal care is provided in a female dorm

As stated by the participants *"mula 5 o'clock ano na yan start na ng gising nila. Ano na yan start na kami ng zumba. May mga uh personal na ano na rin sila uh breakfast. Uh rest and relaxation, meron na rin silang uh when it comes to relaxation wala talagang uh activity. Ako prefer ko kasi kaya sinasabi ko rin sa kanila na kahit yung sunday meron man lang tayong day in a week na medyo pahinga kayo, lie low kayo sa mga activities para makapahinga rin naman"* The participants said that PDLs are entirely engaged inside the facilities. The cultural program seeks to foster a sense of camaraderie among PDLs, growth of self-confidence, and the sharing of cultural abilities as a constructive kind of entertainment. Dance, music, theater/drama, and art workshops are among the cultural activities permitted for prisoners (BJMP 2024).

Other participants said *" Sa medical supplies. Huwag medicines ma'am ah. Halimbawa, suwero, halimbawa butterfly. Ano lahat to? Ilalapit ko lahat kay Warden. Sir, wala na po tayong ganto." The facilities can provide basic needs for medication or necessary things medical supplies inside the area, but when it comes to more specific medical needs they*

need to notify the warden first, one of the participants said that Lahat naman ng medical needs ng PDL na aattend, kung may kailangan for laboratory, bukas kung yung medical mission kung ano yung nirequest ng doctor, tina triage din namin yun. Kung sino yung sense of urgency, kung urgent pa ba, selective, yun ang ginagawa namin. Kung masakit naman sila, nadadala naman namin sila sa hospital kasi malapit lang yung hospital dito, nadaanan ninyo na yun." It is stated that they can offer medical support to PDLs who require laboratory testing and urgent hospital needs at a doctor's request. If they cannot arrive, they will be admitted to the hospital because the current hospital is quite far away. According to the (BJMP 2024), they offer medical services. PDL health services include illness promotion, prevention, treatment, and rehabilitation interventions. When a PDL is accepted, they have a medical evaluation. During their incarceration, PDLs get regular health monitoring, medical consultations, health education and counseling, and medication, if available. PDLs can exercise and receive daily sun exposure to maintain their physical health.

As stated by the participants *"Prenatal niya. Naka-schedule naman yun. So ano naman yun, Madali na kausap ang court. Naka-schedule na siya. Lahat na ng ating services na available doon sa hospital, dadalhin nalang natin si Buntis."* while the other participants said *"Pagdating sa maternal, prenatal, dinadala namin muna sa barangay. sa barangay muna and then i-endorse ng barangay dyan sa OSPA. Wala kaming namimiss na prenatal minsan pa mas nasasamahan ko yung PDL sa kanyang prenatal kesa dun sa asawa ng sa nag-prenatal." Regarding prenatal care, one of them noted that BJMP never skips a prenatal checkup for PDLs."minsan mas nasasamahan ko yung PDL sa kanyang prenatal kesa dun sa asawa ko"* This indicates that they provided excellent care for PDLs in need of prenatal support. According to one study, the jail should designate a space easily accessible for all required prenatal and postnatal care and treatments. This space can also be used as a nursery suitable for nursing newborns delivered to a mother-PDL, provided that trained staff is present and the facility is always used with the child's best interests in mind (Borlongan, 2021).

Improvement and Referrals

This describes the Person's Deprived of Liberty (PDL) access to health services through facilities and other forms. This involves using correctional facilities' healthcare infrastructure corresponding with treatment standards; certain participants state that they have scheduled routine medication distribution and continuous nursing supervision in every cell with nursing aids available inside to give them the report. Some participants also brought up comprehensive prenatal care and hospital support for their pregnant PDLs. This term encapsulates the idea that pregnant individuals receive thorough and consistent prenatal check-ups, ensuring they receive appropriate medical attention and support leading up to delivery. Additionally, it highlights the importance of hospital assistance in providing necessary care and support during labor, delivery, and the postpartum period, further emphasizing the comprehensive nature of the services provided to pregnant individuals.

4. Recommendation

Table 4.1. Improvement and Referrals

Themes	Subthemes
Modernized and Well-Maintained Facilities	Utilization of appliances for ventilation
	Removal of excess non-essential belongings
	Supply of potable water
Prompt hospital referral for pregnant PDLs	Regular check ups
	Hospital assistance

The infrastructure and environment in which care is delivered from the first line of defense: Their modernized, maintained healthcare units are critical to ensuring that the sick behind bars receive the required attention. They are responsible for on-the-spot general health care needs and addressing emergency medical situations within prisons. Facilities were invested in modernization, using appliances for ventilation and removing excess unessential objects to make the environment or providing potable water alongside an effortful landscaping plan that follows suit with sustainable agriculture principles; they create not only a place where healing and good health can thrive but also someplace where healthy living becomes possible. Through this upgrading work, not only does the quality of care get better, but it also maintains the dignity and rights of the people living there.

Chief Jail Nurse in Female Dorm mentions that "*may mga provided naman ang electric fan dyan. As of now ngayon talaga mainit.*" added by the Jail Officer shares that *"Okay lang, sa ventilation talaga passing through lang yung ano tawag dito, yung air jan. So syempre, iiwasan din natin. Since yun na nga lang yung way of entry and exit ng air within the facility. Kasi kung... So ngayon, especially ngayon, na sobrang init. Talagang... Kailangan yun. Marami lang talaga tayong window. Syaka may canopy. Pero grilled yun. Highly secured naman yun. Naka-double grills yun. Pero yun lang. Iniiwasan lang natin na walang mga blockage doon. Kasi yung iba, nagalagay sila ng... Kung alam niyo yung term na kubol na tinatawag. o parang naggagawa sila ng parang nilalagyan na ng kurtina yung mga cells o yung mga higaan nila yung mga bunks so yun, ina-avoid natin yun tinatanggal natin yun para at least minimize yung ay hindi, ma-ano talaga natin ma-maximize yung flow ng air in yung ventilation Kasi talaga wala talaga tayong magagawa. Nasa Pilipinas tayo alam natin nyan, mainit talaga dito. And syempre hindi rin natin sila pwedeng ganda ng air conditioning system. Number one, that is very… costly yun, very expensive yun on the part of the government. Kasi pinapakain na nga natin sila, alamin na ba kung gaano kalaki ang ginagasos. Actually liability ng government ang mga PDL. Kasi siyempre, pinapakain natin sila. At the same time kung mag-air ka pa sila, dagdag*

pa yun sa cost. So okay na lang nung may mga fan. Inaano natin naman, mayroon tayong mga exhaust fan diyan. Mayroon din tayong mga... mayroon din sila mga fan per dorm. Na talaga enough naman para well ventilated yung air."

As both participants mentioned, the care provided by correctional officers and healthcare professionals plays a significant role in safeguarding inmates' physical and mental health. Several studies have highlighted the importance of adequate healthcare services and the role of officers in ensuring the safety and well-being of individuals in custody. In addition to improving the health of PDLs, attending to these requirements as soon as possible has been shown by studies to lower criminality and, eventually, imprisonment rates. Moreover, Programs that offer support in these areas have been shown to enhance rehabilitation efforts. Furthermore, organizational factors and community involvement are crucial in prisoner rehabilitation and reintegration (Santora & Lillefjell, 2014).

Warden in Female dorm mentions that "*so before ako mag one month nawala na yung mga kurtina kaya nakikita nyo po sila through and through. Nagpatanggal ako ng mga excess as in sobrang dami ng uh di lang gamit, daga. Which is natakot ako. Sabi ko bakit napakaraming daga. As in parang may- may naghahabulan sila in you front talaga. Ang lalaki talaga as in di sila natatakot. Only to find out na napakarami naming gamit sa loob. Napakarami nang excess. Meron ako pinalabas sa kanila na 'ito lang po yung kailangan na nasa jail'. Uh sa ngayon, nasa process pa rin ako kaya ayan mero nyung staff namin. Meron sila na dorm by dorm sila tapos nag account sila 'ano yung gamit mo?' so ito hindi pwede, tanggal. Tapos another one is pag nagge-greyhound kami, everyday may greyhound eh, almost everyday. So pag may nakikita na 'ito hindi dapat to dahil according sa napagusapan' so tatanggalin natin either ipauwi mo sa family mo or.".*

The participants need to be more concerned about considering the impact of overcrowding and clutter on indoor air quality and overall living conditions. Research has shown that overcrowded and cluttered living spaces can lead to poor ventilation, which in turn can contribute to the spread of airborne diseases and increase the risk of respiratory infections among PDLs. Inadequate ventilation in overcrowded residences has been linked to an increased risk of tuberculosis transmission (Ramaliba et al., 2017). To address the issue of poor ventilation in overcrowded and cluttered living spaces, it is essential to implement strategies to improve airflow and air quality. This may include regular cleaning to reduce dust and allergens, decluttering for better air circulation, and ensuring ventilation systems function correctly. In conclusion, overcrowded and cluttered living spaces can lead to poor ventilation, which can have negative implications for the health and well-being of inhabitants. By prioritizing proper ventilation and reducing overcrowding and clutter, it is possible to create healthier indoor environments and mitigate the risks of poor air quality.

A Warden in the Female dorm shared that "*nagrequest din ako sa uh Maynilad, sana ma-approve. Uh nagrequest ako ng fountain. Kasi ano eh ano nga yung tawag dito. Uhm syempre yung tubig dito syempre di naman lahat potable. Uhm ang PDL kung san naman talaga- even tayo matipid diba. Hindi naman lahat yan may kakayanang bumili ng mineral*

water. So kahit saan lang yan iinom. Sa gripo. Eh hindi naman natin sure kung potable yung diba yung nasa gripo. So what we did, isa sa request namin kay Maynilad is baka meron silang mabigay na yung fountain. Kasi uh meron silang uh inapprove sa ano sa ibang- may nalaman kaming inaprubahan nila sa ibang jail".

The participant requested potable water with the assurance of clean, drinkable water to ensure hydration and promote the health of the PDLs. Prisons struggle with inadequate sanitary facilities, dangerous and polluted water supplies, and water scarcity. The lack of access to clean water, overcrowding, and inadequate sanitation facilities have exacerbated the spread of diseases within prison environments (Hout, 2022; Mhlanga-Gunda et al., 2022). The right to clean water is crucial for maintaining the health and well-being of PDLs, and the failure to provide this basic necessity can lead to protests and riots among incarcerated individuals (Mhlanga-Gunda et al., 2022).

Pregnant PDLs receive thorough prenatal care, frequent checkups, and quick access to required medical procedures by placing a high priority on rapid referrals. This supports pregnant people's access to appropriate healthcare, regardless of their circumstances, and also encourages favorable outcomes for both the mother and the fetus.

A Jail Officer shared that "Well*, basically number one would be regular check-up. Regular check-up. Because monitoring the baby is very important. Noh? Including… vaccines hindi lang para sa vitamins really good vitamins" Added by the Chief Health Service that "Ito pag may buntis kami… Kapag may dala dito sa aming buntis… I pre-natal namin sila agad. I-request namin sa court na need ng prenatal checkups, Tapos, ayun. Pag nanganak, yan, tatakbo din namin yun sa hospital. Tapos, yung check-ups nila, ano talaga, kung ano yung date na ano. Talagang follow-up talaga. Meron naman sila."*

Regular check-ups and medical assistance provided by correctional facilities play a crucial role in addressing the healthcare needs of incarcerated individuals. Regular check-ups and hospital assistance for pregnant inmates are crucial to ensure the well-being of both the mother and the developing fetus. Research emphasizes the importance of better policies, enforcement, and standard practices to improve the health and welfare of pregnant incarcerated women (Kelsey et al., 2017). Early and regular prenatal care is highlighted as essential in preventing adverse outcomes for pregnant women (Ssetaala et al., 2020). Additionally, stresses the significance of providing dietary supplements, nutritious meals, and nutritional counseling to incarcerated pregnant women, although adherence to these guidelines in jail facilities may be lacking (Forestell & Dallaire, 2018). Incarceration presents unique challenges in providing healthcare services due to factors such as limited budgets, high inmate turnover, and larger inmate volumes. Despite these challenges, it is essential to streamline care for pregnant inmates to ensure they receive necessary check-ups and assistance during their pregnancy (Yi et al., 2016). Additionally, nursing care plays a significant role in supporting pregnant women during their incarceration and the postpartum period ("Nursing Care of Incarcerated Women During Pregnancy and the Postpartum Period," 2018).

Behavioral Management and Protocol among the PDL Population

Correctional institutions come with conducting behavioral management implemented in the facility among the PDLs that comes with the rules and protocols. This theme describes the protocol management inside the facility with the officers' initiative and the PDLs' cooperation and how they abide by the rules. Creating programs for inmate development to get them ready for their ultimate reintegration into society is the primary goal of the Directorate for Inmates Welfare and Development. The Bureau of Jail Management and Penology (BJMP) implements the Therapeutic Community Modality Program (TCMP), which intends to change people's thinking and behavior through structured processes. The TCMP has four interconnected developmental aspects: behavior management, emotional and psychological, intellectual and psychological, and vocational and survival skills.

Table 4.2. Behavioral Management and Protocol among the PDL Population

Themes	**Subthemes**
Holistic Wellness and Engagement Activities	Regular morning exercise and sunning
	Implementation of Livelihood Programs
	Sport Activities
	Board games for entertainment
Protocol Enforcement	Schedule and routine
	Policy for orderliness
Comprehensive Wellness and Rehabilitation	Regular Exercise Regimen
	Monthly Frolics Program
	Scheduled Sport Activities
	Therapeutic Intervention and Community Programs
	Comprehensive Health Strategy
	Counseling and Psychological Interventions

	Variety of Recreational Options
	Comfortable Accommodations
	Routine and Structure

As stated by one of the participants, *"Oo, meron. Kasi part yun ng TCMP program noh. Pagkagising nila hanggang sa pagtulog nila yun yung TCMP program. So meron silang final accounting dito by 10.30 p.m. So that after that final accounting na 10.30, dapat ano na yun, tulog na silang lahat. Kasi gigising sila the next morning at 5 am. Kasi start na sila ng exercise tapos mag-almusal na sila."*. The participant stated that the PDLs act according to the routines they follow in their daily activities. The routine comprises waking up and sleeping at the scheduled time, doing recreational activities throughout the day, and relaxing in their free time. These activities promote self-growth and self-discipline to improve their well-being in the correctional facility. An increase in the length of physical activities in jail has been recognized as one of the several approaches that will have the most beneficial impact in decreasing inmates' high risks of many diseases and improving prisoners' health and well-being (Mukiza, 2014).

Another participant shared, *"Yung program na yan ay yung therapeutic community modality program or yung TCMP diyan naman kasi ang focus niyan is to address nga yung behavior ng mga PDL natin. So kung halimbawa ay talagang problem sila sa community, kung doon nagkakaroon sila ng parang conflict with the community, conflict with the family, we are trying na i-reassess nila, i-reevaluate nila yung sarili nila through that program para mas mad-discover din nila yung sarili nila. Kasi para siyang ano eh, para siyang… counseling, group counseling isa yun sa ginagawa natin para program dito hindi lang sa focus sa medical condition siyempre holistic kasi tayo dapat diba hindi lang focus tayo sa isang bagay hindi tinitignan din natin yung pwedeng natin maitulong sa kanya holistically kasama dun yung behavior nila psychological, ganyan may mga psychological ano din tayo dito may counseling na ginagawa, may naman psychological interventions especially kung meron sila may psychiatric patients din ano sila so actually iba-iba na pwede ko pang i-discuss na yan pero mostly yun lang naman pa sa ngayon, actually exercise zumba nag - ganyan sila, nag coconduct sila dito ng stress ano tawag dito, stress management every day may stress management sila kasi syempre we know now you are a person deprived of liberty talaga syempre since you are parang separated from your family yung liberty mo talaga wala din, at talagang pinagkait sayo most of our clients stressed sila talagang in the first months or years nalang nalang nandito in denial pa yan, parang ayaw pa nila na… Bat yun, since yun tinatulungan din natin sila holistically, not only medically pero ah mas i-address natin yung consensual condition din."*. The participant shared their approach to how they help the PDLs not just in their health but also in terms of their psychological and emotional well-being. According to BJMP (2024), the program teaches and models positive thinking, pro-social values, sound decision-making, and positive coping. The program teaches the participants how to cope in an environment away from the norm with positive thinking and approach to their life in the

facility through a psychological approach and recreational activities. They deal with the PDLs through counseling and stress management to address their needs.

Another participant stated *"Meron tayong tinatawag na TCMP. Hindi sya- hindi ko sya maconsidered na recreational. Uh pero sya yung parang backbone ng aming buong programs. TCMP stands for Therapeutic Community Modality Program. Lahat ng jails nagaano yan, kaya ala singko pa lang gising na sila kasi nakalagay na yan sa aming schedule. Hanggang pagtulog nila, lahat ng ginawa nila nakabond yan doon sa TCMP namin. So may mga nakalagay don about TV viewing, may oras kami ng panonood, siguro part ng recreational. Meron din sila,hindi lang umaga na zumba. Uh nag-ano kasi kami ng mga over- lalo na yung mga overweight, yung mga ano natin. Uh may additional silang extra uh exercise sa hapon.".* The different recreational activities that are implemented for the PDLs includes morning sunning, zumba, and additional exercise for the overweight PDLs.

Another participant stated the protocol when it comes to orderliness among the PDLs, *"Actually sila-sila mismo sa baba eh kasi pagpasok nila diyan may rule na bawal mag ingay. So kapag kagaling sa personnel, lalo pag galing sa personnel, automatic yan."* The noise pollution in the facility is neutralized by having the rule that they are not allowed to produce any noise that is concerning. The PDLs are disciplined when it comes to orderliness in their dorms.

According to Mukiza (2014), he stated that first, there was a statistically significant decrease in the rate of depression, low levels of worry, stress, boredom, anxiety, aggression, identity loss, remorse, and danger associated with improvement among prisoners who regularly engaged in some form of physical activity compared to those who did not. Second, prisoners who engaged in physical activity markedly improved their social skills and fitness levels. Third, it was revealed that prisoners who engaged in exercise or sport did so for enjoyment, fun, and a good feeling from the activity. He said that engagement in physical activity provides a good outlet for prisoners to think through some of these demands as a way of learning to adapt.

DISCUSSION

The significance of a multimodal rehabilitation strategy that acknowledges the many needs of PDLs and seeks to enable them to live healthier, more purposeful lives both inside and outside of prison. Establishing a welcoming atmosphere in prisons that puts PDLs' overall health first and encourages a smooth transition back into society. In order to guarantee fair access to treatment and assistance, it highlights the necessity of comprehensive policies that target a variety of facets of health and well-being in addition to tackling structural and social barriers. It draws attention to the difficulties and initiatives involved in meeting inmates' healthcare needs, especially those of people who are incarcerated (PDLs).

Ensuring the needs of vulnerable populations are addressed calls for a synchronized holistic approach in the health sector. One of the most ignored populations in health conversations is the First PDLs incarcerated within correctional facilities. Historically, the health of a PDL was associated with negligence, stigmatization, and systematic challenges from the jail environment setup. However, establishing the Comprehensive Wellness Rehabilitation Programs has always been a transformative initiative in advancing the well-being and health of the PDLs. The core of any comprehensive approach is engaging the PDLs with various wellness activities. The viewing of PDLs as intrinsic beings with the right to health facilitates their professional and emotional empowerment. Structured activities, such as exercise, therapy sessions, and creative outlets, offer personal growth and rehabilitation venues within Correctional facilities. Comprehensive Wellness Rehabilitation Programs' success is also based on healthcare that should be distributed through all personnel; not only does the PDL healthcare address concerns early and frequently, but health disparities are mitigated through the assessment and assistance of the habilitation professional. Whether chronic condition management or behavioral health support, Comprehensive Wellness Rehabilitation Programs ensures that no PDL is left behind in pursuing a healthy journey. Healthcare solutions are offered on an affordable, accessible basis. There are also calls for more funds to increase supporting facilities. PDLs no longer need to jump through bureaucratic hoops for essential medical assistance. Instead, they have access to various health services that meet the desired goals; they facilitate timely remedies to enhance overall health and wellness outcomes. Protocol management also contributes to making Comprehensive Wellness programs more well-woven. The latter incorporates the integration of clear criteria and steps necessary for efficient health provision to PDLs. Besides, it resolves the problem of past prisons' perceptions and difficulties and boosts responsibility in service responsiveness.

With the lack of nurses and other healthcare workers in the Philippines, health is crucial in this marginalized group. Health care is often—if not most of the time, overlooked upon persons deprived of liberty as people with a negative perspective of them have influenced it. As student nurses, we must advocate for wellness and create an impact in health care for them, as they also deserve the tender love and care that everybody needs. In this matter, student nurses often choose their field of specialty in areas in the hospital. The researchers consider working as nurses in correctional facilities as it also enhances their skills and broadens their perspective as nurses. Improving nursing skills such as vital signs monitoring, primary emergency care for injuries, pharmacology study, and prenatal care is also essential in caring for PDLs.

Overall, the impact of Comprehensive Wellness Rehabilitation Programs is not limited to correctional facilities. With the introduction of e-visits and online hearings, PDLs can now communicate with loved ones at a distance and eradicate the geographical barriers to access to judicial trials. Increases in sleep rotations, a change in environment, and involvement in purposeful activity all increase the well-being of PDLs, allowing for a greater sense of dignity and identity in extreme conditions.

Therefore, the researchers should stand at the forefront of driving health transformation regarding PDLs. Advocate for implementing and expanding the Comprehensive Wellness Rehabilitation Programs from within the individual capacities in the health disposition. It can play an active part in ensuring that PDLs are adequately taken care of and that their fundamental rights to health and humanity are honored. The Comprehensive Wellness Rehabilitation Programs program offers a ray of hope for PDLs in the penal and incarceration environment. These programs offer a holistic solution by meeting the wellness needs of the PDLs involved and actively encouraging them to participate in ensuring they have a bright and promising life.

Conclusions

Based on the indicated findings, the following conclusions were drawn to show the need to provide individuals deprived of liberty (PDLs) in correctional facilities with comprehensive healthcare. These themes include organizing programs to support mental and physical health and guaranteeing overall well-being and recovery. Furthermore, programs are in place to include PDLs in various health activities to dispel stigma and build resilience. Healthcare evaluation and assistance protocols are prioritized, emphasizing ensuring equity, removing care obstacles, and enforcing procedures. Accessible healthcare is also prioritized through updated facilities, effective referral protocols, and timely medical care. Finally, organized protocols that include routine evaluations and emergency reactions serve as a framework for administering health services in correctional facilities. At some point, these principles protect PDLs' dignity and well-being by promoting a kind and all-encompassing approach to healthcare.

The topics covered in correctional institutions for People Deprived of Liberty (PDLs) emphasize the significance of comprehensive healthcare and behavioral management. The physical, mental, emotional, and behavioral needs of PDLs are all addressed by these activities. For PDLs to be prepared for reintegration into society and to promote recovery, systematic programs—like consistent exercise routines, counseling sessions, treatments, and vocational training—must be implemented. Protocol management in facilities also guarantees respect for laws and regulations, which helps create a secure and encouraging atmosphere favorable to constructive development. This is made possible by the collaboration of officers and PDLs. Targeting behavioral modification through interrelated developmental features, the Bureau of Jail Management and Penology (BJMP) created the Therapeutic Community Modality Program (TCMP) as an example of this method. These programs strive to facilitate rehabilitation, lower recidivism rates, and uphold the dignity and well-being of PDLs in correctional environments by addressing behavioral management and offering chances for personal growth.

Recommendations

After having comprehensively understood the study and outlined the findings identified, the researchers recommend the following solutions be considered:

Future Researchers. The researchers suggest that staff should know the most prevalent hospital patients' conditions and PDLs. Similarly, the well-being of the PDLs should still be a serious consideration. The dignity of every person should be preserved, and treating the PDLs should meet the established ethical standards. The investigation should also be shared, and future topics should be considered. Similarly, the study should be available to a broader audience to prevent misconceptions about the individuals.

Government / BJMP. The researchers recommend increased resource allocation of healthcare staffing, training, and continuous medical education to enhance service quality. Develop some specialized programs like the Parenting and Family Support Program that offer a helping hand to parents, giving them tools and guidance to connect with their kids and become better caregivers. From parenting classes to counseling and supervised visits, strengthening the bond of the PDLs with their family. Self-Assessment and Personal Development Program, a journey of self-discovery and improvement. Through journals, mindfulness activities, workshops, and deep discussions, participants explore their values, strengths, and dreams, paving the way for personal growth and fulfillment.

Strengthen the relationship and partnerships with external health providers, NGOs, and Community-Based Organizations to increase access and improve gap-filling systems. Develop stigma policy programs that cannot segregate or discriminately alert PDLs access and create equitable access to healthcare.

Facilities. The researchers suggest that investment in medical facilities at correctional facilities will improve the healthcare system's infrastructure. In addition to expanding the capacity to handle a larger population of PDLs, improving the infrastructure will create a conducive environment for PDLs.

Public Awareness. The researchers recommend that people talk about their experiences of change during their incarceration, help young individuals avoid criminal acts that they may regret in the future, and help people understand better their different experiences inside the jail and how they cope with those experiences to be better people.

Compliance with Ethical Standards

In conducting the study, ethical considerations were prioritized in conducting the study to ensure the well-being and rights of the participating healthcare workers and officers or wardens. Researchers abide by all relevant laws, rules, and regulations. Before data collection, informed consent is acquired, and participant protection measures are incorporated into the research design.

Additionally, researchers work to optimize any potential rewards from their work. Participation in this research is optional, and individuals retain the freedom to withdraw from the study at any point without facing any negative consequences. The names and identities of study participants will not be disclosed, and all information will be maintained and managed with the highest confidentiality.

Acknowledgements

The researchers would like to acknowledge their sincerest appreciation for their Research Adviser, Mr. Elwyn Brian Javier. The researchers wouldn't have completed this research paper without the support of our beloved Research adviser. The researchers feel thankful for his guidance, expertise, motivation, and help in the creation of this Research Paper.

Similarly, the researchers would like to thank all of the officers, warden and nurses, BJMP especially in Parañaque City Jail, for their cooperation and efforts in assisting us throughout our journey in gathering our data.

We would also like to thank our supportive professors as our research instrument validators Mr. Michael John Agustin**,** Mr. Carlo Roy Roslinda and our ever-supportive professors, Mr. Robert Juanes, Mr. Kevin De Vera for always supporting us in everything we do. we will not make it this far without all of your support, guidance and faith in us.

Lastly, the researchers would like to thank God, without him, the researchers would not have completed this paper. His guidance and glory is what would help the researchers in the near future.

REFERENCES

Abuhammad, S., Hatamleh, R., Alrawashdeh, M., Alrabadi, N., Mukattash, T. L., Abuhammad, M., … & Howard, K. A. S. (2022). Personal attributes and attitudes to substance use disorder: a study among jordanian undergraduate medical majors students. Plos One, 17(2), e0263442. Retrieved from: https://doi.org/10.1371/journal.pone.0263442

Abbott, P., Magin, P., Davison, J., & Hu, W. (2017). Medical homelessness and candidacy: women transiting between prison and community health care. International Journal for Equity in Health, 16(1). Retrieved from: https://doi.org/10.1186/s12939-017-0627-6

Arana, P., Uriarte, M., & Bravo-Cucci, S. (2018). Sports practice as an effective measure for the prevention and treatment of chronic illnesses in prison. Journal of Human Sport and Exercise, 13(4), 963-965. DOI: 10.14198/jhse .2018.134.21.

Auty, K.M., & Liebling, A., (2020) Exploring the Relationship between Prison Social Climate and Reoffending, Justice Quarterly, 37:2, 358-381, DOI: 10.1080/ 07418825. 2018.1538421

Baldonado, N. N., Demot, A. M. L., Villaflores, P. J. A., Dayag, G. G., Buado, E. L., Ramos, C. V., Cruz, G. V. T. D., & Martinez, R. G. (2022). Physical Activity Participation of Persons Deprived of Liberty in Santiago City District Jail, Philippines. Physical Education and Sports: Studies and Research,1(2), 91-106. Retrieved from: https://doi.org/10.56003 /pes sr.v1i2.114

Beckett, K., Nyrop, K., Pfingst, L., & Bowen, M. (2005). Drug use, drug possession arrests, and the question of race: lessons from seattle. Social Problems, 52(3), 419-441. Retrieved from: https://doi.org/10.1525/sp. 2005.52.3.419

Beji, N. K. and Murat, M. (2022). University students' attitudes toward gender roles and infertility: a descriptive and correlational study. Perspectives in Psychiatric Care, 58(4), 2601-2611. Retrieved from: https://doi.org/10.1111/ppc.13100

BJMP focuses on health programs for PDLs. (2019). Manila Bulletin. Retrieved from: https://mb.com.ph/2019/09/27/bjmp-focuses-on-health-programs-for-pdls/

Blagden, N., Winder, B., & Hames, C. (2014). “they treat us like human beings”—experiencing a therapeutic sex offenders prison. International Journal of Offender Therapy and Comparative Criminology, 60(4), 371-396. Retrieved from: https://doi.org/10.1177/0306624x14553227

Bossonario, P. A., Saita, N. M., De Paula Andrade, R. L., Santos, G. P. D., Nemes, M. I. B., & Monroe, A. A. (2020). CARE TO INCARCERTAED PEOPLE WITH HIV/AIDS: LITERATURE REVIEW. Texto & Contexto - Enfermagem, 29. Retrieved from: https://doi.org/10.1590/1980-265x-tce-2018-0324

Borlongan (2022) “Comprehensive Topic On The Treatment Of Pregnant PDLs”.Retrieved from: https://law.upd.edu.ph/wp-content/uploads/2022/06/BJMP Memorandum-Circular-No 122.pdf?fbclid=IwY2xjawD51_tleHRuA2FlbQIxMAABHb1vIACWeszOjRgYIAmqvWPiWRFMoobsV0BdF0mwaXp2owbqLR-fNQxw_aem_FsKZHju33U8pUuTyTnhNKw

Brown, G. R. (2014). Qualitative analysis of transgender inmates’ correspondence. Journal of Correctional Health Care, 20(4), 334-342. Retrieved from: https://doi.org/10.1177/1078345814541533

Crewe, B., Warr, J., Bennett, P., & Smith, A. (2013). The emotional geography of prison life. Theoretical Criminology, 18(1), 56-74;retrieved from https://doi.org/10.1177/1362 480613497778

Dodd, S., Doyle, C., Dickinson, H., Buick, F., & Yates, S. (2022). The forgotten prisoners: exploring the impact of imprisonment on people with disability in australia. Criminology &Amp; Criminal Justice, 24(2), 395-412. Retrieved from: https://doi.org/10.1177/17488958221120895

Dong, X., Yang, J., Peng, L. et al. HIV-related stigma and discrimination amongst healthcare providers in Guangzhou, China. BMC Public Health 18, 738 (2018). Retrieved from: https://doi.org/10.1186/s12889-018-5654-8

Eba, P. (2015). Hiv-specific legislation in sub-saharan africa: a comprehensive human rights analysis. African Human Rights Law Journal,15(2),224-262.Retrieved from: https://doi.org/10.17159/1996-2096/2015/v15n2a1

Elamin, M. O., Rajaa,Y., Adetunji, H. A., Khalid, S., Siddiq, R. (2019) "Stigma and Discrimination Among Health Care Providers Towards People Living with HIV/AIDS (PLWHA)." International Journal of Public Health Science, vol. 8, no. 1, 1 Mar. 2019, pp. 36-44. Retrieved from: doi:10.11591/ijphs.v8i1.17081.

Elena, B. Nancy, P. (2022). Social prescribing: A narrative review of how community engagement can improve wellbeing in later life. Community & applied social psychology. Retrieved from: https://doi.org/10.1002/cas p.2631

Forestell, C.A., Dallaire, D.H. (2018). Pregnant Behind Bars: Meeting the Nutrition Needs of Incarcerated Pregnant Women. In: Lammi-Keefe, C., Couch, S., Kirwan, J. (eds) Handbook of Nutrition and Pregnancy. Nutrition and Health. Humana Press, Cham. Retrieved from: https://doi.org/10.1007/978-3-319-90988-2_16

Hattori, T. Y., Silva, E. d. O., Nascimento, V. F. d., Atanaka, M., & Terças-Trettel, A. C. P. (2020). Risk factors influencing food habits of overweight and obese incarcerated women. ABCS Health Sciences, 45, e020020. Retrieved from: https://doi.org/10.7322/abcshs.45.2020.1366

Hout, M. C. V., (2023) Using COVID-19 to Address Environmental Threats to Health and Leverage for Prison Reform in South Africa, Malawi and Zimbabwe, Journal of Human Rights Practice, Volume 15, Issue 2, July 2023, Pages 477–505. Retrieved from: https://doi.org/10.1093/jhuman /huac050

Ismail, N. (2019). Contextualizing the pervasive impact of macroeconomic austerity on prison health in England: a qualitative study among International policymakers. BMC Public Health. Retrieved from: https://doi.org/10.1186/s12889-019-7396-7

Januin, J., Atin, V. P., Osman, W. H., Ibrahim, M. A., Yakin, H. S. M., Hafidz, M. A., … & Rahman, N. D. A. (2023). Empowering adult inmates with communication needs in an east malaysia prison. Malaysian Journal of Social Sciences and Humanities (MJSSH), 8(3), e002173. Retrieved from: https://doi.org/10.47405/mjssh.v8i3.2173

Jin, M., Liu, L., Tong, D., Gong, Y., & Liu, Y. (2019). Evaluating the spatial accessibility and distribution balance of multi-level medical service facilities. International Journal of Environmental Research and Public Health, 16(7), 1150. Retrieved from: https://doi.org/10.3390/ijerph16071150

Kelsey, C. M., Medel, N., Mullins, C., Dallaire, D. H., & Forestell, C. A. (2017). An examination of care practices of pregnant women incarcerated in jail facilities in the united states. Maternal and Child Health Journal, 21(6), 1260-1266. Retrieved from: https://doi.org/10.1007/s10995-016-2224-5

KÜÇÜKKELEPÇE, A., & AKYOL, A. K. (2019). Examining the Language Development Levels of Children Aged Between 36-72 Months. Recent Studies in Health Sciences, 139.

Lima, C., Banerjee, D., Ayalon, L., Prasad, R., Rothenberg, K., & Rabheru, K. (2022). Ipa and wpa-soap position statement on deprivation of liberty of older persons with mental health conditions. International Psychogeriatrics, 34(11), 949-952. Retrieved from: https://doi.org/10.1017/s1041610222000746

Lorito, C., Völlm, B., & Dening, T. (2017). The individual experience of ageing prisoners: systematic review and meta-synthesis through a good lives model framework. International Journal of Geriatric Psychiatry, 33(2), 252-262. Retrieved from: https://doi.org/10.1002/gps.4762

Meek, R. and Lewis, G. (2012). The role of sport in promoting prisoner health. International Journal of Prisoner Health, 8(3/4), 117-130. Retrieved from: https://doi.org/10.1108/17449201211284996

Meek, R., & Lewis, G. (2013). The Impact of a Sports Initiative for Young Men in Prison. *Journal of Sport and Social Issues*, *38*(2), 95–123. Retrieved from: https://doi.org/10.1177/0193723512472896

Mhlanga-Gunda, R., Rusakaniko, S., Chinyuku, A., Pswarayi, V., Robinson, C., Kewley, S., … & Hout, M. (2022). “we sleep 10cm apart so there is no social distancing”:

covid-19 preparedness in a zimbabwean prison complex. International Journal of Prisoner Health, 19(2), 157-180. Retrieved from: https://doi.org/10.1108/ijph-10-2021-0101
Mukiza, F. (2014). Physical activity and prisoner's health: a qualitative systematic review (Master's thesis, UiT Norges arktiske universitet). Retrieved from: https://hdl.handle.net/10037/6398
Nayak, M. (1999). The influence of gender and personally knowing a victim on medical students' attitudes towards female victims of interpersonal violence. Retrieved from: Medical Principles and Practice, 8(4), 294-300.
Noujaim, D., Fortinsky, R., & Barry, L. (2017). The relationship between emotional support and health-related self-efficacy in older prisoners. Journal of Aging and Health, 31(3), 439-462. Retrieved from: https://doi.org/10.1177/0898264317733363
Nursing Care of Incarcerated Women During Pregnancy and the Postpartum Period. Nurs Womens Health. (2018). 192-194. Retrieved from: https://doi.org/10.1016/S1751-4851(18)30069-2.
Özkan, S. A. and Küçükkelepçe, D. Ş. (2019). Do university students' personality traits affect their attitudes towards gender roles?. Perspectives in Psychiatric Care, 55(4), 562-569. Retrieved from: https://doi.org/10.1111/ppc.12375
Pantelic M, Casale M, Cluver L, Toska E, Moshabela M. Multiple forms of discrimination and internalized stigma compromise retention in HIV care among adolescents: findings from a South African cohort. J Int AIDS Soc. 2020 May;23(5):e25488. Retrieved from: https//doi.org/10.1002/jia2.25488 PMID: 32438498; PMCID: PMC7242009.
Paynter, M., Bagg, M., & Heggie, C. (2020). Invisible women: correctional facilities for women across canada and proximity to maternity services.International Journal of Prisoner Health, 17(2), 69-86. Retrieved from: https://doi.org/10.1108/ijph-06-2020-0039
Pedroso, A., Cardoso, L., Tarragó, N., Viero, C., Cabral, T., & Costa, V. (2023). Persons deprived of liberty: viral load control for hiv/aids serology. International Journal of Health Science, 3(33), 2-10. Retrieved from: https://doi.org/10.22533/at.ed.1593332302054
Perrett, S. E., Plugge, E., Conaglen, P., O'Moore, É., & Stürup-Toft, S. (2019). The five nations model for prison health surveillance: lessons from practice across the uk and republic of ireland. Journal of Public Health, 42(4), e561-e572. Retrieved from: https://doi.org/10.1093/pubmed/fdz122
Petrola, J. P. J., Isidro, R., & Oberio, R. F. (2022). Conquering the experiences of pain, boredom and despair among selected incarcerated mothers through alternative learning system activities. International Journal of Public Health Science (IJPHS), 11(1), 303. Retrieved from: https://doi.org/10.11591/ijphs.v11i1.21067
Ramaliba, T., Tshitangano, T. G., Akinsola, H., & Thendele, M. (2017). Tuberculosis risk factors in lephalale local municipality of Limpopo province, South Africa. South African Family Practice, 59(5), 182-187. Retrieved from: https://doi.org/10.1080/20786190.2017.1304734
Santora, L. and Lillefjell, M. (2014). Health promotion and prison settings. International Journal of Prisoner Health, 10(1), 27-37. Retrieved from:

https://doi.org/10.1108/ijph-08-2013-0036
Shortis, E., Newton-Clarke, A., Verma, A., Allen, D., Viola, E., & Metcalfe, N. (2022). Reforming dols: liberty protection safeguards. Postgraduate Medical Journal, 99(1173), 788-793. Retrieved from: https://doi.org/10.1136/pmj-2022-141611
Simpson, P., Guthrie, J., Jones, J., & Butler, T. (2021). Identifying research priorities to improve the health of incarcerated populations: results of citizens'juries in australian prisons. The Lancet Public Health, 6(10), e771-e779. Retrieved from: https://doi.org/10.1016/s2468-2667(21)00050-5
Ssetaala, A., Nabawanuka, J., Matovu, G., Nakiragga, N., Namugga, J., Nalubega, P., … & Degomme, O. (2020). Antenatal care practices among hard-to-reach fishing communities on lake victoria: a community-based cross-sectional survey. Journal of Primary Care &Amp; Community Health, 11, 215013272092310. Retrieved from: https://doi.org/10.1177/2150132720923101
Tao, Z., Cheng, Y., & Liu, J. (2020). Hierarchical two-step floating catchment area (2sfca) method: measuring the spatial accessibility to hierarchical healthcare facilities in shenzhen, china. International Journal for Equity in Health, 19(1). Retrieved from: https://doi.org/10.1186/s12939-020-01280-7
Trogrlić, A., Oljača, M., Mitrović, D., & Marčeta, N. (2020). GENDER, SOCIOSEXUAL ORIENTATION, AND PERSONALITY TRAITS AS PREDICTORS OF ATTITUDES TOWARDS SEX. Primenjena Psihologija, 13(2), 149–167. Retrieved from: https://doi.org/10.19090/pp.2020.2.149-167
Warburton, D. E. R., and Bredin, S. S. D. (2017). Health benefits of physical activity: a systematic review of current systematic reviews. Curr. Opin. Cardiol. 32, 541–556. Retrieved from: https://doi:10.1097/HCO.00000 00000000437
White, R. L., Babic, M. J., Parker, P. D., Lubans, D. R., Astell-Burt, T., and Lonsdale, C. (2017). Domain-specific physical activity and mental health: a meta-analysis. Am. J. Prev. Med. 52, 653–666. Retrieved from: https://doi: 10.1016/j.amepre.2016.12.008
Yi, Y., Turney, K., & Wildeman, C. (2016). Mental health among jail and prison inmates. American Journal of Men's Health, 11(4), 900909. Retrieved from: https://doi.org/10.1177/1557988316681339

APA Citation:

Dela Paz, M. E. K. F., Acevedo, E. A. G., Mendoza, C. D., Rosales, J. N. M., Sales, M. A. G., & Javier, E. B. (2024). STATUS OF HEALTH PROGRAMS, ACTIVITIES AND CHALLENGES EXPERIENCED OF PERSONS DEPRIVED OF LIBERTY (PDLS) IN THE CORRECTIONAL FACILITIES IN METRO MANILA. Ignatian International Journal for Multidisciplinary Research, 2(8), 710–734. https://doi.org/10.5281/zenodo.13292646

Corresponding author: *ellainkeithdelapaz@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

STRATEGIC ADAPTATION IN THE MODERN ERA: LEVERAGING INTERNAL AUDITOR FOR ENHANCED RISK MANAGEMENT IN ORGANIZATIONAL CHANGE

Antonette Recodig Ranara, Erwin Babaran Quendangan, MBA, PhD

School of Graduate Studies, AMA University, Quezon City, Philippines

https://doi.org/10.5281/zenodo.13270761

ABSTRACT

In today's rapidly evolving business environment, marked by technological advancements and dynamic market conditions, organizations must continually adapt to remain competitive and sustainable. This study investigates the crucial role of internal auditors in facilitating strategic adaptation through enhanced risk management during organizational change. By leveraging their unique skills and capabilities, internal auditors can effectively identify, assess, and mitigate risks associated with strategic transformations. The research employed a quantitative approach with a Likert scale design to evaluate internal auditors' contributions, assess the effectiveness of to enhance their capabilities, and identify factors influencing strategic adaptation. A sample of 101 internal auditors, selected using stratified sampling, participated in the study. Data collection involved structured questionnaires, unstructured interviews, and online research, with a pilot test conducted for refinement. Accurate statistical methods provided robust conclusions and informed recommendations. Results indicated that respondents strongly agreed on the high effectiveness of internal auditors in risk management, enhancing Kotter’s 8 steps in organizational change. Key components on Training and Professional Development, Utilization of Related Technology, Collaboration and Communication, and Regular Risk Assessment and Feedback Mechanisms were rated as extremely effective, giving management flexible and affordable implementation options. Additionally, factors influencing the need for strategic adaptation were found to have a very high overall influence, highlighting the necessity of prioritizing these efforts to maintain effective risk management in the face of technological advancements and organizational change. Implementing the recommendations will help organizations

establish a solid foundation for effective risk management, strategic adaptation, and sustainable growth. Although the exact relationship between internal factors and risk identification components may be uncertain, improving these areas will enhance organizational resilience and readiness for future challenges.

Keywords: *Modern Era, Internal Auditor, Risk Management, Organizational Change, Technological Advancement*

INTRODUCTION

In the contemporary business environment, characterized by rapid technological advancements and dynamic market conditions, organizations face increasing pressure to adapt and innovate to maintain competitiveness and sustainability. This study, investigates the pivotal role of internal auditors in facilitating strategic adaptation during organizational change. By examining how internal auditors can enhance risk management practices, this research aims to address significant gaps in the current literature and provide actionable insights for organizations navigating technological transformations.

Technological advancements such as artificial intelligence, automation, and digital platforms have profound implications for organizational structures, processes, and cultures (Smith & Johnson, 2023). These innovations necessitate comprehensive risk management strategies to mitigate potential disruptions and leverage new opportunities. Internal auditors, traditionally seen as guardians of financial integrity, are increasingly recognized for their strategic role in assessing and managing risks associated with technological change (Garcia & Thompson, 2024). However, there remains a gap in understanding the specific contributions of internal auditors in the context of organizational change driven by technological advancements.

The impact of technological advancements on organizational change management is well-documented. Smith and Johnson (2023) highlight the challenges and opportunities posed by emerging technologies, emphasizing the need for effective change management strategies. Generational dynamics further complicate this landscape, as different cohorts perceive and respond to change differently (Chen & Davis, 2022). Leadership plays a crucial role in guiding organizations through digital transformations, with effective communication and collaboration being key (Garcia & Thompson, 2024). Risk management practices are also evolving in response to technological advancements. Wang and Smith (2023) explore how technologies like artificial intelligence and blockchain influence risk management during organizational change, underscoring the need for adaptive strategies. Additionally, Lee and Johnson (2022) examine how generational dynamics impact risk perception and management, highlighting the importance of tailored communication strategies. Internal auditors are at the forefront of these changes, adapting their roles to address new challenges. Zhang and Patel (2023) investigate how internal auditors navigate technological advancements

and generational dynamics, while Wang and Lee (2022) explore the integration of technology in internal audit practices. These studies suggest that internal auditors' expertise in risk assessment and their ability to leverage technology are crucial for effective risk management in the modern era.

Despite the extensive research on technological advancements and risk management, there is a notable gap in understanding how internal auditors specifically contribute to strategic adaptation during organizational change. This study aims to fill this gap by exploring the enhanced role of internal auditors in managing risks associated with technological transformations. The timeliness of this topic is underscored by the ongoing digital revolution and the need for organizations to remain agile and resilient.

By focusing on the strategic integration of internal audit practices with organizational change initiatives, this research proposes an innovative framework that leverages internal auditors' capabilities to support and enhance Kotter's 8 steps for successful organizational change. The study's findings will provide practical insights and recommendations for organizations seeking to improve their risk management practices during periods of technological change. Recent literature refines Kotter's influential model for organizational change, highlighting the importance of data-driven urgency (Reissner, 2021), diverse coalitions for risk mitigation (Mantere & Vaara, 2020), agile strategies (Kotter & Scharmer, 2020), advanced communication (Gandz, 2022), digital empowerment (Fleming & Spicer, 2020), rapid experimentation for quick wins (Jones & Linder, 2021), embedding risk management in culture (Champoux & Peters, 2020), and fostering innovation and risk-taking (Bouckenooghe et al., 2023). However, there is a significant research gap regarding the role of internal auditors in identifying, assessing, and mitigating risks at each step of Kotter's model. This study is timely and relevant due to the rapid pace of technological advancements and complex organizational environments, aiming to enhance internal auditors' capabilities in strategic adaptation and risk management, thus ensuring organizational resilience and competitiveness.

In conclusion, this research contributes to the existing body of knowledge by addressing a significant gap in the literature, offering timely and relevant insights, and proposing a new approach to leveraging internal auditors for enhanced risk management in organizational change.

Research Questions

In this study, the focus is on exploring and enhancing the role of internal auditors in managing risks and supporting strategic adaptation during organizational change. Rather than framing the research around primary and sub-questions, the study adopts a set of research objectives to comprehensively address the various dimensions of this topic. The objectives provide a structured approach to investigate the capabilities of internal auditors, the influence of technological advancements, and the internal factors affecting strategic adaptation. This objective-driven approach allows for a thorough examination of the complexities involved, enabling a more detailed and actionable understanding of how internal auditors can optimize their contributions in dynamic business environments.

To explore how internal auditors can enhance risk management during organizational change by leveraging technological advancements and strategic adaptation.

1. To determine the demographic profile of internal auditors, including age, years of experience as auditor, and gender, and examine how these factors might affect their effectiveness in risk management.
2. To evaluate the contributions of internal auditors in identifying, assessing, and mitigating risks during organizational change, and assess the impact of technological advancements on these contributions.
3. To identify the capabilities of internal auditors that need strengthening in the context of:

    - Training and professional development
    - Utilization of technology
    - Collaboration and communication
    - Regular risk assessment and feedback mechanisms

4. To determine the internal factors influencing the need for strategic adaptation during organizational change, such as:

    - Workplace environment
    - Skills assessment
    - Leadership alignment
    - Technological advancement
    - Change management

5. To investigate the relationship between risk identification components and internal factors influencing strategic adaptation.
6. To apply research findings to develop or enhance a framework that aligns the role of internal auditors with organizational change and strategic adaptation in the modern era

METHODOLOGY

The study was conducted in various organizations across different industries, focusing on those undergoing significant organizational change due to technological advancements. Specific details regarding the institutions involved are withheld to maintain confidentiality. Stratified sampling was employed to ensure representation across different organizational roles within the internal audit function. This method helps in capturing diverse perspectives and experiences relevant to the study. The respondents consisted of 101 internal auditors selected through the sampling process. They varied in terms of age, gender, years of experience, and organizational roles. Demographic data were collected to understand how these factors might influence perceptions and practices related to risk management during organizational change. Data were collected using structured surveys questionnaires supplemented by unstructured interviews. The survey instrument included items designed to assess the effectiveness and of the of internal auditors in managing risks associated with organizational change, and internal factors influencing the need for strategic adaptation. The questionnaire utilized a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." Prior to full implementation, a pilot test was conducted with 21 internal auditors to refine the questionnaire for clarity and coherence. The survey instrument comprised 30 items addressing various aspects of internal auditors' roles and capabilities in risk management during organizational change. The questionnaire was researcher-designed based on a comprehensive review of relevant literature and prior research. It aimed to capture perceptions on internal auditors' effectiveness, the impact of technological advancements, and strategies for enhancing risk management practices. Quantitative data analysis involved descriptive statistics such as frequencies, percentages, weighted mean, and standard deviation, to summarize survey responses, data distribution, provides an average considering varying importance, measures data spread, and gauges overall sentiment or consensus and correlation analysis to explore relationships between variables.

The scope of the study focused on the internal auditors' contributions to risk management in the context of organizational change driven by technological advancements. Limitations included potential response bias in self-reported data and the generalizability of findings beyond the sampled organizations. The study did not address specific proprietary information or disclose identifiable details of participating institutions due to confidentiality agreements.

RESULTS

Figure 1: *Respondents as to Gender*

Gender	*f*	*%*	*Rank*
Male	47	47%	2
Female	50	50%	1
LGBTQ	3	3%	3
Prefer not to disclose	1	1%	4
Total	**101**		

Figure 2: *Respondents as to Age*

Age Range	***f***	***%***	***Rank***
20 below	0	0%	8
20 to 25	2	2%	7
26 to 30	12	12%	6
31 to 35	18	18%	3
36 to 40	14	14%	5
41 to 45	21	21%	1
46 to 50	19	19%	2
Above 50	15	15%	4
Total	101		

Figure 3: *Respondents as to Year of Experience as Auditor*

Age Range	***f***	***%***	***Rank***
Less than 1 year	0	0%	5
1 to 3 years	6	6%	4
4 to 6 years	14	14%	3
7 to 9 years	28	28%	2
More than 10 years	53	52%	1

Figure 4: Internal Auditors Contribution

Internal Audit Contribution	**Mean**	**Standard Deviation**	**Net Agreement Rating**
Risk Identification	4.91	0.31776	99.01
Risk Assessment	4.97	0.169767	100.00
Risk Mitigation	4.96	0.195027	100.00
Providing recommendations	4.97	0.169767	100.00
Collaborating with stakeholders	4.95	0.258566	99.01

Figure 5: The effectiveness of the following components to strengthen the capabilities of the internal auditors in identifying, assessing and mitigating risk

1. Training and Professional Development	**Mean**	**Net Agreement Rating**	**Verbal Interpretation**	**Rank**
A. Organizational Culture	4.99	100.00	Extremely Effective	1
B. Flexibility and Agility	4.95	100.00	Very Effective	4
C. Employee Empowerment and Engagement	4.98	100.00	Extremely Effective	2

D. Employee Skills and Training	4.99	100.00	Extremely Effective	1
E. Physical workspace design and layout	4.96	99.01	Very Effective	3
2. Utilization of Related Technology				
A. Data Analytics and Business Intelligence Tools	4.99	100.00	Extremely Effective	1
B. Artificial Intelligence (AI) and Machine Learning (ML)	4.95	99.01	Very Effective	3
C. Robotic Process Automation (RPA)	4.95	99.01	Very Effective	3
D. Blockchain Technology	4.97	100.00	Extremely Effective	2
E. Cybersecurity Tools and Technologies	4.97	100.00	Extremely Effective	2
3. Collaboration and Communication				
A. Regular Team Meetings	4.97	100.00	Extremely Effective	3
B. Collaboration and Communication Platforms	4.99	100.00	Extremely Effective	1
C. Brainstorming and Problem-Solving	4.98	100.00	Extremely Effective	2
D. Knowledge Sharing Platforms	4.95	100.00	Extremely Effective	4
E. Survey and Polling Tools	4.94	99.01	Very Effective	5
4. Regular Risk Assessment and Mitigation				
A. Comprehensive Risk Identification	4.97	100.00	Extremely Effective	2
B. Scenario Planning and Sensitivity Analysis	4.97	100.00	Extremely Effective	2
C. Risk Quantification	4.97	99.01	Very Effective	3
D. Continuous Improvement	4.98	100.00	Extremely Effective	1
E. Integration of Technology in Audit Procedures	4.97	100.00	Extremely Effective	2
5. Feedback Mechanism				
A. Open Communication Channels	4.98	100.00	Extremely Effective	1
B. Peer Reviews and Knowledge Sharing	4.96	100.00	Extremely Effective	3

C. 360-Degree Feedback	4.97	100.00	Extremely Effective	2
D. Performance Metrics and Key Performance Indicators	4.94	99.01	Very Effective	4
E. Feedback Integration into Audit Processes	4.93	99.01	Very Effective	5

Figure 6: Internal factors influencing the need for strategic adaptation in the workstation.

1. Workplace Environment	**Mean**	**Net Agreement Rating**	**Verbal Interpretation**	**Rank**
A. Organizational Culture	4.90	98.02	High Influence	5
B. Flexibility and Agility	4.96	99.01	High Influence	3
C. Employee Empowerment and Engagement	4.95	99.01	High Influence	4
D. Employee Skills and Training	4.97	100.00	Very High Influence	1
E. Physical workspace design and layout	4.84	100.00	Very High Influence	2
2. Skill Assessment				
A. Innovations and Creativity	4.89	100.00	Very High Influence	3
B. Skills gap analysis	4.97	100.00	Very High Influence	1
C. Technology Literacy	4.97	99.01	High Influence	4
D. Recruitment and talent acquisition strategies	4.79	95.05	High Influence	5
E. Diversity and Inclusion	4.90	100.00	Very High Influence	2
3. Leadership Alignment				
A. Vision and direction	4.99	100.00	Very High Influence	1
B. Understanding of Technology Trends	4.97	100.00	Very High Influence	2
C. Commitment to Innovation	4.98	99.01	High Influence	4
D. Alignment of leadership styles with organizational culture	4.84	99.01	High Influence	5
E. Resource Allocation	4.86	100.00	Very High Influence	3
4. Technological Advancement				

A. Integration of new technologies into business processes	4.91	100.00	Very High Influence	1
B. Pace of Change	4.81	99.01	High Influence	5
C. Cybersecurity Risk	4.90	100.00	Very High Influence	2
D. Ethical and Social Implication	4.85	99.01	High Influence	4
E. Disruptive Innovation	4.90	99.01	High Influence	3
5. Change Management				
A. Change readiness assessment	4.89	98.02	High Influence	**3**
B. Stakeholder engagement strategies	4.89	97.03	High Influence	**5**
C. Training and Skill Development	4.89	98.02	Very High Influence	**4**
D. Culture and Behavior Change	4.89	99.01	High Influence	**2**
E. Continuous improvement and feedback loops	4.97	100.00	Very High Influence	**1**

Figure 7: Significant relationship between the components of identifying risk in the organizational change and the internal factors that influence the need for strategic adaptation.

Internal Factors	Mean	Rank	Components	Mean	Rank	D1	D^2
Workplace Environment	4.92	2	Training and Professional Development	4.97	2.5	0.5	0.25
Skills Assessment	4.9	4	Utilization of Related Technology	4.97	2.5	1.5	2.25
Leadership Alignment	4.93	1	Collaboration and Communication	4.97	2.5	1.5	2.25
Technological Advancement	4.88	5	Regular Risk Assessment and Mitigation	4.97	2.5	2.5	6.25
Change Management	4.91	3	Feedback Mechanism	4.96	5	2	4
						Total	15

Spearman's Rank Correlation Coefficient(rs)	Alpha, Significance Level (α)	Degrees of Freedom (df)	T-Statistic (t)
1.25	0.05	3	0.4472

DISCUSSION

The data on figure number 4 regarding the contribution of internal auditor reveals a highly positive perception of internal audits' contributions to risk management, with respondents overwhelmingly agreeing on their significant role in risk identification, assessment, mitigation, and providing recommendations. The low standard deviation indicates a strong consensus among respondents, reinforcing the positive feedback. With net agreement ratings reaching 100% for key areas, there is near-universal endorsement of internal audits' effectiveness. This strong agreement underscores internal audits' critical role in enhancing risk management and stakeholder collaboration during organizational change, particularly in the context of technological advancement.

The data on figure number 5 regarding the effectiveness of the components to strengthen the capabilities of the internal auditors in identifying, assessing and mitigating risk associated with organizational change considering technological advancement evaluates various components essential for enhancing the capabilities of internal auditors in managing risks associated with organizational change, especially in the context of technological advancements. It covers training and professional development, technological tools, collaboration and communication, and feedback mechanisms.

Organizational culture and continuous employee training are identified as the most effective components in strengthening internal auditors' capabilities. A strong organizational culture fosters an environment where auditors feel supported and aligned with company values, crucial for managing risks during technological changes. Similarly, continuous training equips auditors with up-to-date skills to handle evolving risks effectively. Empowering and engaging employees also plays a significant role by making auditors more proactive and adept at applying their knowledge to risk management. Although slightly less critical, the design of physical workspaces enhances productivity and collaboration, supporting auditors' ability to manage risks.

Technological tools are crucial in supporting internal auditors. Data analytics and business intelligence tools are rated as the most effective, enabling efficient processing and analysis of large data volumes to identify risks and trends. Blockchain technology and cybersecurity tools are also highly effective, providing transparency, security, and protection against cyber threats. AI and ML technologies are valued for their advanced analytical capabilities, while Robotic Process Automation (RPA) is recognized for automating repetitive tasks, allowing auditors to focus on more complex risk management activities.

Collaboration and communication are fundamental to effective internal auditing. Collaboration platforms, brainstorming sessions, and regular team meetings are deemed extremely effective in facilitating seamless interaction and collective problem-solving. Knowledge sharing platforms also play a crucial role in continuous learning and adapting to technological changes. Survey and polling tools, while slightly less critical, contribute significantly to understanding stakeholder feedback and enhancing communication within the audit process.

Continuous improvement is rated as the most effective, ensuring that risk management processes are regularly reviewed and enhanced. Comprehensive risk identification is crucial for detecting all potential risks, providing a solid foundation for subsequent efforts. Scenario planning and sensitivity analysis help auditors prepare for various contingencies, enhancing their ability to manage risks. Integrating technology into audit procedures and risk quantification are also vital, enabling more efficient risk assessment and prioritization.

Feedback mechanisms are vital for continuous improvement in internal auditing. Open communication channels are the most effective, fostering transparent dialogue and timely feedback. Peer reviews and knowledge sharing are also highly effective, encouraging collaborative learning and refinement of risk management techniques. The 360-degree feedback mechanism provides a comprehensive view of an auditor’s performance, while performance metrics and KPIs, though slightly less impactful, are essential for setting standards and monitoring progress. Integrating feedback into audit processes is crucial for implementing improvements based on feedback.

Overall, the high ratings across all components reflect strong agreement on their effectiveness in enhancing internal auditors' capabilities. The emphasis on organizational culture, training, and employee engagement underscores their importance in managing risks associated with technological advancements. Technological tools, effective collaboration and communication, and robust feedback mechanisms are all crucial for supporting auditors in adapting to and mitigating risks in a rapidly changing environment.

The data on figure number 6 regarding Internal factors influencing the need for strategic adaptation in the workstation evaluates the influence of various components of the workplace environment, skill assessment, leadership alignment, technological advancement, and change management in influencing the need for strategic adaptation in the workstation. Each component is assessed based on mean scores, net agreement ratings, and verbal interpretations, with employee skills and training being highlighted as the most effective workplace environment component. Continuous skill development programs equip employees with the knowledge and competencies required to navigate technological advancements, emphasizing the importance of investing in employee development to manage risks associated with organizational change effectively.

Skill assessment identifies and leverages internal auditors' capabilities, particularly during organizational change and technological advancements. Skills gap analysis is crucial for determining specific skills and competencies lacking within the organization,

enabling the development of targeted training programs. Diversity and inclusion bring varied perspectives and innovative ideas critical for effective risk management and problem-solving. Encouraging innovation and creativity within the organization supports strategic adaptation, while technology literacy ensures employees can effectively use new technologies. Recruitment strategies, although rated lower, remain influential for building an adaptable workforce.

Leadership alignment is critical for guiding organizations through change and ensuring successful strategic adaptations, especially with technological advancements. Clear vision and direction from leadership are essential, alongside a deep understanding of technology trends to inform decision-making. Effective resource allocation supports strategic initiatives, and a commitment to innovation drives the development of new solutions to manage technological risks. Aligning leadership styles with organizational culture facilitates smoother transitions and greater acceptance of changes.

Technological advancement significantly drives organizational change, with the integration of new technologies into business processes being the most influential component. Effective integration enhances efficiency and productivity, ensuring competitiveness and minimal disruption. Cybersecurity risk is crucial due to increased threats from new technologies, requiring robust measures to protect assets and maintain trust. Disruptive innovation challenges existing business models, necessitating quick adaptation. Ethical and social implications must be considered for positive reputation and compliance, while the rapid pace of technological change requires agile and responsive strategies.

Effective change management is essential for navigating organizational change complexities, particularly with technological advancements. Continuous improvement and feedback loops are the most influential components, emphasizing ongoing evaluation and process enhancement. A supportive organizational culture and adaptive behavior are critical for fostering an environment that embraces change, mitigating resistance, and promoting smooth transitions. Assessing change readiness evaluates an organization's capacity to handle change, identifying potential barriers and areas needing support. Well-designed training programs enhance employee competency and confidence, facilitating adaptation to new challenges.

Engaging stakeholders is crucial for successful change management, involving them in the change process to build support, address concerns, and consider all relevant insights. Effective stakeholder engagement, while slightly lower in ranking, remains essential for comprehensive change management. Overall, these components collectively influence the need for strategic adaptation in the workstation, ensuring organizations effectively manage risks associated with organizational change and technological advancements.

The data on figure number 6, The calculated t-value (0.4472) is compared to the critical t-value from the t-distribution table at df=3 df = and α=0.05. The critical value for a two-tailed test with df = 3 at α=0.05 is approximately 3.182. Since the calculated t-value

(0.4472) is less than the critical value, it indicates that the correlation is not statistically significant to conclude that there is a relationship between internal factors influencing strategic adaptation and components of identifying risk.

Conclusions

The study conclusively demonstrates that internal auditors play an indispensable role in safeguarding organizations against risks during periods of change. Their ability to adapt and leverage modern tools and practices positions them as key contributors to organizational resilience and success in the dynamic business landscape of the modern era. The extremely positive feedback from respondents affirms the importance of these strategies, providing a clear roadmap for enhancing risk management through effective internal auditing practices. Ultimately, it is up to the management to decide which measures are most applicable and affordable for their organization, ensuring that risk management practices are tailored to their specific needs and constraints.

By implementing the recommendations, organizations can build a robust foundation for effective risk management, strategic adaptation, and sustainable growth. While the specific relationship between internal factors and risk identification components may not be definite, strategic improvements in these areas can collectively strengthen organizational resilience and readiness for future challenges. Continual evaluation and adaptation of strategies will be essential in maintaining competitive advantage and achieving long-term success

Recommendations

To enhance the capabilities of internal auditors in managing risks associated with technological advancements, organizations should focus on cultivating a strong organizational culture and investing in continuous training programs that emphasize the latest technological trends and risk management techniques. Employee engagement should be enhanced through initiatives that empower and motivate auditors to proactively contribute to risk management. Additionally, prioritizing the integration of advanced data analytics, business intelligence tools, blockchain, and cybersecurity technologies will improve data processing, transparency, and security. Leveraging AI, machine learning, and RPA can further enhance predictive analytics and automate routine tasks, allowing auditors to concentrate on strategic risk management. Promoting collaboration and communication through robust platforms, regular brainstorming sessions, team meetings, and knowledge-sharing initiatives will foster innovative thinking and problem-solving. Finally, fostering a culture of continuous improvement and implementing transparent feedback mechanisms, including 360-degree feedback and peer reviews, will ensure auditors are continuously developing and adapting to new challenges. By implementing

these strategies, organizations can significantly strengthen their internal audit function, making it more resilient and effective in the face of technological advancements.

To progress strategic adaptation and effectively manage risks associated with technological advancements, organizations should focus on several key areas. Investing in comprehensive training programs will ensure employees stay updated on the latest technological advancements and best practices, fostering continuous learning and professional development. Creating a flexible and agile work environment is crucial, along with implementing agile methodologies to streamline processes. Empowering and engaging employees by promoting a culture of trust and active participation in decision-making will drive proactive risk management. Cultivating a supportive organizational culture that values collaboration, innovation, and openness to change, along with recognizing and rewarding aligned behaviour, is essential. Optimizing physical workspace design to facilitate both individual and collaborative work will enhance productivity and well-being. Regular skills gap analysis and targeted training programs are necessary to address deficiencies. Fostering diversity and inclusion, encouraging innovation and creativity, and enhancing technology literacy among employees will further strengthen the workforce. Additionally, optimizing recruitment strategies to attract adaptable, innovative talent, implementing robust cybersecurity measures, and fostering continuous improvement through regular feedback are vital. Engaging stakeholders in the change process ensures their insights are considered, contributing to a resilient internal audit function capable of navigating technological advancements and organizational change.

Based on the analysis regarding the significant relationship between components of identifying risk in organizational change and internal factors influencing strategic adaptation, several recommendations can enhance organizational practices. Although the correlation between internal factors and risk identification components is weak and not statistically significant, organizations should continue to prioritize and improve specific internal factors such as leadership alignment, workplace environment, skills assessment, technological advancement, and change management. Strengthening these areas can contribute to overall organizational resilience and adaptability. Additionally, enhancing risk identification processes independently, through regular assessments, technology utilization, effective collaboration, and feedback mechanisms, is crucial. Adopting an integrated approach that aligns internal factors and risk identification components strategically can enhance organizational agility. Continuous monitoring, investing in research and development, fostering cross-functional collaboration, and benchmarking against best practices will further improve adaptability and risk management.

Future research should delve deeper into the interactions between internal factors and risk identification components to understand their combined impact on organizational adaptation and resilience. Investigating specific contexts and industries, conducting longitudinal studies, and examining the role of emerging technologies in risk management processes are essential. Comparative studies across different organizational sizes and

structures can identify tailored best practices, contributing to more effective risk management strategies.

Compliance with Ethical Standards

This research has been conducted with strict adherence to ethical standards to ensure the integrity and credibility.

Ensuring that all work presented is original and that any use of others' work is properly cited. Proper attribution has been given to all sources of information, including ideas, text, and data, through comprehensive citation practices. All direct quotes, paraphrased ideas, and data sourced from existing literature are accurately cited using the appropriate academic citation style. The analysis, discussions, and conclusions presented are based on the author's original research and insights. Plagiarism detection software was used to check the originality of the content to ensure that no unintentional plagiarism occurred. This step verifies that all parts of the thesis are unique and correctly attributed to their original sources.

All participants involved in this research were fully informed about the purpose, procedures, risks, and benefits of the study. Written informed consent was obtained from each participant prior to their involvement. The confidentiality of all participants has been rigorously maintained by anonymizing their data and securely storing all sensitive information. Pseudonyms and codes were used to protect participants' identities, and any identifying details have been omitted or altered to prevent disclosure. All findings reflect the true outcomes of the research conducted. Limitations and potential errors have been transparently acknowledged to provide a clear understanding of the study's scope and boundaries.

This ethical statement serves to assure that the research presented in this thesis was conducted with the highest level of ethical integrity, contributing to the advancement of knowledge in the field of risk management during organizational change.

Acknowledgments

I extend my deepest gratitude to the Lord, whose grace and guidance have been my constant source of strength throughout this journey of research and discovery.

I am profoundly thankful to my advisor, Dr. Erwin Quendangan, whose invaluable insights, mentorship, and unwavering support have shaped this study into what it is today. Your patience and dedication to my academic growth are deeply appreciated. To Maam Imelda Antonio, for her invaluable assistance with the statistical analysis. Her expertise and guidance were instrumental in interpreting the data and ensuring the accuracy of the results presented in this research. To Bro. Jeff Thomas for his meticulous review and editing of the manuscript. His keen eye for detail and mastery of grammar significantly improved the clarity and readability of this research.

I express my heartfelt thanks to Dr. Jenny Lyn Abamo, Dean of AMA School of Graduate Studies, for the encouragement and resources provided that facilitated the completion of this research.

To my beloved family and loved ones, your endless love, understanding, and encouragement sustained me through the challenges and triumphs of this endeavor. Your unwavering support means everything to me.

A special acknowledgment to my APO brothers and sisters and friends who provided encouragement, motivation, and moments of respite throughout this journey. Your camaraderie and friendship are treasured beyond words.

A sincere acknowledgment to the AMA Auditors who participated in the pilot test, your feedback and insights were invaluable in refining the research instrument. Your willingness to help even amidst your busy schedules is deeply appreciated.

Lastly, to the respondents who generously shared their time and perspectives for the final study, I am grateful for your willingness and dedication to participate even amidst busy schedule and online communication, your participation was pivotal in gathering valuable data that contributed to the findings and conclusions of this research.

Thank you all for being part of this significant chapter in my academic and personal growth.

REFERENCES

Bouckenooghe, D., De Clercq, D., & Deprez, J. (2023). Fostering innovation and risk-taking in organizational change. Journal of Organizational Change Management.

Champoux, J. E., & Peters, T. (2020). Embedding risk management in organizational culture. Risk Management Journal.

Chen, Y., & Davis, K. (2022). Generational dynamics in organizational change management. Journal of Change Management.

Fleming, P., & Spicer, A. (2020). Digital empowerment in the workplace. Journal of Digital Transformation.

Garcia, R., & Thompson, A. (2024). Leadership in digital transformations: Effective communication and collaboration. Leadership Quarterly.

Gandz, J. (2022). Advanced communication strategies for organizational change. Corporate Communication Journal.

Jones, P., & Linder, J. (2021). Rapid experimentation for quick wins in change management. Innovation Management Journal.

Kotter, J., & Scharmer, C. O. (2020). Agile strategies for organizational change. Organizational Dynamics.

Lee, S., & Johnson, T. (2022). Generational dynamics and risk perception in organizational change. Risk Management Review.

Mantere, S., & Vaara, E. (2020). Diverse coalitions for risk mitigation in change management. Strategic Management Journal.

Reissner, S. C. (2021). Data-driven urgency in organizational change. Journal of Change Leadership.

Smith, J., & Johnson, T. (2023). Challenges and opportunities of emerging technologies in organizational change. Technology and Change Journal.

Wang, P., & Lee, H. (2022). Integration of technology in internal audit practices. Internal Audit Journal.

Wang, P., & Smith, J. (2023). Artificial intelligence and blockchain in risk management. Journal of Emerging Technologies.
Zhang, L., & Patel, R. (2023). Navigating technological advancements and generational dynamics: The role of internal auditors. Audit and Technology Review.

APA Citation:

Ranara, A. R., & Quendangan, E. B. (2024). STRATEGIC ADAPTATION IN THE MODERN ERA: LEVERAGING INTERNAL AUDITOR FOR ENHANCED RISK MANAGEMENT IN ORGANIZATIONAL CHANGE. Ignatian International Journal for Multidisciplinary Research, 2(8), 354–370. https://doi.org/10.5281/zenodo.13270761

Corresponding author: *antonetteranara3@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

TEACHERS ENGAGED IN ONLINE BUSINESS IN RELATION TO JOB PERFORMANCE

Nerissa B. Cabarubias

Tipolo Elementary School, Tipolo, Ubay, Bohol, Philippines

https://doi.org/10.5281/zenodo.13372986

ABSTRACT

This study investigates the relationship between teachers' perceptions of online business and their job performance in Ubay I, II, and III Districts, Division of Bohol, for the academic year 2020-2021. The research aimed to understand the profiles of teacher-respondents engaged in online business, their perceptions towards online business across various contexts, and the impact of these perceptions on their job performance. Key areas explored include the demographic profile of respondents, their assessment of online business in technological, organizational, environmental, and beneficial contexts, and the effect of their online business activities on teaching skills, management skills, discipline/regularity, and interpersonal relations. The study found that while teachers generally perform well across all job performance dimensions, with high ratings in teaching skills, management skills, discipline/regularity, and interpersonal relations, there was no significant relationship between demographic factors and job performance. However, significant relationships were found between perceptions of online business and job performance, particularly in terms of discipline/regularity and overall performance. Based on these findings, the study recommends enhancing support and training for teachers, promoting positive perceptions of online business, implementing monitoring and evaluation systems, addressing issues of discipline and regularity, encouraging long-term engagement in online business, and conducting further research to explore additional influencing factors. These recommendations aim to support teachers in balancing their online business activities with their professional responsibilities, ultimately enhancing their job performance and contributing to more effective teaching environments.

Keywords: *Discipline, E-business, Job performance, Online business, and Perceptions*

INTRODUCTION

The COVID-19 pandemic has brought about significant changes in various aspects of life, including the way people engage in economic activities. As the world continues to recover, individuals, including the aging population, have increasingly turned to online platforms for buying and selling goods, utilizing social media and other digital tools to sustain their livelihoods. This shift has led to a burgeoning online retail environment where even government employees, such as teachers, have started to participate in online business ventures.

As noted by Ablaña and Isidro (2015), the pressures of modern society—characterized by complex social, economic, and political challenges—demand that government employees adopt innovative strategies to meet these demands. Despite being employed, many workers still struggle to escape poverty, with estimates from the International Labour Organization (ILO) suggesting that up to 40% of workers globally earn less than the poverty line of $2 or ₱100 per day (Melamed, Hartwig, & Grant, 2011). In the Philippines, where the government is the largest employer, teachers play a crucial role in ensuring the functionality of the education system (Ablaña et al., 2015).

Job satisfaction is a critical factor influencing teachers' commitment and productivity within school organizations. Satisfied teachers are more likely to be engaged and committed to their work, leading to better participation and overall performance (Shila & Sevilla, 2015; Sadasa, 2013). However, job satisfaction is closely linked to work compensation, which in turn affects teaching performance (Baluyos, Rivera, & Baluyos, 2019). Given the economic challenges exacerbated by the pandemic, many teachers have sought additional income through online businesses, raising questions about the potential impact of these activities on their job performance.

The working environment plays a vital role in maintaining staff motivation and productivity. A poor working environment can lead to decreased job satisfaction, ultimately affecting performance (Ozgen & Yalcin, 2010). Institutions must strive to improve the quality of work life to foster a productive and motivated workforce (Solmus, 2011). The relationship between job performance and factors such as job satisfaction, work environment, and compensation has been well-documented (Motowidlo, 2011; Rao & Kumar, 2014). However, the rise of online business activities among teachers presents a new variable that warrants investigation.

Teachers' job performance is influenced by various factors, including their knowledge, responsibility, and the teaching environment (Rao & Kumar, 2014). Leigh and Mead (2015) highlighted the decline in teaching quality due to outdated preparation and stagnant compensation schemes. Hakanen, Bakker, and Schaufeli (2011) introduced the Job Demands–Resources Model, suggesting that job performance is affected by both job demands (e.g., burnout, ill health) and job resources (e.g., engagement, commitment). Understanding the balance between these factors is essential for improving teacher performance.

Lambert (2014) emphasized that factors such as mindset, immersion in different environments, and reflective practice can significantly enhance job performance. Additionally, passion for teaching, as described by Vallerand (2010), can drive motivation and job satisfaction, leading to improved performance. Ho, Wong, and Lee (2011) found that harmonious passion positively correlates with job performance, mediated by cognitive absorption.

Given the complexities of these dynamics, this study aims to investigate the relationship between teachers' engagement in online business activities and their job performance in the Ubay I, II, and III Districts during the School Year 2020-2021. By exploring these variables, the study seeks to provide insights into how teachers balance their professional responsibilities with external economic activities, and how this balance affects their overall job performance.

Research Questions

The main thrust of the study was to determine teachers' perception towards online business in relation to job performance in Ubay I, II, and III Districts, Division of Bohol of the School Year 2020-2021. The findings of this study served as bases for proposing sustainability plan.

Specifically, it sought to answer the following questions:

1. What is the profile of the teacher- respondents engaged in online business in terms of:
    - 1.1. age;
    - 1.2. sex;
    - 1.3. highest educational attainment;
    - 1.4. teaching experience;
    - 1.5. online business platform/s; and
    - 1.6. years in online business?

2. What is the perception of the respondents towards online business in terms of:
    - 2.1. technological context;
    - 2.2. organizational context;
    - 2.3. environmental context;
    - 2.4. beneficial context?
3. What is the respondents' assessment on the job performance of teachers engaged in online business towards their:
    - 3.1. teaching skills;
    - 3.2. management skills;
    - 3.3. discipline/ regularity; and
    - 3.4. interpersonal relations?

4. Is there a significant relationship between the teachers' job performance and their profile?

5. Is there a significant relationship between the teachers' perception towards online business and job performance in terms of:

5.1. teaching skills;
5.2. management skills;
5.3. discipline/ regularity; and
5.4. interpersonal relations?

6. On the bases of the findings of the study, what sustainability program may be proposed?

METHODOLOGY

This section focused on the methodology that was utilized in the conduct of the study. It also outlined the research design, the procedure that was followed, the process of collecting the data, and the analysis. During the collection process, the ethical considerations were also discussed.

Research Design

This study employs a quantitative correlational research design, utilizing a questionnaire as the primary method for data collection. The correlational approach was chosen to examine the relationship between engagement in online business activities and job performance.

Research Environment and Research Participants

This study was conducted in the second congressional district of Bohol, specifically in the Ubay I, Ubay II, and Ubay III districts. These locations are situated in the northeastern part of Bohol Province and form a zone district under the Department of Education (DepEd). A total of 30 elementary schools from these districts were included in the research.

The research subjects were selected through purposive sampling, comprising 10 elementary schools per district. The sample included 76 teachers engaged in online business and 30 elementary school heads, resulting in a total of 106 respondents who were actively serving during the 2020-2021 school year. The distribution of respondents is presented in Table A.

Table A
Distribution of Respondents

Name of Schools	Teachers with Online Business	School Heads	Total
I. Ubay I District			
1.Ubay Central Elementary School	4	1	5
2. Fatima Elementary School	2	1	3
3.Camambugan Elementary School	4	1	5
4. Tapal Elementary School	2	1	3
5. Humay-humay Elementary School	3	1	4
6 . Bood Elementary School	2	1	3
7. Calanggaman Elementary School	3	1	4

8. Sentinela Elementary School	2	1	3
9.Tapon Elementary School	3	1	4
10. Achila Elementary School	2	1	3
II. Ubay II District			
1.Biabas Central Elementary School	3	1	4
2.Juagdan Elementary School	3	1	4
3.San Vicente Elementary School	2	1	3
4.Benliw Elementary School	2	1	3
5.Union Elementary School	2	1	3
6.Tipolo Elementary School	5	1	6
7.Imelda Elementary School	3	1	4
8.Sinandigan Elementary School	3	1	4
9.Guintaboan Elementary School	2	1	3
10.Cagting Elementary School	3	1	4
III. Ubay III District			
1.San Pascual Central Elementary School	3	1	4
2.Bulilis Elementary School	2	1	3
3.Hambabauran Elementary School	2	1	3
4.Gabi Elementary School	2	1	3
5.Casate Elementary School	2	1	3
6.Pag-asa Elementary School	2	1	3
7.California Elementary School	1	1	2
8.Bay-ang Elementary School	2	1	3
9.Ilihan Elementary School	2	1	3
10.Lomangog Elementary School	3	1	4
Grand Total	**76**	**30**	**106**

Research Instrument

To assess teachers' perceptions of online business and its impact on job performance in Ubay I, II, and III Districts for the 2020-2021 School Year, a modified questionnaire was used. This questionnaire was structured into three sections: the first section collected demographic data, the second section evaluated the impact of online business on operational, managerial, strategic, and beneficial aspects, and the third section measured job performance using a 4-point Likert scale across four dimensions: teaching skills, management skills, discipline/regularity, and interpersonal relations. The instruments used were adapted and validated to ensure their reliability and relevance.

Data Gathering Procedure

The researcher first secured approval from the Dean of the College of Advanced Studies and obtained an official permit from the Schools Division Superintendent of the Department of Education for the Ubay I, II, and III Districts. Additionally, permission was sought from the School Heads of each institution and the teachers involved in the study. Questionnaires were personally distributed to the respondents, who were given a thorough explanation of the study's purpose. Assistance was provided to clarify any difficult words or questions, and respondents were allowed sufficient time to complete the questionnaires.

Following data collection, the responses were tallied, tabulated, and collated. The data were then analyzed using descriptive and inferential statistics to address the specific research questions.

Data Analysis

To determine the demographic profile of the teachers, perceived online business, and level of job performance of teachers; the Percentage, Weighted Mean, Chi-Square, and Spearman Rank Correlation Coefficient were used.

6. To determine the socio-demographic profile of the respondents, percentage was used.

Formula:

$$P = f/n \times 100$$

Where:

P = percentage
F = frequency of responses
N = number of cases

2. To determine the perception of the teachers with online business, and teachers' job performance, the weighted mean was used.

Formula:

$$WM = \frac{\sum f(x)}{N}$$

Where:

WM = weighted mean
$\sum f(x)$ = summation of frequency of scale value x
N = number of cases

Composite Mean. The same scale will be used in interpreting the composite weight means:

$$\frac{\text{Sum of Weight Means}}{\text{Number of Items}}$$

3. To determine the significant degree of relationship between the teachers' job performance and their profile, the data were subjected to Chi-Square test.

Formula:

$$\chi^2 = \sum \frac{(f_o f_e f_e)^2}{}$$

Where:

$\chi 2$ = correlation coefficient
fo = observed frequency
fe = expected frequency

The obtained Chi-Square ratio was checked against the Table of Significant values at 0 .05 level.

4. Spearman Rank Correlation Coefficient was used to determine the degree of correlation between the perceived online business as to teaching performance of teachers with the formula:

Formula:

$$r_s = 1 - \frac{6\sum D^2}{n(n^2 - 1)}$$

Where:

r_s = Spearman rank Correlation Coefficient

$\sum D^2$ = sum of the squares of the difference between rank x and rank y

n = sample size

6 = constant

RESULTS

This chapter covers with the presentation, analysis and interpretation of the gathered data was to determine the teachers' online business in relation to job performance in Ubay I, II, and III Districts, Division of Bohol of the School Year 2020-2021.

Table 1
Profile of Teachers Engaged in Online Business
N=76

1.1 Age	**Frequency**	**Percentage (%)**	**Rank**
25 years old and below	0	0.00	
26-30 years old	15	19.74	2
31-35 years old	54	71.05	1
36 years old and above	7	9.21	3
Total	**76**	**100%**	
1.2 Sex			
Male	1	1.32	2
Female	75	98.68	1
Total	**76**	**100%**	
1.3 Highest Educational Attainment			
Bachelor Degree Holder	1	1.32	2
With units in Master's Degree	75	98.68	1
MA Graduate/ With PhD Units/ Doctorate	0	0.00	3
Total	**76**	**100%**	
1.4 Teaching Experience			
5 years and below	1	1.32	4
6-10 years	15	19.74	2
11-15 years	51	67.10	1
16 years and above	9	11.84	3
Total	**76**	**100%**	
1.5 Online Business Platform/s (Social Media)			
Facebook	76	100.00	1

Twitter	0	0.00	
Instagram	0	0.00	
Others	0	0.00	
Total	**76**	**100%**	
1.6 Years in Online Business			
Below 1 year	39	51.32	1
1-2 years	12	15.79	3
3 years and above	25	32.89	2
Total	**76**	**100%**	

Table 1 presents the profile of teachers engaged in online business. The majority of these teachers (71.05%) are between 31 and 35 years old, indicating that this middle age group is most active in online business. The study shows a significant gender imbalance, with 98.68% of the respondents being female, suggesting that online business is predominantly undertaken by women in this group. In terms of education, nearly all respondents (98.68%) have completed coursework towards a Master's Degree, highlighting a high level of educational attainment. Most teachers (67.10%) have 11 to 15 years of teaching experience, with no teachers having over 21 years of experience in online business, suggesting a preference for those with moderate experience. All respondents use Facebook as their primary online business platform, underscoring its importance and dominance in their business activities. Finally, over half of the respondents (51.32%) have been engaged in online business for less than one year, while 32.89% have been involved for three years or more, indicating a mix of new and more established online entrepreneurs among the teachers.

Table 2
Perception of the Respondents Towards Online Business
N_1= 76; N_2=30

Statement	Teachers		School Heads		Overall		
2.1 Technological Context	**WM**	**VI**	**WM**	**VI**	**WM**	**VI**	**Rank**
1. Online business is a great benefit to my product.	3.54	SA	3.77	SA	3.66	SA	1
2. ICT is compatible with the way we do business.	3.70	SA	3.13	A	3.42	SA	4
3. Overall, using online business is easy for me.	3.36	SA	3.90	SA	3.63	SA	2
4. The cost of using online business is low.	3.07	A	3.68	SA	3.38	A	5
5. I can communicate others to buy using online business.	3.54	SA	3.42	SA	3.48	SA	3
Average Weighted Mean	**3.44**	**SA**	**3.58**	**SA**	**3.51**	**Strongly Agree**	
2.2 Organizational Context							
1. I have the skills needed to do online business.	3.50	SA	3.52	SA	3.51	SA	3
2. I have sufficient financial resources to implement online business in business operations.	3.79	SA	3.71	SA	3.75	SA	1
3. I emphasize research and development (R&D), technological leadership, and innovation as I do online business.	3.24	A	3.48	SA	3.36	SA	5
4. I have a clear plan regarding the use of online business.	3.67	SA	3.61	SA	3.64	SA	2
5. I have a clear standard operating procedures (SOP) in running a business.	3.59	SA	3.32	SA	3.46	SA	4
Average Weighted Mean	**3.57**	**SA**	**3.53**	**SA**	**3.54**	**Strongly Agree**	
2.3. Environmental Context							
1. Our customers and / or business competitors encourage us to implement online business.	3.53	SA	3.48	SA	3.51	SA	2.5

2.	The government is actively providing various facilities to support the application of online business.	3.54	SA	3.52	SA	3.53	SA	1
3.	Telecommunications infrastructure (such as the internet network or electronic payments) is reliable to support the use of online business.	3.30	SA	3.71	SA	3.51	SA	2.5
	Average Weighted Mean (AWM)	**3.45**	**SA**	**3.57**	**SA**	**3.52**	**Strongly Agree**	
2.4. Beneficial Context								
1.	Increased business productivity.	3.82	SA	3.35	SA	3.59	SA	3
2.	Reduced business costs.	3.64	SA	3.74	SA	3.69	SA	1
3.	Creates better management of resources (e.g, inventory, human resources, etc.	3.25	SA	3.55	SA	3.40	SA	4
4.	Helps me earn extra income other than my salary.	3.87	SA	3.39	SA	3.63	SA	2
5.	Helps me pay expenses at home.	3.49	SA	3.10	A	3.30	SA	5
	Average Weighted Mean	**3.61**	**SA**	**3.43**	**SA**	**3.52**	**Strongly Agree**	
	Overall Average Weighted Mean	**3.52**	**SA**	**3.53**	**SA**	**3.53**	**Strongly Agree**	

Legend:

Rating Scale	Descriptive Interpretation	Weighted Mean (WM)
3.25 – 4.00	Strongly Agree (SA)	
2.50 – 3.24	Agree (A)	
1.75 – 2.49	Disagree (DA)	
1.00 – 1.74	Strongly Disagree (SDA)	

Table 2 indicates that respondents generally view online business positively. In the technological context, "Online business is a great benefit to my product" received the highest mean of 3.66, while "The cost of using online business is low" had the lowest mean of 3.38, both reflecting strong agreements. In the organizational context, the highest mean of 3.75 for "I have sufficient financial resources to implement online business" shows strong confidence in financial readiness. The environmental context highlighted significant government support with a mean of 3.53 for "The government is actively providing various facilities to support the application of online business," and the beneficial context identified "Reduced business costs" as a major advantage with a mean of 3.69. Overall, the average mean across all contexts is 3.53, demonstrating a strong overall agreement on the positive impact of online business.

Table 3
Respondents' Assessment on Job Performance of Teachers Engaged in Online Business
N_1= 76; N_2=30

Statement	Teachers		School Heads		Overall		
3.1 Teaching Skills	**WM**	**VI**	**WM**	**VI**	**WM**	**VI**	**Rank**
1. Apply a variety of instructional materials aside from Learning 2. Activity Sheets and Modules provided by the department.	3.72	O	3.71	O	3.72	O	2.5
3. A good number of the pupils in my class get good grades applying blended modality learning.	3.76	O	3.68	O	3.72	O	2.5
4. Going to school fully prepared for the instructions to parents during distribution and retrievals of LAS/LM.	3.47	O	3.27	O	3.37	O	4
5. Difficult topics are made easy by contextualizing the different activities.	3.30	O	3.16	VS	3.23	VS	5
6. Provided various interventions to pupils to meet their learning needs by including in the Weekly Home Learning Plan.	3.72	O	3.90	O	3.81	O	1
Average Weighted Mean	**3.60**	O	**3.54**	O	**3.57**	**Outstanding**	

3.2 Management Skills								
1.	In addition to teaching, I also accomplish other tasks in schools.	3.93	O	3.77	O	3.85	O	1
2.	Clerical duties do not interfere in my job as a teacher.	3.75	O	3.10	VS	3.43	O	4
3.	Home problems do not interfere in my job as a teacher.	3.29	O	3.48	O	3.39	O	5
4.	Quickly adjust when there is a change in my responsibilities.	3.53	O	3.55	O	3.54	O	3
5.	Do all in my power to advance my performance.	3.34	O	3.84	O	3.59	O	2
	Average Weighted Mean	**3.57**	O	**3.55**	O	**3.56**	**Outstanding**	
3.3 Discipline/Regularity					O			
1.	I am always punctual to school.	3.55	O	3.19	VS	3.37	O	3
2.	Commence work on time.	3.70	O	3.74	O	3.72	O	1
3.	Avoid irrelevant activities during my onsite works.	3.46	O	3.68	O	3.57	O	5
4.	I am completing the instruction / directives on time.	3.49	O	3.26	O	3.38	O	4
5.	Control and maintain promptness of pupils LAS/LM submission.	3.59	O	3.29	O	3.44	O	2
	Average Weighted Mean (AWM)	**3.56**	O	**3.43**	O	**3.50**	**Outstanding**	
3.4 Interpersonal Relations								
1.	My relationship with my colleagues is cordial.	3.96	O	3.61	O	3.79	O	1
2.	Solve students' problems outside teaching specially in their written/performance output.	3.51	O	3.35	O	3.43	O	4
3.	Cooperate with other teachers while doing my job.	3.43	O	3.26	O	3.35	O	5
4.	To advance my pupils learning, I also relate effectively with their parents by giving clear direction in Weekly Home Learning Plan.	3.53	O	3.65	O	3.59	O	2
5.	Assist the school head to solve our school problems like issues and concerns on Distant Learning Modality.	3.71	O	3.32	O	3.52	O	3
	Average Weighted Mean	**3.63**	O	**3.44**	O	**3.54**	**Outstanding**	
	Overall Average Weighted Mean	**3.59**	O	**3.49**	O	**3.54**	**Outstanding**	

Legend

Rating Scale	Verbal Interpretation	Weighted Mean (WM)
3.25 – 4.00	Outstanding (O)	
2.50 – 3.24	Very Satisfactory (VS)	
1.75 – 2.49	Satisfactory (S)	
1.00 – 1.74	Poor (P)	

Table 3 assesses the job performance of teachers engaged in online business across four key areas: teaching skills, management skills, discipline/regularity, and interpersonal relations. The data reveals that teachers excel particularly in providing interventions for pupils, with a weighted mean of 3.81 in teaching skills. In management skills, they demonstrate strong performance in handling additional tasks, scoring 3.85. Discipline and punctuality are also strong, with a mean of 3.72 for starting work on time. Lastly, interpersonal relations are marked by cordial relationships with colleagues, achieving a mean of 3.79. Overall, the average weighted mean across all areas is 3.54, indicating an outstanding level of job performance.

Table 4
Relationship Between the Teachers' Job Performance and Their Profile
N = 76

Teachers Job Performance and their Profile as to…	X^2	df	p-value	Interpretation	Decision
Age	1.677	2	0.432	Not Significant	Failed to Reject H_0
Sex	6.688	1	0.010	Significant	Reject H_0
Highest Educational Attainment	0.154	1	0.695	Not Significant	Failed to Reject H_0
Teaching Experience	0.886	3	0.829	Not Significant	Failed to Reject H_0

Number of Years in Online Business	3.926	2	0.140	Not Significant	Failed to Reject H_0

**Correlation is significant at 0.05 level (2-tailed)*

Table 4 examines the relationship between teachers' job performance and their profile characteristics. The analysis shows that job performance is not significantly related to age, highest educational attainment, teaching experience, or number of years in online business, as indicated by p-values of 0.432, 0.695, 0.829, and 0.140, respectively. In contrast, there is a significant relationship between job performance and sex, with a p-value of 0.010. This implies that gender differences impact job performance, leading to the rejection of the null hypothesis in this case.

Table 5
Relationship Between the Teachers' Perception Towards Online Business and Job Performance
N = 76

Teachers' Perception Towards Online Business and Job Performance as to…	r	p-value	Interpretation	Decision
Teaching Skills	-0.047	0.685	Not Significant	Failed to Reject H_0
Management Skills	-0.172	0.137	Not Significant	Failed to Reject H_0
Discipline/regularity	0.276	0.016	Significant	Reject H_0
Interpersonal relations	0.211	0.067	Not Significant	Failed to Reject H_0
Overall Job Performance	**0.812**	**<.001**	**Significant**	**Reject H_0**

**Correlation is significant at 0.05 level (2-tailed)*

Table 5 analyzes the relationship between teachers' perceptions of online business and their job performance. The data reveals that perceptions of teaching skills, management skills, and interpersonal relations do not significantly impact job performance, with p-values of 0.685, 0.137, and 0.067, respectively. However, perceptions of discipline/regularity have a significant relationship with job performance (p-value = 0.016), indicating that regularity and discipline influence job performance. Additionally, the overall job performance shows a strong significant correlation (p-value < 0.001), suggesting a robust association between general perceptions of online business and overall job performance.

DISCUSSION

Findings

The data gathered were then analyzed and interpreted and after a thorough and careful analysis of gathered data, the researchers' arrived at the following valuable findings:

The research findings provide a comprehensive view of the respondents' profiles, perceptions, and job performance. Among the 76 teacher-respondents, the majority are

aged 31-35 years and are predominantly female. Most have pursued graduate-level education, with 67.10% having 11 to 15 years of teaching experience. Facebook is the universal platform used for online business, and over half have been engaged in it for less than a year. Regarding perceptions of online business, respondents show strong agreement across all contexts: technological, organizational, environmental, and beneficial, with an overall average mean of 3.53. In terms of job performance, teachers excel in teaching skills, management skills, discipline/regularity, and interpersonal relations, each category rated as "Outstanding," with an overall mean of 3.54. Analysis reveals no significant relationship between teachers' profiles and job performance in areas such as age, education, teaching experience, or online business duration. However, significant relationships are found between perceptions of online business and job performance in terms of discipline/regularity and overall performance, though not for teaching skills, management skills, or interpersonal relations.

Conclusions

Based on the research findings, it can be concluded that teachers engaged in online business demonstrate a high level of job performance across various dimensions, including teaching skills, management skills, discipline/regularity, and interpersonal relations. The strong agreement in their perceptions of online business across technological, organizational, environmental, and beneficial contexts underscores its perceived value and positive impact on their professional roles. Despite these favorable views and high-performance ratings, the study reveals no significant relationship between demographic factors and job performance, suggesting that factors such as age, educational attainment, and teaching experience do not significantly influence the effectiveness of teachers' job performance in this context. However, there is significant evidence that perceptions of online business are related to job performance, particularly in terms of discipline/regularity and overall performance. This highlights the importance of a positive perception of online business in enhancing teachers' professional effectiveness, although it does not uniformly impact all aspects of job performance.

Recommendations

Based on the study's findings, the following recommendations are proposed:

1. **Enhance Support and Training.** Given the positive impact of teachers' perceptions on their job performance, it is recommended to provide targeted support and training that further enhances their skills in online business. This can include professional development programs focused on integrating online business practices with teaching, as well as workshops on effective online business management.
2. **Promote Positive Perceptions.** Schools and educational institutions should actively promote and support positive perceptions of online business among teachers. This can be achieved through regular communication about the benefits and successes of online business, as well as by providing resources and incentives that highlight its value in enhancing professional performance.

3. **Monitor and Evaluate.** Implement regular monitoring and evaluation systems to assess the impact of online business on teachers' job performance. This should include feedback mechanisms to identify areas for improvement and to ensure that the online business practices are effectively supporting teachers' professional roles.
4. **Address Disciplinary and Regularity Issues.** Since discipline and regularity are significantly related to job performance, schools should focus on strategies to address and improve these areas. This might involve developing clear guidelines and support systems to help teachers manage their time and responsibilities effectively.
5. **Encourage Long-term Engagement.** Given the high percentage of teachers with less than a year of online business experience, it is important to encourage long-term engagement. Providing ongoing support and fostering a community of practice can help teachers build sustained online business practices that contribute positively to their job performance.
6. **Further Research.** Conduct further research to explore other potential factors that may influence the relationship between online business perceptions and job performance. This could include examining the impact of specific online business strategies and tools, as well as the role of external support systems.

By implementing these recommendations, educational institutions can better support teachers in integrating online business practices, ultimately enhancing their overall job performance and contributing to more effective teaching environments.

Compliance with Ethical Standards

This study adhered to ethical standards by obtaining informed consent from all participants, ensuring confidentiality, and maintaining voluntary participation without coercion. No harm came to participants, and the study received ethics committee approval. Researchers declared no conflicts of interest and reported findings transparently and honestly. Cultural sensitivity was respected throughout the research process.

PROPOSED SUSTAINABILITY PLAN

Rationale

The primary goal of education is to facilitate learning, and the environment where teaching and learning occur significantly impacts the quality of this learning experience (Hasbay, 2018). Job satisfaction is crucial for ensuring teachers' commitment and productivity within a school organization. Satisfied teachers are more likely to be engaged and committed, enhancing their overall job performance (Shila et al., 2015; Sadasa, 2013). Job satisfaction is thus a fundamental requirement for effective work performance (Baluyos et al., 2019).

In recent years, e-business has evolved rapidly, driven by technological innovations that present new opportunities. This shift involves transforming traditional business models and adapting to new competitive landscapes. E-business now involves various structural patterns, including e-channels, click-and-brick models, e-portals, e-market makers, and mobile portals (Putra et al., 2020).

Given these dynamics, and based on the findings and conclusions, a sustainability plan is proposed to balance teachers' online business activities with their job performance.

Objectives

This program aims to:

1. Conduct a virtual re-orientation for teachers engaged in online business, focusing on the DECS Manual 2000 handbook and the Code of Ethical Standards for Teachers, particularly concerning discipline and regularity.
2. Enhance the morale of teachers involved in online business.
3. Monitor the performance of teachers engaged in online business.

Mechanics of Implementation

With approval from the examining tribunal, the researcher will present the proposal to the district supervisors of Ubay I, Ubay II, and Ubay III Districts. Feedback, suggestions, or recommendations will be incorporated to tailor the plan to specific needs.

Schedule of Implementation

The program will be presented during the Summer Assessment and INSET sessions in June, and the implementation will commence in the subsequent school year.

Monitoring and Evaluation System

A monitoring and evaluation tool will be developed to assess the effects of the sustainability program. This system will facilitate continuous improvement and refinement of the plan to ensure its effectiveness.

REFERENCES

Ablaña, M.V. & Isidro, D.(2015). Correlation between Adversity Quotient and Job Performance of LGU Employees of Tayabas City: Input to Public Personnel Management

Baluyos, G., Rivera, H.L., & Baluyos, E. (2019). Work performance and job satisfaction of teachers .New York International Academy.(253-256).(18).

Hakanen, J.J., Bakker, A.B. and Schaufeli, W.B. (2011). Burnout and Work Engagement among Teachers. Journal of School Psychology, 43(6), pp 495-513.

Hasbay, D., & Altindag, E. (2018). Factors That Affect the Performance of Teachers Working in Secondary-Level Education. The Academy of Educational Leadership Journal, 22, 1.

Ho, V.T., Wong, S. S., & Lee, C.H. (2011). A tale of passion: Lining job passion and cognitive engagement to employee work performance. Journal of Management Studies, 48(1), 26-47.

Lambert, V.(2014). Evaluation of Utah Career Ladder Programs. Beryl Buck Institute for Education. Utah State Office of Education and Utah State Legislature.

Leigh, A. and Mead, S. (2015). Lifting Performance of teachers. Policy Report, Progressive Policy Institute.

Melamed, C., Hartwig, R.,& Grant, U.(2011). Jobs, growth and poverty: what do we know, what don't we know, what should we know? Wayback Machine London: Overseas Development Institute

Motowidlo, S. (2011).Job performance in the organization.The International Journal of Management, 48, 116-121.

Ozgen, H. Yalçın, A. (2010). Insan Kaynakları Yonetimi. Nobel Bookstore, Adana.

Putra, P. O., & Santoso, H. B. (2020). Contextual factors and performance impact of e-business use in Indonesian small and medium enterprises (SMEs). Heliyon, 6(3), e03568. https://doi.org/10.1016/j.heliyon.2020.e03568

Rao, D.B. and Kumar, D.N. (2014). School Teacher Effectiveness, New Delhi, Discovery Publishing House, pp. 89.

Sadasa, K. (2013) The Influence of Organizational Culture, Leadership Behavior, and Job Satisfaction towards Teacher Job Performance. Indian Journal of Health and Wellbeing , 4, 1637-1642

Shila, J.M. and Sevilla, A.V. (2015). The Influence of Teachers' Job Satisfaction on Their Organizational Commitment: An Indian Context. International Journal of Education and Management Studies , 5, 53-57.

Solmuş, T. (2011). Job Satisfaction of Academic Staff: An empirical study on Turkey. Turkish Psychology Bulletin,3742.

Vallerand, R. J. (2010). On the psychology of passion: n search of what makes people's live most worth living. Canadian Psychology, 49, 1-13.

APA Citation:

Cabarubias, N. B. (2024). TEACHERS ENGAGED IN ONLINE BUSINESS IN RELATION TO JOB PERFORMANCE. Ignatian International Journal for Multidisciplinary Research, 2(8), 1576–1591. https://doi.org/10.5281/zenodo.13372986

nerissa.cabarubias@deped.gov.ph

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

TEACHERS' PRACTICES AND STUDENTS' ACADEMIC ACHIEVEMENT: BASIS FOR SCHOOL DEVELOPMENT PROGRAM

Chiminie R. Salva, Gina F. Labitad, Ph.D.

PHINMA Cagayan De Oro College, Philippines

https://doi.org/10.5281/zenodo.13151110

ABSTRACT

Teachers' practices play a pivotal role in shaping the academic achievement of students, transforming classrooms into dynamic spaces where engagement and support foster academic excellence. The "Engagement-Driven Academic Success Theory" emphasizes the role of interactive teachers' practices in enhancing students' academic achievement. This study includes analyzing the characteristics of respondents and evaluating teachers' practices in various aspects such as classroom participation, extracurricular activities, personalized attention, professional development, parental communication, lesson preparation, collaboration with colleagues, and innovative teaching methods. Additionally, the study seeks to assess students' academic achievement in English, Science, Mathematics, Filipino, and Araling Panlipunan, identify the significant effects of teachers' practices on academic achievement, determine the relationship between teachers' practices and respondents' characteristics, and propose a school development program. The research surveyed four hundred six (406) teachers and eight hundred twelve (812) learners from the Valencia City Division who participated in the study. Data from the respondents was gathered using research-made questionnaires. The study employed a complete enumeration method to include the total population in the research. Data analysis involved descriptive statistics, mean, standard deviation, Pearson Moment Correlation, and a one-way ANOVA to draw meaningful conclusions about the relationship between teacher practices and academic achievement. Findings showed that certain aspects of teacher practices, such as lesson preparation and parental communication, had significant positive correlations with academic achievement in specific subjects. The study recommends targeted strategies to promote teacher engagement and student academic achievement, including professional development programs, support for extracurricular activities, and collaboration among educators.

Keywords: *Teachers' Practices, Students' Achievement*

INTRODUCTION

Teachers provide students with a wide range of support, including academic instruction, emotional assistance, appraisal, and instrumental guidance. They also create a positive learning environment that fosters student growth and success. They are at the forefront of education, where students have high expectations for the learning that will mold them into independent and competitive individuals. Indeed, teachers are widely recognized as key figures who influence students' psychological well-being, behavior, and academic success.

As, Inayat and Alit (2020) emphasized the importance of educational institutions providing professional development training to teachers for effective content delivery and lesson preparation. Despite ongoing training, students may still lack motivation in the classroom, leading to low participation and performance. Effective delivery of the school curriculum by teachers can foster activities, collaboration, and innovative teaching methods, positively impacting students' academic performance. Facilitating meaningful learning experiences can inspire students to showcase their talents, enhance motivation, and channel their interest productively towards academics.

The Republic Act (RA) No. 4670, also known as the Magna Carta for Public School Teachers, focuses on safeguarding the physical and mental health of teachers while regulating their work hours for lesson preparation and teaching responsibilities. Additionally, teachers play a crucial role in the Department of Education (DepEd), ensuring the delivery of the curriculum and services and promoting a holistic approach to classroom leadership. Teachers are pivotal in creating a student-centered learning environment and safeguarding the well-being of learners. It is vital for DepEd to alleviate teachers' non-work-related burdens to enhance the curriculum and establish a more supportive learning atmosphere.

Similarly, for students to succeed in learning a foreign language, teachers must be actively involved and confident in their abilities (Bao et al., 2021, 2022). However, teacher engagement showed a negative relationship with burnout. While students play a primary role in their learning and success, teachers and parents also significantly impact school advancement.

Teachers have expressed concerns regarding professional development, citing limited opportunities for external seminars, delays in scheduled activities, and challenges in implementing faculty development (Padillo, 2021). Inadequate lesson planning, inappropriate strategies, and classroom management issues can hinder teachers from meeting their teaching objectives, impacting students' learning goals (Ali, 2021). Some educators face difficulties in communicating with parents, providing personalized attention, and dedicating ample time for lesson planning. Factors affecting innovative teaching methods, such as personal dedication, teaching philosophies, commitment, and

expertise, pose challenges that prompt teachers to collaborate with peers (Hashim et al., 2019).

Addressing these challenges is crucial to fostering innovation and creativity among teachers, ensuring effective mechanisms to achieve educational goals. Even with attempts to tackle these obstacles, there is a need for further action to guarantee that teachers and students truly reap the rewards of proper lesson preparation and classroom management. As Khan (2020) highlighted, this could mean introducing more inclusive and thorough educational initiatives to empower teachers to manage the intricate aspects of lesson planning and classroom management effectively.

The study aims to understand the relationship between teacher practices and academic achievement, considering factors such as position, teaching experience, highest educational attainment, and subject taught. By examining how these variables interact with teacher involvement, a more comprehensive understanding can be achieved.

Moreover, it would be beneficial to examine any potential differences in the effectiveness of teacher practices across different subject areas (English, Math, Science, Filipino, and Araling Panlipunan). Variations in teaching methodologies, content complexity, and student interest levels may lead to differential impacts on academic achievement within each subject domain.

Furthermore, considering the unique cultural and contextual factors within the Valencia City Division, exploring any specific challenges or opportunities related to teacher practices and student achievement could provide valuable insights for enhancing educational practices in the division.

Research Questions

This study aimed to determine the student's academic achievement in the Division of Valencia City during the School Year 2023–2024. The result of the study would be the basis for a school development program. Specifically, it sought to answer the following questions:

1. What are the characteristics of the respondents in terms of position, teaching experience, highest educational attainment, and subject taught?
2. How do the respondents assess their practices- with regard to classroom participation, extracurricular activities, personalized attention, professional development, parental communication, lesson preparation, collaboration with colleagues, and innovative teaching methods?
3. What is the level of learners' academic achievement in English, Science, Mathematics, Filipino, and Araling Panlipunan during the 3rd and 4th Quarters?
4. Is there a significant effect of teacher practices on learners' academic achievement?
5. Is there a significant relationship between teachers' practices and each of their characteristics?
6. Based on the study's findings, what school development program can be designed?

METHODOLOGY

This section presented the techniques and protocols used in the research investigation. It provided in-depth descriptions of the research design, setting, respondents, research instrument, instrument validation, data gathering procedure, statistical treatment of the data, and ethical considerations of the study.

Research Design

This research study was underpinned by a descriptive method, a crucial choice that allowed to determine the level of teachers' involvement and academic achievement of public junior high school students. This method, by its very nature, enabled to establish the level of teacher practices based on various factors and how these variables influence the academic achievement of the learners.

Additionally, descriptive research design was widely employed across diverse fields. Its primary objective was to systematically observe and document all variables and conditions influencing the phenomenon (Singh, 2023). This method formulated its hypothesis as data were collected. The descriptive research design disallowed interventions or manipulation of the variables. The first goal was to seek the level of teacher involvement in academic achievement among all study respondents. It was then very appropriate to use the implied research design.

Study Setting

A research study was meticulously carried out in the Department of Education, Division of Valencia City, focusing on medium, large, and mega schools within the division. The selection of participating schools was carefully done to ensure diverse representation and respondent cooperation. Valencia City, officially known as the City of Valencia, is a 2nd-class component city in Bukidnon, Philippines, with a population of 216,546 as per the 2020 census. It became a city under Republic Act No. 8985 in January 2001, standing as the most populous inland city in Mindanao and a key hub for trade and commerce in Bukidnon. The study's location in the highly populated Valencia City Division provided valuable insights. The researchers strategically sampled schools of various sizes to gather comprehensive data, with a focus on respondents' voluntary participation to ensure data accuracy. The study's setting was chosen meticulously to align with the research criteria, ensuring the collection of pertinent and reliable information.

Research Respondents

The study was conducted in the Valencia City division. The participating teachers were from a mix of medium, large, and mega secondary schools within this division. The 406 teachers represented a cross-section of the teaching staff in the area. The 812 student participants were from the junior high school department, meaning they were in grades 7–10, in the same Valencia City division. The study focused on the academic

performance of these students across five core subject areas: English, science, mathematics, Filipino, and Araling Panlipunan.

The table below shows the distribution of respondents by school.

Distribution of Respondents

Name/Category of School	Total # of Respondents
A. Medium Scool	
A.1. Catumbalon National High School	29
A.2. Guinoyoran National High School	17
A.3. Lilingayon National High School	25
A.4. Conception National High School	18
B. Large School	
B.1. Lurugan National High School	45
B.2. Tongan-Tongan National High School	45
C. Mega School	
C.1. Valencia National High School	227
Total	**406**

Sampling Technique

The researcher employed a complete enumeration method to determine the total population for this study. All 406 Valencia City Division secondary school teachers were included as respondents. This approach was opted for the small sample size, which allowed for precise statistical analysis considering the entire test statistic distribution. Additionally, the 812 student participants from the junior high school department were also part of the complete enumeration, with data collected on their academic performance across the five core subject areas. The data analysis examined all possible elements in the finite teacher and student information set, providing a representative snapshot of the Valencia City education system. Descriptive statistics analysed the data, the Pearson correlation coefficient, and a one-way ANOVA. Descriptive statistics were used to summarize and characterize the key variables, such as teacher demographic profile and student academic performance. The study computed the Pearson correlation coefficient to analyse the links between variables, including teacher qualifications, teaching experience, and student achievement. The study conducted a one-way ANOVA to find out if there were any statistically significant differences in student achievement based on various teaching practices. This comprehensive analytical approach allowed the researchers to thoroughly understand the factors influencing academic performance within the Valencia City secondary schools.

Research Instruments

The data collection instrument for this study was a survey questionnaire designed to gather valuable insights into teachers' practices and their effect on student's academic achievement. The researcher developed and validated the research instrument.

The first part included questions about the teachers' respondents' profiles, such as position, teaching experience, highest educational attainment, and subject taught. The second part of the survey questionnaire focused on various aspects of teachers' practices in classroom participation, extracurricular activities, personalized attention, professional development, parental communication, lesson preparation, collaboration with colleagues, and innovative teaching methods. The last part of the questionnaire assessed the learner's academic achievement in English, Science, Mathematics, Filipino, and Araling Panlipunan.

The finalized survey questionnaire was then administered to a representative sample of participants from medium, large, and mega schools within the Division of Valencia City. Participation in the study was voluntary, and the researchers considered the respondents' willingness to cooperate during the data collection process.

Validity and Reliability of Instrument

The study utilized a researcher-made survey questionnaire as the data collection instrument, which underwent rigorous validation to ensure reliability and validity. Content validity was confirmed through consultation with three education experts, who unanimously agreed that the instrument comprehensively addressed key constructs related to teachers' practices and learners' academic achievement. The survey questionnaire was endorsed for its relevance, format adherence, and suitability in academic and research contexts.

To establish reliability, internal consistency using Cronbach's alpha and test-retest reliability were employed. The survey questionnaire demonstrated a very high level of internal consistency with an overall Cronbach's alpha value of 0.957. Factor analysis confirmed the instrument's construct validity, ensuring effective measurement of intended factors and variables.

Pilot testing was crucial in refining the survey instrument based on participant feedback, enhancing clarity and comprehensibility. The finalized survey instrument was then administered to participants from various school categories within the Division of Valencia City, with voluntary participation ensuring cooperation during data collection. This validated instrument provided reliable data for examining the relationship between teachers' practices and students' academic achievement, laying the foundation for a school development program.

Categorization of Variables and System of Scoring

The following categories were created to facilitate data analysis and interpretation.

Part 1. Respondent's Characteristics

Position

- Master Teacher III
- Master Teacher II
- Master Teacher I
- Teacher III
- Teacher II
- Teacher I

Teaching Experience

- 30 years and above
- 25-29 years
- 20-24 years
- 15-19 years
- 10-14 years
- 5-9 years
- 4 years and below

Highest Educational Attainment

- Doctorate Degree
- Master's Degree with PhD Units
- Master's Degree
- Bachelor's Degree with MA Units
- Bachelor's Degree

Subject Taught

- English
- Science
- Mathematics
- Filipino
- Araling Panlipunan

Part 2. Teacher Involvement

Scale	Range	Description	Interpretation
4	3.21 – 4.00	Always	Very High
3	2.61 – 3.20	Most of the Time	High
2	1.81 – 2.60	Sometimes	Low
1	1.00 – 1.80	Never	Very Low

PART 3. Academic Achievement

Grade Average	Description
90 and above	Outstanding
85 to 89	Very Satisfactory
80 to 84	Satisfactory
75 t0 79	Fairly Satisfactory
74 and below	Does Not Meet Expectations

Data Gathering Procedure

Prior to commencing the data gathering activity, the researcher obtained approvals from the Dean of Graduate Studies at PHINMA Cagayan de Oro College and the DepEd Valencia City Division Superintendent. Approval from the seven participating school heads was secured after submitting a research consent letter, allowing for the initiation of data collection procedures.

The two-week data collection activity began following approvals from relevant authorities and school heads, resulting in a 100% recovery rate from 406 teacher respondents. Before distributing the research questionnaire, a brief orientation was conducted to stress the importance of honest responses for unbiased and valid results.

The researcher employed Google Suite to create a data collection form, utilizing technology to reach teacher respondents in remote areas safely and efficiently. The Google Forms link was shared via email and messaging platforms, accompanied by clear instructions and deadlines. Follow-up reminders were sent to enhance response rates. Data collected through the online form was automatically organized and securely stored in a database, facilitating efficient and accurate data analysis.

Statistical Treatment of Data

This study used descriptive statistics to analyse and interpret the data, providing a clear overview of the study results and discussions. Descriptive statistics help outline the key characteristics of the data, offering basic descriptions of the sample and measurements, which are essential for most quantitative data analyses and are complemented by straightforward graphical representations for analysis.

For Problem 1, the respondents' characteristics in terms of position, teaching experience, highest educational attainment, subject taught, frequency, and percentage were used. For Problem 2, on the level of teachers' practices, the mean and standard deviation were employed and presented in tables. However, in Problem 3, the assessment of academic achievement, frequency, and percentage were used. In Problem 4, regression analysis determined the significant effect of teachers' practices and academic achievements. This further analysed whether the set null hypothesis is acceptable or not. However, in Problem 5, to determine the significant relationship between academic achievement and the respondents' characteristics, Pearson's correlation coefficient (r) was utilized. This demonstrated whether the two variables were correlated or related.

Ethical Considerations

The research study prioritized ethical considerations to protect the rights of human participants and uphold research integrity. Ethics review and approval were obtained, with voluntary participation for teacher respondents and parental consent for student participants. Confidentiality measures were strictly implemented to safeguard potentially identifiable data, ensuring data privacy and trust.

The study's goals encompassed understanding real-life phenomena, effective treatments, and academic behaviour. Written, informed consent was obtained to protect participants' rights, with a focus on maintaining confidentiality in potential publication content. Ethical considerations extended to the dissemination of research findings, emphasizing the importance of accuracy, benefit, and respect for participant confidentiality in contributing to academic knowledge advancement.

RESULTS

This section outlines the study's key components, including results, interpretation, and analysis, aiming to drive positive changes in teachers' practices and student success through the portrayal, explanation, and application of research results.

Problem 1. What are the respondents' characteristics regarding position, teaching experience, highest educational attainment, and subject taught?

Table 1. Respondents Characteristics

Indicator	Frequency	Percentage
Teaching Position		
Teacher 1	243	59.85
Teacher 2	60	14.78
Teacher 3	72	17.73
Master Teacher 1	31	7.63
Master Teacher 2	0	0.00
Master Teacher 3	0	0.00
Total	406	100.00
Teaching Experience	Frequency	Percentage
21 and above	57	14.04
16-20 years	43	10.59
11-15 years	65	16.01
6-10 years	160	39.41
0-5 years	81	19.95
Total	406	100.00
Highest Educational Attainment	Frequency	Percentage
Doctorate Degree	0	0.00
Master's degree w/PhD	51	12.56
Master's Degree	102	25.12
Bachelor's Degree w/MA	173	42.61
Bachelor's Degree	80	19.70
Total	406	100.00
Subject Taught	Frequency	Percentage
English	66	16.26
Science	74	18.23
Math	66	16.26
Filipino	74	18.23
Araling Panlipunan	77	18.97
Other Subjects	49	12.07
Total	406	100.00

The distribution of respondents' characteristics revealed a significant presence of teachers in the Teacher 1 position, comprising 59.85% of the respondents. This high frequency may be attributed to turnover rates, limited career progression options, or a disparity between the supply and demand of experienced teachers. To address these challenges, the study suggests fostering a supportive work environment, structured career pathways, and comprehensive professional development opportunities to enhance teacher retention and success (Hattie, 2019).

On the other hand, the Master Teacher 1 position had the lowest frequency, with only 7.64% of respondents occupying this role. Barriers such as limited training access, lack of mentorship, and insufficient incentives for higher qualifications may contribute to the scarcity of teachers in advanced positions. The study recommends implementing professional development initiatives, mentorship programs, clear career paths,

recognition incentives, and supportive leadership to address this gap (Vagi et al., 2019). The absence of Master Teacher 2 and Master Teacher 3 positions signifies a significant void in top-tier professional recognition and expertise, suggesting potential barriers hindering teachers from advancing to these higher levels.

The research underscores the significance of investing in the growth of early-career educators, establishing clear career pathways, and offering advanced teaching roles to attract and retain high-performing teachers. By tackling these issues, educational institutions can cultivate a more experienced, engaged, and effective teaching workforce, ultimately leading to enhanced student outcomes.

The distribution of respondents based on teaching experience indicated that 39.41% were in the 6–10-year category, a crucial period for educators to refine their instructional practices and become expert teachers. Research by Kraft and Falken underscores the significance of comprehensive, sustained, and content-focused professional development programs to enhance teacher practices and student outcomes. These programs should be multifaceted, sustained, and tailored to teachers' needs to improve student achievements and cultivate a proficient teaching workforce.

However, 10.59% of respondents fell into the 16–20-year experience range, suggesting potential mid-career attrition due to burnout, lack of support, and work-life balance issues. Implementing personalized professional development, mentorship initiatives, and work-life balance programs is essential to retain experienced educators and contribute to long-term student success and the educational community. The study by Vagi, Pivovarova, and Barnard (2019) emphasizes the importance of targeted support and retention strategies, beyond the initial induction phase, to mitigate teacher attrition and enhance the overall teaching workforce quality.

The distribution of respondents based on their highest educational attainment revealed that 42.61% held a bachelor's degree with a master's degree, showcasing a workforce that values continuing education and professional development. Teachers with advanced degrees often possess enhanced content knowledge and pedagogical skills, leading to improved student outcomes and effective classroom management. Higher levels of educational attainment among teachers have been linked to better student performance and more effective teaching practices (Darling-Hammond et al., 2020).

Ghanizadeh and Rostami's study (2021) highlighted that teachers with a master's degree exhibit higher self-efficacy and confidence in various aspects of teaching, contributing to improved student achievement and job satisfaction. However, the low representation of teachers with a master's degree and a PhD suggests potential barriers to pursuing doctoral-level education. Strategies to incentivize and support advanced degrees are crucial to attract and retain highly educated teachers and enhance the quality of the teaching workforce.

The distribution of respondents based on the subject taught highlighted a notable presence of teachers in Araling Panlipunan, potentially influenced by curricular

requirements and student interest. In contrast, subjects like Music, Arts, Physical Education, Health Education (MAPEH), Edukasyon sa Pagpapakatao (ESP), and Technology and Livelihood Education (TLE) had lower frequencies, indicating a focus on core academic subjects over elective or specialized areas. Addressing this imbalance through interdisciplinary integration and targeted professional development initiatives could bolster the teaching workforce in these subjects and promote a more well-rounded curriculum for holistic student development.

Cohen and Hill's study (2020) stresses the importance of a balanced curriculum in nurturing multiple intelligences, enhancing student engagement, and fostering equity and inclusion. Integrating non-core subjects like MAPEH, ESP, and TLE can enrich the learning experience, establish interdisciplinary connections, and cater to diverse student interests and talents. By rectifying disparities in subject representation, educational institutions can establish a more inclusive learning environment that empowers all students to realize their full potential.

Problem 2. How do the respondents assess their practices in classroom participation, extracurricular activities, personalized attention, professional development, parental communication, lesson preparation, collaboration with colleagues, and innovative teaching methods?

Table 2.1. Distribution of Respondents' Assessment of their Practices in Classroom Participation

Indicators	Mean	SD	Description
As a teacher…			
I lead the discussions and activities to motivate students to participate throughout the period.	3.70	0.46	Always
I promote student participation to enrich both creativity and mind-fullness.	3.72	0.45	Always
I ensure that classroom participation is a positive experience for every student.	3.75	0.44	Always
I encourage students to share their thoughts and opinions in class to enhance self-confidence.	3.79	0.41	Always
I employ interactive teaching methods like discussions, debates, or Q&A sessions for student engagement.	3.50	0.58	Always
I use approaches to actively involve students in hands-on activities or group work during lessons.	3.58	0.53	Always
I empower students to ask questions and engage in meaningful dialogue.	3.64	0.53	Always
I facilitate the discussions and activities for a better understanding of the concepts.	3.70	0.46	Always
I engage my students in interactive discussions and develop better outcomes.	3.65	0.49	Always
I provide feedback and foster a collaborative learning	3.54	0.57	Always

environment.

Overall	**3.66**	**0.49**	**Always**

Legend : 3.21-4.00 Always/Very High 2.61-3.20 Most of the Time/High 1.81-2.60 Sometimes/Low 1.00-1.80 Never/ Very Low

Table 2.1 analyzes teachers' classroom participation practices, showing a mean of 3.66 (SD = 0.49), indicating consistent engagement. Factors like training, resource access, and institutional support contribute to this engagement. Zhong and Li (2020) highlight the positive impact of teacher engagement on student achievement, especially in online learning environments. Strengthening interactive teaching approaches can enhance students' learning outcomes.

Encouraging students to share thoughts and opinions promotes self-confidence, inclusivity, and motivation in the classroom. Student self-efficacy predicts academic success, making student expression crucial for their engagement and motivation. Interactive methods like discussions, debates, and Q&A sessions, with a mean score of 3.50 (SD = 0.58), demonstrate a commitment to engaging students. However, there is room for improvement and innovation in their implementation.

Interactive methods like discussions and debates enhance understanding, critical thinking, and communication skills. Cochrane et al. (2019) emphasize that active participation fosters critical thinking, engagement, and skill development. These methods not only enhance academic performance but also prepare students for future success by developing essential skills like communication and teamwork.

Table 2.2. Distribution of Respondents Assessment of their Practices in Engagement in Extracurricular Activities

.

Indicators	Mean	SD	Description
As a teacher…			
I take an active role in planning and managing extracurricular activities.	3.11	0.72	Most of the Time
I initiate and organize extracurricular activities to enhance the talents of my students.	3.02	0.74	Most of the Time
I organize or lead some extracurricular activities relevant to the appropriate grade-level competencies.	2.98	0.77	Most of the Time
I participate in extracurricular activities outside of the scheduled school day.	2.94	0.83	Most of the Time
I encourage and assist students who want to participate in extracurricular activities.	3.32	0.70	Always
I eagerly participate in extracurricular activities to share my knowledge and skills.	3.13	1.40	Most of the Time
I attend and support students during extracurricular events, such as sports competitions or performances.	3.26	0.69	Always
I render extra hours to help motivate students to pursue extracurricular activities.	3.04	0.73	Most of the Time
I am involved in supervising and coordinating school clubs or societies.	2.96	0.81	Most of the Time
I allow project collaboration as part of extracurricular initiatives.	3.12	0.74	Most of the Time

Overall		**3.09**	**0.81**	**Most of the Time**

Legend : 3.21-4.00 Always/Very High 2.61-3.20 Most of the Time/High
1.81-2.60 Sometimes/Low 1.00-1.80 Never/ Very Low

The analysis of teacher practices in engagement in extracurricular activities reveals a high commitment level, with an overall mean of 3.09 (SD = 0.81). While teachers show dedication to holistic student development, there are disparities in participation levels across schools. Encouraging uniform practices through policies and support systems can maximize the benefits of extracurricular activities, promoting equity and inclusion.

One teacher, focusing on encouraging student participation, achieved a high mean score of 3.32 (SD = 0.70), reflecting a very high commitment level. Consistent support for students in extracurricular activities fosters holistic education, empowering students to explore interests and develop life skills. Teacher encouragement plays a vital role in promoting student success and participation in these activities, as highlighted by Rodriguez and Martinez (2020).

Conversely, teacher participation in extracurricular activities outside the scheduled school day received a lower mean of 2.94 (SD = 0.83), indicating room for improvement in consistency. The variability in engagement suggests factors like support, resources, and motivation influence educators' involvement. Addressing these challenges can strengthen a holistic approach to education, ensuring equal emphasis on academic and non-academic aspects.

Table 2.3. Distribution of Respondents' Assessment of their Practices in Personalized Attention

Indicators	Mean	SD	Description
As a teacher…			
I offer personalized support to students who encounter academic challenges.	3.34	0.61	Always
I adjust my teaching methods to meet each student's individual needs and learning interests.	3.52	0.55	Always
I regularly integrate interests and preferences into the curriculum to ensure personalized learning experiences.	3.45	0.57	Always
I identify and address individual learning difficulties by offering additional support and resources to students.	3.33	0.61	Always
I schedule individual conferences or meetings with students to discuss their goals and progress.	3.23	0.68	Always
I tailor my teaching methods to meet the specific learning needs of each student.	3.34	0.61	Always
I consistently provide personalized feedback to individual students regarding their academic progress.	3.33	0.61	Always
I give each student individualized feedback to ensure their academic needs are met.	3.34	0.60	Always
I consistently provide individualized feedback to students on their assignments and assessments.	3.21	0.64	Always
I employ teaching strategies that cater to the diverse learning needs of each student for an inclusive learning environment.	3.38	0.61	Always

Overall	**3.35**	**0.61**	Always	

Legend *: 3.21-4.00 Always/Very High 2.61-3.20 Most of the Time/High*
1.81-2.60 Sometimes/Low 1.00-1.80 Never/ Very Low

The analysis of personalized attention practices among teachers reveals a high level of commitment, with an overall mean score of 3.35 (SD = 0.61), described as very high. Teachers consistently provide individualized support, adapting their teaching methods to meet the unique needs of each student. This personalized approach is crucial for addressing diverse learning needs and fostering student engagement and academic success.

One teacher, focusing on adjusting teaching methods to meet individual student needs, achieved a high mean score of 3.52 (SD = 0.55), indicating a strong emphasis on personalized teaching. Adapting teaching strategies to align with students' needs and interests creates an inclusive and effective learning environment, supporting equitable learning opportunities.

In contrast, providing individualized feedback to students on assignments and assessments received a slightly lower mean score of 3.21 (SD = 0.64), suggesting challenges in consistent implementation. Time constraints and workload issues can hinder educators from delivering personalized feedback effectively, highlighting the need for additional support and strategies to maintain this practice consistently.

The research by Cohen and Hill (2020), Darling-Hammond et al. (2020), Hattie (2019), Ingersoll and Strong (2019), and Shute (2019) emphasizes the importance of personalized teaching strategies, mentoring programs, and individualized feedback in supporting student learning, engagement, and academic performance. These studies underscore the transformative impact of personalized approaches on student growth and success, highlighting the significance of ongoing professional development and institutional support in enhancing teaching practices.

Table 2.4. Distribution of Respondents' Assessment of their Practices in Professional Development

Indicators	Mean	SD	Description
As a teacher…			
I improve my teaching abilities by taking part in professional development training.	3.43	0.65	Always
I participate in ongoing training sessions the school or district offers to stay informed about educational trends.	3.39	0.64	Always
I proactively seek and engage in various professional development opportunities to refine my skills and expertise.	3.36	0.64	Always
I attend workshops, conferences, or seminars to enhance my teaching skills and knowledge.	3.32	0.65	Always
I pursue advanced degrees or additional certifications to further develop my expertise in the subject matter.	3.20	0.74	Most of the Time
I remain abreast of the latest educational approaches and advancements for continuous improvement in my practice.	3.29	0.62	Always

I remain abreast of the latest educational approaches and advancements for continuous improvement in my practice.	3.45	0.59	Always
I collaborate with colleagues to share best practices and innovative teaching strategies as part of my personal and professional development.	3.36	0.65	Always
I engage in reflective practice and establish personal and professional development goals for continuous improvement.	3.33	0.59	Always
I apply insights gained from professional development in my daily teaching practices.	3.39	0.60	Always
Overall	**3.35**	**0.64**	**Always**

Legend *: 3.21-4.00 Always/Very High 2.61-3.20 Most of the Time/High 1.81-2.60 Sometimes/Low 1.00-1.80 Never/ Very Low*

The analysis of teachers' practices in professional development indicates a high level of commitment, with an overall mean score of 3.35 (SD = 0.64), categorized as Very High. Teachers show consistent engagement in professional development activities, highlighting a strong dedication to continuous improvement and growth in their teaching practices. Ongoing participation in professional development is crucial for enhancing teaching skills, keeping abreast of educational trends, and enhancing student outcomes.

Padillo (2021) emphasizes the significant impact of professional development on improving teaching practices and student learning outcomes. These programs equip teachers with essential skills and strategies to deliver effective and personalized instruction, ultimately enhancing student engagement and academic success. Research by Adeniran, Ishaku, and Akanni (2020) also underscores the importance of continuous professional development in maintaining teacher engagement and addressing learning disparities.

Sanchez (2022) and Ansong (2024) highlight the necessity of well-designed professional development programs tailored to meet the specific needs of teachers and students. These initiatives provide practical strategies that can be directly implemented in the classroom, significantly influencing teaching practices, confidence, and job satisfaction. Continuous learning through professional development is vital for teachers to navigate challenges and ensure a high-quality education for students.

One indicator, focusing on staying informed about the latest educational approaches, received the highest mean score of 3.45 (SD = 0.59), reflecting a strong commitment to continuous learning and adaptation. Teachers who remain updated on educational advancements can implement innovative teaching strategies, enhancing student engagement, motivation, and academic achievement.

On the other hand, the indicator related to pursuing advanced degrees or additional certifications received a lower mean score of 3.20 (SD = 0.74), indicating challenges in consistent engagement with further education. Darling-Hammond et al. (2019) emphasize the importance of advanced education and specialized training in deepening subject matter expertise, adapting teaching strategies, and meeting diverse learning needs. Educators with higher levels of education are more likely to integrate innovative teaching techniques and benefit from ongoing learning opportunities.

Table 2.5. Distribution of Respondents' Assessment of their Practices in Parental Communication

Indicators	Mean	SD	Description
As a teacher...			
I regularly communicate with parents or guardians regarding their child's academic progress.	3.43	0.60	Always
I promote parents' involvement in supporting their child's education and in a collaborative home-school partnership.	3.51	0.57	Always
I promptly respond to messages from parents seeking information or updates about their child's education to ensure open lines of communication.	3.56	0.55	Always
I organize quarterly parent-teacher conferences, or as needed, to discuss students' overall development and performance.	3.54	0.56	Always
I provide parents with opportunities for teaching methods and classroom activities to enhance transparency.	3.33	0.67	Always
I communicate with parents about the child's behavioral issues or concerns that need to be addressed.	3.52	0.61	Always
I share information about upcoming school events, projects, or assignments with parents.	3.50	0.60	Always
I actively seek parental input and involvement in the child's educational journey for shared decision-making.	3.41	0.60	Always
I regularly provide constructive feedback to parents on ways they can support their child's learning at home to promote effective home-school partnerships.	3.39	0.64	Always
I collaborate with parents to address academic challenges and improve coping mechanisms.	3.39	0.60	Always
Overall	**3.46**	**0.60**	**Always**

Legend *: 3.21-4.00 Always/Very High 2.61-3.20 Most of the Time/High 1.81-2.60 Sometimes/Low 1.00-1.80 Never/ Very Low*

The analysis of teachers' practices in parental communication reveals a high level of commitment, with an overall mean score of 3.46 (SD = 0.60), described as Very High. Teachers consistently engage in effective communication with parents, emphasizing the importance of maintaining open and meaningful dialogue to enhance student success and the educational experience.

Research by Tutt (2021) and Hawthorne (2022) highlights the significance of effective parental communication in education, addressing common challenges and fostering strong home-school partnerships. Effective communication leads to improved student outcomes, enhanced teacher provision, and increased parent engagement in their child's education.

One indicator, focusing on promptly responding to parent messages seeking information or updates about their child's education, received the highest mean score of 3.56 (SD = 0.55), demonstrating a strong commitment to maintaining open lines of communication. This practice fosters trust, collaboration, and positive relationships between parents and teachers, contributing to student well-being and academic success.

In contrast, the indicator of providing parents with opportunities to learn about teaching methods and classroom activities received a lower mean score of 3.33 (SD = 0.67). While educators value transparency and parent involvement, there may be variability in how consistently these opportunities are provided, indicating a need for more structured approaches to enhance parent engagement.

Table 2.6. Distribution of Respondents' Assessment of their Practices in Time Spent on Lesson Preparation

Indicators	Men	SD	Description
As a teacher….			
I dedicate time to plan and prepare for daily lessons thoroughly.	3.41	0.56	Always
I engage in strategic long-term curriculum planning to ensure comprehensive coverage of topics throughout the academic year.	3.29	0.62	Always
I invest extra time beyond regular school hours to prepare materials and resources for classroom instruction.	3.31	0.60	Always
I update and adapt lesson plans to address the evolving needs of the students.	3.44	0.56	Always
I use a variety of assessments (e.g., essays, quizzes, projects) that align with learning objectives and accurately measure student understanding of the course material.	3.54	0.54	Always
I collaborate with colleagues to share lesson plans and resources, reducing individual preparation time.	3.34	0.63	Always
I participate in professional development activities focused on improving lesson planning and preparation skills.	3.34	0.63	Always
I allocate time for reflection on the teaching practices and adjust to improve student learning.	3.36	0.58	Always
I involve students in planning to solicit their input and feedback on learning activities to enhance relevance and engagement.	3.25	0.65	Always
I invest additional time in planning and organizing initiatives relevant to the lesson.	3.27	0.63	Always
Overall	**3.35**	**0.60**	Always

Legend *: 3.21-4.00 Always/Very High 2.61-3.20 Most of the Time/High*
1.81-2.60 Sometimes/Low 1.00-1.80 Never/ Very Low

The analysis of teachers' professional development practices indicates a high level of commitment, with an overall mean score of 3.35 (SD = 0.64), signifying a Very High dedication to continuous improvement. Teachers exhibit consistent engagement in professional development activities, emphasizing the importance of ongoing learning to enhance teaching skills and student outcomes. Padillo (2021) highlights the significant impact of professional development on teaching practices and student learning, equipping educators with essential skills for effective instruction.

Research by Adeniran, Ishaku, and Akanni (2020) reinforces the necessity of continuous professional development to maintain teacher engagement and address learning disparities. Sanchez (2022) and Ansong (2024) stress the need for well-tailored professional development programs to meet the specific needs of teachers and students, enhancing teaching practices and job satisfaction. Staying informed about the latest educational approaches received the highest mean score, indicating a strong

commitment to continuous learning and adaptation, leading to innovative teaching strategies and improved student engagement.

Conversely, pursuing advanced degrees received a lower mean score, suggesting challenges in consistent engagement with further education. Darling-Hammond et al. (2019) underscore the importance of advanced education in deepening subject matter expertise and adapting teaching strategies. Educators with higher levels of education are more likely to integrate innovative teaching techniques and benefit from ongoing learning opportunities.

Table 2.7. Distribution of Respondents Assessment of their Practices in Collaboration with Colleagues

Indicators	Mean	SD	Description
As a teacher….			
I collaborate with colleagues on joint lesson planning or curriculum development.	3.33	0.65	Always
I participate in professional learning communities or collaborative teacher teams.	3.36	0.60	Always
I share teaching strategies and resources with my colleagues to foster a collaborative learning environment.	3.32	0.61	Always
I engage in interdisciplinary collaboration with colleagues from other subject areas.	3.32	0.66	Always
I collaborate with colleagues to share insights and develop effective interventions.	3.42	0.61	Always
I actively engage in collaborative professional development opportunities with colleagues, focusing on implementing evidence-based practices to enhance student learning outcomes.	3.44	0.59	Always
I involve colleagues in discussions about innovative teaching methods and educational trends.	3.37	0.63	Always
I work collaboratively with colleagues to create a supportive and cohesive classroom environment.	3.37	0.62	Always
I help my colleagues to organize and supervise extracurricular activities.	3.32	0.61	Always
I seek input and feedback from colleagues on their teaching practices for mutual professional growth and improvement.	3.36	0.63	Always
Overall	**3.36**	**0.62**	**Always**

Legend *: 3.21-4.00 Always/Very High 2.61-3.20 Most of the Time/High 1.81-2.60 Sometimes/Low 1.00-1.80 Never/ Very Low*

Table 8 provides a comprehensive analysis of teachers' collaboration practices, revealing a strong culture of collaboration that enhances teaching effectiveness, problem-solving support, and professional growth. This collaborative environment fosters shared best practices and mutual support, promoting a supportive teaching community. Studies by Ruano (2019), Sannen et al. (2021), Muckenthaler et al. (2020), Drossel et al. (2019), and De Jong et al. (2022) align with these findings, emphasizing the positive impact of effective collaboration on student achievement and the importance of dense networks for inclusive teaching practices.

The research underscores the significance of teacher collaboration in professional development and educational effectiveness, leading to continuous improvement and better student outcomes. The high level of engagement in collaborative activities reflects a well-established norm among teachers, enhancing the professional environment and fostering growth. The emphasis on evidence-based practices and shared learning opportunities highlights educators' commitment to lifelong learning and skill enhancement.

While sharing teaching strategies and resources received a slightly lower mean score, educators still value collaboration and recognize its importance in fostering a supportive learning environment. Collaborative efforts not only enhance pedagogical skills and teaching effectiveness but also promote innovation, creativity, and job satisfaction among teachers. By working together, educators can create a culture of continuous improvement and excellence in education, benefiting both teachers and students alike.

Table 2.8. Distribution of Respondents' Assessment of their Practices in Innovative Teaching Methods

Indicators	Mean	SD	Description
As a teacher…			
I integrate technology into my lessons to enhance student engagement.	3.53	0.60	Always
I employ various creative teaching approaches in the classroom to meet the needs of students with different learning styles and preferences.	3.44	0.60	Always
I facilitate project-based learning and hands-on experiential approaches in my teaching for active learning.	3.38	0.61	Always
I tailor-fit lessons to accommodate diverse learning styles and preferences for equitable learning opportunities.	3.35	0.58	Always
I utilize flipped classroom techniques for pre-learning before in-class discussions.	3.32	1.43	Always
I integrate real-world applications to contextualize content and enhance its relevance for students.	3.48	0.57	Always
I incorporate collaborative learning activities as teaching methods to develop teamwork among students.	3.56	1.93	Always
I utilize gamification strategies to increase student engagement and motivation.	3.26	0.66	Always
I incorporate creative assessment methods to gauge student understanding.	3.30	0.62	Always
I adapt different teaching approaches to match each student's needs and interests.	3.42	0.55	Always
Overall	**3.40**	**0.82**	Always

Legend *: 3.21-4.00 Always/Very High 2.61-3.20 Most of the Time/High*
1.81-2.60 Sometimes/Low 1.00-1.80 Never/ Very Low

The distribution analysis of respondents' practices in innovative teaching methods reveals a high level of commitment, with an overall mean score of 3.40 (SD = 0.82), described as Very High. Teachers demonstrate a strong willingness to incorporate innovative teaching

strategies, emphasizing student-centred approaches and dynamic instructional methods to enhance learning outcomes.

Research by Karolčík and Marková (2023) highlights the importance of teachers' perceptions of innovative teaching methods in designing effective professional development programs and support systems. Overcoming implementation challenges and fostering widespread adoption of innovative practices can positively impact student motivation, learning outcomes, and engagement.

One indicator, focusing on incorporating collaborative learning activities to develop teamwork among students, obtained the highest mean score of 3.56 (SD = 1.93), demonstrating educators' high value for collaborative learning. These activities promote social interaction, critical thinking, and essential interpersonal skills, contributing to improved student engagement and academic achievement.

In contrast, the indicator of utilizing gamification strategies to increase student engagement and motivation received the lowest mean score of 3.26 (SD = 0.66), indicating a consistent but slightly lower application of gamification. Despite this, educators recognize the potential benefits of gamification in enhancing learning experiences, suggesting a willingness to explore innovative approaches to boost student engagement and motivation.

Jones and Smith (2021) emphasize the positive impact of gamification strategies on student engagement and motivation. By incorporating game elements into educational tasks, educators can create interactive and enjoyable learning experiences that resonate with students' preferences for interactive and experiential learning.

Table 2.9. Summary of the Respondents' Assessment of Their Practices

Variables	**Mean**	**SD**	**Interpretation**
Classroom Participation	3.66	0.49	Very High
Extracurricular Activities	3.09	0.81	High
Personalized Attention	3.35	0.61	Very High
Professional Development	3.35	0.64	Very High
Parental Communication	3.46	0.60	Very High
Lesson Preparation	3.35	0.60	Very High
Collaboration with Colleagues	3.36	0.62	Very High
Innovative Teaching Methods	3.40	0.82	Very High
Overall	**3.38**	**0.67**	**Very High**

Legend : 3.21-4.00 Always/Very High 2.61-3.20 Most of the Time/High
1.81-2.60 Sometimes/Low 1.00-1.80 Never/ Very Low

The assessment of teachers' practices in Table 2.9 reveals a high level of engagement and dedication, with an overall mean score of 3.38 (SD = 0.67), interpreted as Very High. This indicates that teachers are committed to their responsibilities and actively involved

in their roles, enhancing the educational experience for students through effective teaching practices.

According to Harris and Jones (2020), teacher involvement in community and extracurricular activities significantly enhances the educational experience for students. Engaging in extracurricular activities as mentors, club advisors, or community liaisons builds stronger student relationships, improves academic performance, and fosters personal development. Teachers' involvement outside the traditional classroom setting creates a supportive and personal environment for students, guiding them through academic challenges and personal growth.

Specifically, the variable of classroom participation received the highest mean score of 3.66 (SD = 0.49), indicating highly active and engaged teachers who lead discussions, encourage student participation, and utilize diverse teaching methods. This dynamic and interactive learning environment fosters strong student-teacher relationships, enhances student engagement, and promotes holistic student development.

Smith and Brown (2019) emphasize the significance of active teacher participation in classrooms for improving student engagement and learning outcomes. Teachers' interactive lessons, collaborative projects, and discussions create a dynamic learning environment that motivates students, enhances critical thinking skills, and fosters positive attitudes towards learning. Investing in comprehensive teacher professional development opportunities focused on active teaching practices can significantly enhance the overall learning experience for both teachers and students.

On the other hand, the variable of extracurricular activities received a lower mean of 3.09 (SD = 0.81), interpreted as High. While teacher involvement in extracurricular activities was notable, it was not as robust as classroom participation. This indicates the need for schools to better integrate and value teachers' participation in extracurricular activities to foster a more holistic student development approach. Rodriguez and Martinez (2020) highlight the positive impact of teacher involvement in extracurricular activities on students' overall development and academic success, emphasizing improved social skills, motivation, and academic performance.

Problem 3. What is the level of learners' academic achievement in English, Science, Mathematics, Filipino, and Araling Panlipunan during the 3rd and 4th Quarter general weighted average?

Table 3.1. Distribution of Respondents on Academic Achievement in English 3rd and 4th Quarter

Category	**Frequency**	**Percentage**	**Description**
90-and Above	**380**	**46.80**	**Outstanding**
85 – 89	358	44.09	Very Satisfactory

80 – 84	64	7.88	Satisfactory
75 -79	**10**	**1.23**	**Fairly Satisfactory**
74 and below	0	0.00	Does not Meet Expectations
Total	**812**	**100.00**	
Mean		92.87	Outstanding
Standard Deviation		0.81	Outstanding

Legend: 90–100% Outstanding, 85-89% Very Satisfactory, 80-84% Satisfactory, 75-79% Fairly Satisfactory, 74% below Does Not Meet Expectations

The analysis of learners' academic performance in English in Table 3.1 showcases exceptional results, with an overall mean score of 92.87 (SD = 0.81), described as Outstanding. The high proportion of learners achieving scores of 90 and above reflects exceptional understanding and competency in English, highlighting the effectiveness of teaching methodologies, learning environment, and dedication of students. The absence of students in the "Did not Meet Expectations" category underscores the success of the educational environment in meeting or exceeding academic standards in English.

According to Smith and Johnson (2019), learners' academic performance in English is influenced by their level of engagement and motivation in the classroom. Actively participating in class discussions and demonstrating interest in English language activities contribute to better academic outcomes. Genuine interest and engagement in the subject matter enhance students' involvement and participation in learning activities, leading to improved academic performance.

Table 3.2. Distribution of Respondents on Academic Achievement in Science for the 3rd and 4th Quarter

Category	Frequency	Percentage	Description
90 and Above	362	44.58	Outstanding
85 – 89	**372**	**45.81**	**Very Satisfactory**
80 – 84	66	8.13	Satisfactory
75 -79	**12**	**1.48**	**Fairly Satisfactory**
	0	0.00	Does not Meet Expectations
Total	**812**	**100.00**	
Mean		88.84	Very Satisfactory
Standard Deviation		0.77	Very Satisfactory

Legend: 90–100% Outstanding, 85-89% Very Satisfactory, 80-84% Satisfactory, 75-79% Fairly Satisfactory, 74% below Does Not Meet Expectations

The performance analysis of learners in Science presented in Table 3.2 reflects outstanding academic achievement, with an overall mean score of 88.84 (SD = 0.77), described as Very Satisfactory. Most students achieving Outstanding and Very Satisfactory scores highlights the strong foundation in scientific concepts and

understanding among the learners. The absence of students in the lower performance categories underscores the excellence of Science education within the school.

Lee and Kim (2020) emphasized the significant impact of hands-on laboratory activities and inquiry-based learning on learners' academic performance in science. Engaging in practical experiments and investigations enhances students' understanding and achievement in science, providing a comprehensive grasp of scientific principles.

Table 3.3. Distribution of Respondents on Academic Achievements in Mathematics for the 3rd and 4th Quarter

Category	Frequency	Percentage	Description
90 and Above	304	37.44	Outstanding
85 – 89	**384**	**47.29**	**Very Satisfactory**
80 – 84	120	14.78	Satisfactory
75 -79	**4**	**0.49**	**Fairly Satisfactory**
74 and below	0	0.00	Does not Meet Expectations
Total	**812**	**100.00**	
Mean		87.93	Very Satisfactory
Standard Deviation		0.74	Very Satisfactory

Legend: 90–100% Outstanding, 85-89% Very Satisfactory, 80-84% Satisfactory, 75-79% Fairly Satisfactory, 74% below Does Not Meet Expectations

The analysis of learners' academic performance in Mathematics presented in Table 3.3 indicates a very satisfactory mean score of 87.93 (SD = 0.74), reflecting the school's success in delivering a Mathematics education program that supports the majority of students in achieving a high level of mastery in the subject. The significant proportion of students achieving very satisfactory grades underscores the effectiveness of the institution's teaching methodologies and support systems.

Thompson and Green (2021) highlighted the impact of differentiated instruction strategies on improving students' academic performance in Mathematics. Adapting teaching methods to meet students' diverse needs enhances their understanding and mastery of mathematical concepts, promoting academic success.

Table 3.4: Distribution of Respondents on Academic Achievement in Filipino for the 3rd and 4th Quarter

Category	Frequency	Percentage	Description
90 and Above	**438**	**53.94**	**Outstanding**
85 – 89	320	39.41	Very Satisfactory
80 – 84	42	5.17	Satisfactory
75 -79	**12**	**1.48**	**Fairly Satisfactory**

74 and below	0	0.00	Does not Meet Expectations
Total	**812**	**100.00**	
Mean		93.55	Outstanding
Standard Deviation		0.85	Outstanding

Legend: 90–100% Outstanding, 85-89% Very Satisfactory, 80-84% Satisfactory, 75-79% Fairly Satisfactory, 74% below Does Not Meet Expectations

The analysis of learners' academic performance in Filipino presented in Table 14 reveals an outstanding mean score of 93.55 (SD = 0.85), indicating exceptional proficiency and mastery in the Filipino language. The high frequency of outstanding performance underscores the school's success in delivering a curriculum that nurtures robust Filipino language skills and deep appreciation among the students.

Santos and Reyes (2019) emphasize the significant influence of language proficiency and cultural background on Filipino learners' academic performance. Their research highlights the importance of fluency in Filipino and a strong connection to Filipino culture in achieving better educational outcomes.

Table 3.5. Distribution of Respondents on Academic Achievement in Araling Panlipunan for the 3rd and 4th Quarter

Category	Frequency	Percentage	Description
90 and Above	**504**	**62.07**	**Outstanding**
85 – 89	260	32.02	Very Satisfactory
80 – 84	44	5.42	Satisfactory
75 -79	4	0.49	Fairly Satisfactory
74 and below	**0**	**0.00**	**Does not Meet Expectations**
Total	**812**	**100.00**	
Mean		87.93	Very Satisfactory
Standard Deviation		0.74	Very Satisfactory

Legend: 90–100% Outstanding, 85-89% Very Satisfactory, 80-84% Satisfactory, 75-79% Fairly Satisfactory, 74% below Does Not Meet Expectations

The analysis of learners' academic performance in Araling Panlipunan presented in Table 3.5 showcases an impressive overall mean score of 87.93 (SD = 0.74), described as Very Satisfactory. The high percentage of students achieving outstanding grades in Araling Panlipunan reflects the institution's success in providing quality education and fostering a learning environment that supports academic excellence.

Cruz and Santos (2020) highlighted the impact of integrating local history and community-based learning activities on enhancing learners' academic performance in Araling Panlipunan. Engaging in projects that explore local history and community issues leads to a deeper understanding and higher achievement in the subject.

Table 3.6: Summary of the level of students' Academic Achievement

Variables	Mean	SD	Description
English	92.87	0.81	Outstanding
Science	88.84	0.77	Very Satisfactory
Mathematics	87.93	0.74	Very Satisfactory
Filipino	93.55	0.85	Outstanding
Araling Panlipunan	92.76	0.79	Outstanding
Overall	**91.19**	**0.79**	**Outstanding**

Legend: 90–100% Outstanding, 85-89% Very Satisfactory, 80-84% Satisfactory, 75-79% Fairly Satisfactory, 74% below Does Not Meet Expectations

The study indicates consistently high academic performance among learners across various subjects, with an impressive overall mean of 91.19 (SD = 0.79), reflecting outstanding achievement. Students demonstrate proficiency in multiple subjects, showcasing the effectiveness of current educational practices and educators' commitment to facilitating student success.

Active learning strategies, such as group discussions and hands-on projects, positively correlate with academic performance, fostering deeper understanding and retention of course material. Exceptional performance in Filipino subjects underscores students' mastery of language, literature, and cultural aspects, enhancing the school's reputation and instilling pride in stakeholders.

Language proficiency plays a vital role in learners' academic success in Filipino subjects, emphasizing the significance of language competence within the educational system. Mathematics, with a mean of 87.93 (SD = 0.74) described as Very Satisfactory, shows room for improvement compared to other subjects, prompting a focus on enhancing instructional practices and exploring innovative approaches for better student achievement.

Garcia and Martinez (2020) highlight the essential role of effective teaching in improving students' mathematical proficiency. Teachers' subject knowledge, teaching skills, and ability to create a positive learning environment significantly impact students' comprehension and mastery of mathematical concepts.

Problem 4. Is there a significant effect of teacher practices on learners' academic achievement?

Table 4.1. Effect on Teachers' Practices on Students' Academic Achievement

Table 4 shows the findings of the study on the significant relationship between teacher practices and academic achievement in English, Science, Math, Filipino, and Araling Panlipunan subjects. It highlights the importance of teacher involvement, including classroom participation, extracurricular activities, personalized attention, professional

development, parental communication, lesson preparation, collaboration with colleagues, and innovative teaching methods.

Students' Academic Achievement	Teachers' Practices								Overall
	Classroom Participation	Extracurricular Activities	Personalized Attention	Personal Development	Parental Communication	Lesson Preparation	Collaboration with Colleagues	Innovative Teaching Method	
	r value p-value	r value p-value	r value p-value	r value p-value	r value p-value	r value p-value	r value p-value	r value p-value	r value p-value
English	-11.16 0.06 NS	-8.29 p-value NS	3.44 0.18 NS	2.78 0.22 NS	14.32 0.04 **S**	22.25 0.03 **S**	-10.29 0.06 NS	-12.48 0.05 **S**	**0.71** **0.09** **NS**
Science	-1.87 0.31 NS	-1.35 0.41 NS	1.18 0.45 NS	1.84 0.09 NS	2.72 0.22 NS	3.49 0.18 NS	-0.43 0.74 NS	-1.93 0.03 **S**	**0.46** **0.30** **NS**
Math	-1.05 0.49 NS	-1.06 0.08 NS	-0.53 0.05 **S**	1.23 0.43 NS	1.68 0.34 NS	1.89 0.03 **S**	-0.34 0.79 NS	-1.38 0.40 NS	**0.06** **0.33** **NS**
Filipino	1.43 0.39 NS	-0.15 0.90 NS	2.21 0.27 NS	1.08 0.48 NS	-0.79 0.07 NS	2.64 0.23 NS	5.92 0.11 NS	-0.38 0.77 NS	**1.50** **0.40** **NS**
AP	1.032 0.49 NS	0.884 0.539 NS	0.231 0.08 NS	-0.355 0.783 NS	-0.003 0.998 NS	-0.102 0.935 NS	0.778 0.05 **S**	-0.301 0.814 NS	**0.27** **0.59** **NS**

Legend: **S**- Significant **NS**- Not Significant

The study examines the relationship between various forms of teachers' practices and students' academic achievements in different subject areas. While the overall correlation between teacher practices and educational attainment is not statistically significant, analyzing specific dimensions of teachers' practices provides essential insights.

In English, parental communication positively influences academic achievement, suggesting that increased levels of interaction between parents and teachers are associated with improved student performance. Lesson preparation and innovative teaching methods yield significant positive effects, indicating that meticulous lesson planning and integrating creative teaching approaches are vital in boosting student outcomes in English. The findings emphasize the importance of effective communication between parents and teachers, thorough preparation of lessons, and the adoption of innovative teaching techniques as critical factors in enhancing academic achievement in the English subject area.

In Science, Innovative Teaching Methods have a potential positive significance, indicating an area ripe for deeper exploration. Factors like personalized attention, professional development, parental communication, and lesson preparation display positive correlation coefficients, indicating higher levels of science achievement. Conversely, classroom participation, extracurricular activities, collaboration with colleagues, and innovative teaching methods demonstrate negative correlation coefficients, suggesting lower science achievement.

In Mathematics, personalized attention significantly impacts math performance, indicating that when teachers offer tailored attention and support to students, it significantly enhances their math proficiency. Effective lesson planning is pivotal in shaping the connection between teacher engagement and academic success, stressing the necessity of prioritizing and improving lesson preparation strategies in educational environments.

In Filipino, none of the factors exhibited statistical significance, suggesting that the relationships between these factors and the achievement of the Filipino subject did not reach statistical significance levels. Further analysis is necessary to grasp the implications of these results within the study's context, delving into potential reasons for the absence of essential relationships and contemplating additional variables that could impact academic achievement in the Filipino subject.

Collaboration with colleagues among the teacher practices factors means a noteworthy impact on academic achievement in Araling Panlipunan, highlighting the value of collaborative efforts among teachers in enhancing student outcomes. However, the absence of significant results for other teacher practices such as classroom participation, extracurricular activities, personalized attention, professional development, parental communication, lesson preparation, and innovative teaching methods suggests that these specific factors may not have had a statistically significant influence on academic achievement in Araling Panlipunan.

Problem 5. Is there a significant relationship between teachers' practices and each of their characteristics?

Table 5. Relationship between Teachers' Practices and the Respondents' Characteristic

Respondents' Characteristics	Teacher's Practices								
	Classroom Participation	Extracurricular Activities	Personalized Attention	Personal Development	Parental Communication	Lesson Preparation	Collaboration with Colleagues	Innovative Teaching Method	Overall
	r value p-value	r value p-value	r value p-value	r value p-value	r value p-value	r value p-value	r value p-value	r value p-value	r value p-value
Position	-0.42	0.17	-0.30	0.91	0.19	0.78	0.70	0.17	**0.28**
	0.40	0.74	0.57	0.04	0.72	0.05	0.12	0.74	**0.42**
	NS	NS	NS	**S**	NS	**S**	NS	NS	**NS**
Teaching Experience	0.17	-0.20	-0.49	0.75	0.13	0.51	-0.11	0.82	**0.20**
	0.79	0.75	0.40	0.05	0.84	0.38	0.86	0.03	**0.51**
	NS	NS	NS	**S**	NS	NS	NS	**S**	**NS**
Highest Educational Attainment	0.32	-0.41	-0.18	0.96	0.43	0.19	-0.22	-0.76	**0.05**
	0.60	0.50	0.78	0.02	0.48	0.76	0.72	0.13	**0.50**
	NS	NS	NS	**S**	NS	NS	NS	NS	**NS**
Subject Taught	0.21	0.00	0.00	-0.04	-0.35	0.42	-0.44	-0.58	**-0.10**
	0.69	0.99	0.99	0.94	0.49	0.41	0.38	0.23	**0.64**
	NS	NS	NS	NS	NS	NS	NS	NS	**NS**

Legend: **S**- Significant **NS**- Not Significant

Table 5 shows the relationship between teachers' practices and respondents' characteristics. It aims to identify potential correlations between teachers' involvement

and personal attributes, revealing the nuanced connections between these variables and their instructional practices.

Table 5 examines the relationship between teacher practices and respondent characteristics such as position, teaching experience, highest educational attainment, and subject taught. It evaluates how various aspects of teacher involvement correlate with these characteristics using correlation coefficients and significance levels. The results highlight the importance of inclusive professional development for all educators to enhance teaching practices, with a positive correlation between job satisfaction, career advancement, and course preparation. Additionally, the study emphasizes the positive link between professional development, innovative teaching methods, and teaching experience, underlining the need for ongoing learning for instructional improvement. While certain factors like educational attainment and subjects taught show little correlation with teacher involvement, understanding these dynamics can help promote collaboration among teachers. Considering teacher characteristics such as position and experience is crucial when planning professional development activities (Hashim et al., 2019; Padillo, 2021).

Problem 6. Based on the study's findings, what school development program can be developed?

Table 6. School Development Plan

Table 6 shows the study's findings: a school development program can be designed to leverage the significant relationships between various aspects of teacher practices and students' academic achievement**.**

Year I. Foundation to Empower Teachers							
Areas of Concern	**Specific Objectives**	**Strategies/ Activities**	**Time Frame**	**Person/s Involved**	**Source of Fund**	**Estimated Budget**	**Expected Outcome**
Extracurricular Activities	Expand the range of extracurricular activities to cater to a broader array of student interests and talents	Collaborate with community organizations to provide unique extracurricular opportunities.	Quarterly	-SSG Coordinator -BSP Coordinator -GSP Coordinator -MAPEH Coordinator	-SSLG Fund -BSP and GSP Fund	P 15,000	-A broader range of activities that meet varied student interests, resulting in increased satisfaction and skill development.
Mathematics	-Improve student academic performance, with a focus on enhancing mathematics outcomes.	-The proposed plan includes a workshop series to enhance teachers' mathematical content knowledge, pedagogical training to improve their pedagogical skills, and a mentorship program to provide guidance and support to new teachers, promoting professional growth and development in mathematics instruction. strategies, and the use of technology in mathematics instruction.	- Start at the beginning of the school year - Monthly - Quarterly	-Mathematics Department -Mathematics Teacher -Classroom Adviser -School Administrator -Grade level Coordinator	-MOOE -Mathematics Department Fund	P 20,000	-Improved student academic performance in mathematics, with a focus on increasing the overall mean score. - Increased student engagement and confidence in the subject.
Mathematics	-Enhance students' understanding and performance in mathematics through targeted interventions and support.	-Provide targeted interventions such as tutoring, small group instruction, and after-school programs.	Whole year round	-- Mathematics Teacher -Classroom Adviser -	-School Fund	P 10,000	Higher proficiency levels in mathematics, as evidenced by improved test scores and performance on standardized assessments
	Develop and implement strategies to make mathematics more engaging and relevant to students.	Incorporate real-world applications and problem-solving activities in lessons.	Beginning of the school year	-Curicculum implementer -School Administrator	-MOOE -School fund	P 10,000	-Greater student interest and engagement in mathematics, leading to increased participation and enthusiasm in class activities.
	-Improve student performance and interest in mathematics	-Implement interactive math competitions - Introduce math-themed events and challenges -Provide peer tutoring and support sessions	Quarterly	-Mathematics Teacher -Student Math Leaders	MOOE	P 15,000	Enhanced math proficiency, increased enthusiasm for the subject, and improved problem-solving skills

DISCUSSION

The survey conducted among 406 teachers and 812 Junior High Students revealed significant relationships between teacher practices and learners' academic achievement. The program aims to enhance teacher educators, promote collaborative practices, and personalized teaching approaches to improve academic performance. The assessment showed strong teacher engagement, with interactive teaching methods positively impacting student performance. While extracurricular activities present an area for increased engagement, significant correlations were observed between teacher involvement and academic achievement in specific subjects. Parental communication,

lesson preparation, innovative teaching methods, personalized attention, professional development, and collaboration with colleagues all positively influenced student performance in various subjects. However, the overall impact of teacher practices on academic achievement across all subjects was not statistically significant, suggesting the need for a broader approach for widespread improvement. The study emphasizes the importance of active teacher participation in enhancing academic performance and suggests targeted professional development to elevate student achievement further. The "Engagement-Driven Academic Success Theory" highlights the pivotal role of teacher practices in shaping academic outcomes, particularly in subjects like Filipino, emphasizing the significance of interactive teaching methods in promoting student success.

Conclusions

The survey involving 406 teachers and 812 junior high students highlighted the substantial impact of teacher practices on academic achievement. Notably, classroom participation and the exceptional performance in the subject of Filipino underscored the effectiveness of interactive teaching methods in engaging students and promoting academic success. The strong correlation between teacher engagement and student performance emphasizes the crucial role of interactive teaching practices in enhancing academic achievement. In conclusion, the study emphasizes the vital contribution of teacher practices, particularly classroom participation, in fostering academic success, especially in subjects like Filipino. The findings underscore the significance of prioritizing and enhancing teacher engagement to sustain and improve student achievement, ultimately leading to enhanced educational outcomes.

Recommendations

Based on the conclusion drawn from the study, the following recommendations are provided:

1. The school leader should implement extracurricular activities that promote hands-on learning, teamwork, and creativity, which can complement traditional classroom instruction and foster a holistic educational experience.

2. The division and school leader must allocate resources and funding to support extracurricular activities, develop policies that adjust teacher workloads to prioritize

extracurricular activities and recognize and provide incentives for extracurricular involvement.

3. Mathematics teachers should actively participate in professional development opportunities to enhance their skills and knowledge, implement evidence-based instructional practices, and provide targeted support for struggling students.

4. Mathematics classes, incorporating interactive problem-solving activities, Mathematics competitions, and peer tutoring sessions, can stimulate student interest and deepen their understanding of mathematical concepts.

5. Schools should incorporate interactive strategies in extracurricular activities and mathematics classes to boost student engagement and academic achievement. This fosters a culture of active participation, critical thinking, and academic excellence among students.

6. In order to apply the significant conclusion of the study, educators, school administrators, and learners should all embrace the development program offered by the researcher.

Compliance with Ethical Standards

The research on teacher practices and academic achievement, involving 406 teachers and 812 junior high students, prioritized ethical considerations to ensure the rights and privacy of participants. Key ethical considerations included voluntary participation, informed consent procedures, and strict confidentiality measures. Teachers voluntarily participated, while student participants obtained parental consent through their class advisers. Confidentiality measures were strictly upheld to protect potentially identifiable data. The study's ethical framework aimed to produce reliable results while respecting participant rights and privacy. By adhering to ethical guidelines, the study aimed to contribute valuable and trustworthy insights to academic knowledge and uphold the integrity of research practices.

Acknowledgments

The researcher expresses deep gratitude for dedicating this humble endeavour to her cherished husband, Ramel N. Salva. His enduring love, boundless patience, and unwavering support have been the driving forces behind her academic journey. The researcher also extends this dedication to her siblings, nieces, nephews, in-laws, relatives, and friends. Their encouragement has been a steadfast source of inspiration and strength throughout this endeavour. This work is dedicated to the author's parents, especially to her late father, whose passion for knowledge fuelled her own scholarly pursuits.

The researcher is deeply grateful to her esteemed thesis adviser, Dr. Gina F. Labitad, whose invaluable guidance and unwavering support have been instrumental in illuminating the author's path through the uncertainties of this academic journey. To the

members of the researcher's dissertation committee, Dr. Gerlinda G. Corpuz, Dr. Braziel L. Ongcachuy, Dr. Carmelita O. Elbanbuena, Dr. Pepa V. Pontillas, and Dr. Estrella S. Ferenal, the author is thankful for their insightful feedback, thoughtful critiques, and for helping strengthen this study.

Dr. Erlinda Quirap and Dr. Mahalia Sultan are acknowledged for their meticulous editing and proofreading to ensure the clarity and accuracy of this research. Ms. Soraya L. Redoble, the statistician, provided expert guidance in the data analysis, ensuring the rigor and validity of the findings. The researcher also thanks the numerous people who helped make this work possible, including the personnel at the School of Graduate Studies, especially Mr. Verge Samson, and others who gave of their time and skills. Their efforts and assistance were crucial to the completion of this study.

Above all, the researcher expresses thanks to the Almighty God for His mercy and direction during this academic endeavour.

REFERENCES

Adeniran, A., Ishaku, J., & Akanni, L. (2020). Is Nigeria Experiencing a Learning Crisis: Evidence from Curriculum-matched Learning Assessment.Centre for the Study of the Economies of Africa Working Paper. ttps://riseprogramme.org/sites/default/files/inline-files/Adeniran-Nigeria_learning_crisis.pdf.

Ali, A. (2021). Lesson planning and proactive classroom management strategies for teaching English at the tertiary level in Pakistan. Journal of English Language Studies, 3(1), 8–16.

Ansong, D., Okumu, M., Amoakoa, E., Kubia, J., Ampomah, O., Koomson, I., and Hamilton, E. (2024). The role of teacher support in students' academic Performance in low- and high-stakes assessments. Learning and Individual Differences. Volume 109, January 2024, 10239. https://doi.org/10.1016/j.lindif.2023.102396.

Ansong, D. (2024). Tailoring professional development to meet teacher and student needs. International Journal of Teaching and Learning, 35(1), 45-60.

Bao, C. R., Zhang, L. J., & Dixon, H. R. (2021). Teacher engagement in language teaching: investigating self-efficacy for teaching based on the project “Sino-Greece online Chinese language classrooms.” Front. Psychol. 12:710736. doi: 10.3389/fpsyg.2021.710736.

Cohen, D., & Hill, L. (2020). Nurturing multiple intelligences through a balanced curriculum. Educational Research Journal, 25(4), 123-146.

Cochrane, L., Wang, J., & Chen, Y. (2019). Enhancing critical thinking and communication skills through interactive teaching methods. Journal of Educational Innovation, 17(2), 78-92.

Cruz, A. B., & Santos, M. L. (2020). Enhancing academic performance in Araling Panlipunan through local history and community-based learning. Journal of Social Studies Education, 12(2), 123-139. https://doi.org/10.1016/j.jse.2020.02.001

Cruz, J. V., & Santos, L. M. (2020). Integrating local history and community based

learning activities to enhance students' academic performance in Araling Panlipunan. International Journal of Educational Research and Innovation,15, 125-138. *Works*. Yale University Press.
Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science, 24*(2), 97–140. https://doi.org/10.1080/10888691.2019.1621391
Drossel, K., Eickelmann, B., & Gerick, J. (2019). Predictors of teachers' participation in professional development concerning the implementation of new technologies in German schools. Education and Information Technologies, 24(1), 863-881. https://doi.org/10.1007/s10639-018-9797-2
De Jong, L., Meirink, J., and Admiraal, W. (2022). School-based collaboration as learning context for teachers: A systematic review. International Journal of Educational Research. Volume 112, 2022, 101927.
DepEd Order No. 8, s. 2023: Teachers and Their Involvement in Volunteer and Extracurricular Activities. Retrieved from https://www.teacherph.com/dep- ed order-teachers-volunteer-work-extracurricular-activities.
Education Policy Innovation Collaborative. (2021). The impact of teacher education on student achievement: New evidence from Michigan. Michigan State University.
Garcia, A., & Martinez, L. (2020). Factors influencing learners' academic performance in mathematics. Journal of Educational Research and Practice, 17(3), 45-62. https://doi.org/10.1016/j.jerp.2020.03.004
Ghanizadeh, A., & Rostami, S. (2021). The interplay of EFL teachers' self efficacy, and their use of strategies for classroom management, student engagement, and instructional strategies. Iranian Journal of Language Teaching Research, 9(1), 71-99.
Harris, A., & Jones, M. (2020). System leadership and COVID-19: Supporting schools and school leadership. School Leadership & Management, 40(4), 295 301. https://doi.org/10.1080/13632434.2020.1811479
Harris, A., & Jones, M. (2020). The impact of teacher involvement in extracurricular and community activities on student outcomes. *Journal of Educational Leadership and Policy Studies*, 15(2), 89-105. https://doi.org/10.1016/j.jelps.2020.04.005
Hashim, H. , Saharani, M. , Zulkifli, N. , Mokhtar, M. and Yunus, M. (2019) Conception of Innovative Teaching Methodologies among Lecturers at Selected Polytechnics in Malaysia. Creative Education, 10, 874-881. doi: 10.4236/ce.2019.105065.
Hattie, J., & Zierer, K. (2020). Visible learning with lesson observation: A handbook for teachers and school leaders. Routledge.
Hawthorne, (2022). Promoting Effective Communication with Parents in Education. Retrieved from https://www.highspeedtraining.co.uk/hub/how- to communicate-with-parents-effectively.
Inayat, A. and Ali, A. (2020). Influence of Teaching Style on Students' Engagement, Curiosity and Exploration in the Classroom. Journal of Education and Educational Development. 7(1), 87-102, 2020. DOI: http://dx.doi.org/10.22555/joeed.v7i1.2736.
Ingersoll, R. M., & Strong, M. (2019). The impact of induction and mentoring

programs for beginning teachers: A critical review of the research. *Review of Educational Research, 81*(2), 201-233. https://doi.org/10.3102/0034654311403323
Ingersoll, R., Sirinides, P., & Dougherty, P. (2021). Leadership, professional community, and teacher commitment. American Educational Research Journal, 58(2), 347-387. https://doi.org/10.3102/0002831220920374
Jones, C., & Smith, H. (2021). Gamification in education: A systematic review of the literature. Educational Research Review, 34, 100394. https://doi.org/10.1016/j.edurev.2021.100394
Karolčík, Š., & Marková, J. (2023). Teachers' perceptions of innovative teaching methods and their relationship with selected variables. Journal of Education for Teaching, 49(2), 193-208. https://doi.org/10.1080/02607476.2022.2084872
Kraft, M. A., & Rogers, T. (2019). The underutilized potential of teacher-to-parent communication: Evidence from a field experiment. Economics of Education Review, 66, 14-29. https://doi.org/10.1016/j.econedurev.2018.07.007
Lee, H., & Kim, S. (2020). The impact of hands-on laboratory activities on academic performance in science. Journal of Science Education, 14(3), 89-104. https://doi.org/10.1016/j.jse.2020.03.002
Lee, J., & Kim, H. (2020). The effects of hands-on learning and inquiry-based learning on students' academic achievement and science process skills in science lessons. Journal of Science Education and Technology, 29(3),285-294.https://doi.org/10.1007/s10956-020-09815-x
Lee, H., & Thompson, A. B. (2020). The impact of active learning strategies on student academic performance. Journal of Educational Methods, 13(4), 89-104. https://doi.org/10.1016/j.jem.2020.04.005
Muckenthaler M, Tillmann T, Weiß S, et al. (2020) Teacher collaboration as a core objective of school development. School Effectiveness and School Improvement 31(3): 486–504.
Muckenthaler, M., Richter, D., Engelbert, M., & Brunner, M. (2020). Collaborative teacher participation in school development and student achievement gains. Studies in Educational Evaluation, 65, 100859. https://doi.org/10.1016/j.stueduc.2020.100859
Padillo, G., Manguilimotan, R., Capuno, R. and Espina, R. (2021). *Professional Development Activities and Teacher Performance*. International Journal of Education and Practice 2021 Vol. 9, No. 3, pp. 497-506. DOI: 10.18488/journal.61.2021.93.497.506.
Padillo, R. W. (2021). The influence of professional development on teachers' instructional planning, subject knowledge, and classroom management. International Journal of Teacher Education and Professional Development, 4(1), 1-16.
Rodriguez, A. M., & Martinez, L. P. (2020). The influence of teacher involvement in extracurricular activities on student development. Journal of Educational Leadership and Policy Studies, 17(3), 78-94. https://doi.org/10.1016/j.jelps.2020.03.004
Rodriguez, L. A., & Martinez, E. F. (2020). Strengthening school community

through teacher engagement in extracurricular activities. School Community Journal, 30(1), 129-152.
Rodriguez, M., & Martinez, J. (2020). The impact of teacher involvement in extracurricular activities on student development and academic achievement. Journal of Educational Research and Practice, 10(1), 23-36. https://doi.org/10.5590/JERAP.2020.10.1.02
Ruano, J., Heine, J., and Gebhardt. M. (2019). Does Teacher Collaboration Improve Student Achievement? Analysis of the German PISA 2012 Sample Front. Educ., 13 August 2019. Sec. Teacher Education. Volume 4 -2019 | https://doi.org/10.3389/feduc.2019.00085.
Ruano, L. R. (2019). A collaborative approach to improving student learning outcomes in a high-needs school district. School Community Journal, 29(1), 91-114. https://files.eric.ed.gov/fulltext/EJ1219284.pdf
Sanchez, J. (2022). Effective professional development: Enhancing teaching practices and student outcomes. Journal of Teacher Education, 73(2), 123-138.
Sannen J, Maeye r S, de Struyf E, et al. (2021). Connecting teacher collaboration to inclusive practices using a social network approach. Teaching and Teacher Education 97: 103182.
Sannen, T., Voet, M., & De Wever, B. (2021). Teacher collaboration and student achievement in secondary education: A systematic review. Review of Educational Research, 91(5), 751-791. https://doi.org/10.3102/00346543211027030
Santos, A. P., & Reyes, M. C. (2019). The influence of language proficiency and cultural background on Filipino learners' academic performance. Journal of Multilingual and Multicultural Development, 40(8), 705-718. https://doi.org/10.1080/01434632.2019.1571065
Santos, M. L., & Reyes, J. P. (2019). The impact of language proficiency and cultural background on academic performance in Filipino. Journal of Language Education, 10(2), 67-82. https://doi.org/10.1016/j.jle.2019.02.001
Shute, V. J. (2019). Focus on formative feedback. Review of educational research, 78(1), 153-189.
Singh, S. (2023). Descriptive research design: Observing and documenting variables and conditions. Journal of Research Methodology, 15(2), 45-57.
Smith, J. A., & Johnson, K. L. (2019). The impact of student engagement on academic performance in English language learning. Journal of Educational Research, 24(3), 45-62.
Smith, J. A., & Johnson, L. M. (2019). The impact of student engagement and motivation on academic performance in English. Journal of Educational Research and Practice, 11(3), 123-139. https://doi.org/10.1016/j.jerp.2019.03.002
Smith, J. D., & Brown, A. L. (2019). Enhancing student engagement through active teacher participation in the classroom. Teaching and Teacher Education,84, 12-24. https://doi.org/10.1016/j.tate.2019.04.007
Thompson, A. B., & Green, S. E. (2021). Differentiated instruction and its impact on academic performance in mathematics. Journal of Educational Innovation, 13(4), 112-126. https://doi.org/10.1016/j.jei.2021.04.007

Thompson, M. (2021). The Effects of Teacher Involvement in Students' Lives Liberal Studies Program, California State University, Chico. EDTE 490 W: Liberal Studies Capstone. https://scholarworks.calstate.edu/downloads/rr172360r.

Tutt, P. (2021). Teacher-Parent Communication Strategies to Start the Year Off Right. Retrieved from https://www.edutopia.org/article/teacher-parent-c communication-strategies-start-year-right.

Vagi, R., Pivovarova, M., & Barnard, W. M. (2019). Dynamics of the Teacher Labor market in Arizona and implications for teacher quality. AERA Open, 5(1), 2332858419827391.f Teacher Education, 70(2), 115-127.

Zhong, Y., & Li, S. (2020). The influence of online teachers' teaching engagement on students' learning performance: From the perspectives of teachers and students. Open Educ. Res. 26, 99–110. doi: 1 0.13966/j.cnki.kfjyyj.2020.03.011

APA Citation:

Salva, C. R., & Labitad, G. F. (2024). TEACHERS' PRACTICES AND STUDENTS' ACADEMIC ACHIEVEMENT: BASIS FOR SCHOOL DEVELOPMENT PROGRAM. Ignatian International Journal for Multidisciplinary Research, 2(8), 46–82. https://doi.org/10.5281/zenodo.13151110

Corresponding author: *gina.labitad@deped.gov.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

TEACHERS' WORK TASK MOTIVATION, SELF-EFFICACY, AND EFFECTIVENESS: BASIS FOR PROFESSIONAL DEVELOPMENT PROGRAM

Jordan G. Saner, Ph.D.
Arnie Christian D. Villena, Ph.D.

Lyceum of the Philippines University- Batangas, Batangas City, Philippines

https://doi.org/10.5281/zenodo.13292338

ABSTRACT

This descriptive study examined the connections between work task motivation, self-efficacy, and effectiveness among K-12 teachers in a city in the Philippines. A sample of 426 teachers was drawn from a larger pool of 1,424 Basic Education Teachers using stratified non-proportional allocation sampling during the 2023-2024 school year. Data collection involved a modified questionnaire that evaluated work task motivation, self-efficacy, and effectiveness. The instruments used for data collection were subjected to reliability testing to ensure their accuracy and consistency. Findings indicated that most respondents were female with a Master's degree, teaching in elementary schools with 10 years or less of experience. They demonstrated high motivation in various responsibilities, including class preparation and student evaluation. Respondents also reported strong self-efficacy in executing teaching duties, such as adapting instruction and maintaining discipline, and were effective in subject knowledge, assessment, and communication. Notably, differences in work task motivation and self-efficacy were observed based on sex and years of teaching experience, particularly in tasks related to assessment and class preparation. The study found significant relationships between work tasks motivation, self-efficacy, and teacher effectiveness. Based on these assessments and relationships, a professional development program for Basic Education Teachers in Lipa City is proposed to enhance these key variables, aiming to improve teaching performance and educational outcomes.

Keywords: *professional development program, teacher effectiveness, teacher self-efficacy, work tasks motivation*

INTRODUCTION

Teaching is a noble profession that is being looked up to by society when it comes to training and educating future generations. This might be true despite issues being faced by teachers in general. Teachers perform duties of shaping the intellectual, social, and emotional dimensions of students, laying the foundation for lifelong learning and success. Across nations and cultures, educators are known for dedication, passion, and commitment to the societal improvement. Being facilitators of knowledge and models to youth, the teaching profession encompasses diverse roles and responsibilities that range from curriculum design, curriculum implementation, instructional delivery to classroom management and student assessment. Teachers have been known to be doing their best when they are effective, though most of times the term is being interchanged with efficiency. To be known as effective, teachers should possess a substantial amount of knowledge of subject matter delivered through pedagogical expertise and a genuine concern for their students' well-being.

One indicator and could also be a correlate of teaching effectiveness is motivation to do the tasks that are relative to the holistic implementation of the curriculum. This could be collectively known as work task motivation (Garcia, 2021). Work tasks motivation, as an emerging area of study, focuses on determining the intrinsic and extrinsic factors that drive teachers to perform their duties with dedication, enthusiasm, and commitment. Research indicates that motivated teachers are more likely to excel in various aspects of their profession, which could include motivations for class preparation, teaching, evaluation of students, administrative tasks, and complementary tasks.

Recent studies suggest that teachers who experience personal fulfillment in their work tend to exhibit higher motivation and effectiveness in their roles. This research highlights the positive correlation between work task motivation and both teacher performance and job satisfaction. Specifically, intrinsically motivated teachers often engage more in class preparation, showcasing enhanced creativity, resourcefulness, and effectiveness in developing instructional materials and lesson plans. Additionally, teachers who feel autonomous and competent are more likely to deliver engaging and impactful lessons, emphasizing the importance of intrinsic motivation in the teaching profession (Deci & Ryan, 2000).

One of the primary roles of teachers is to deliver teaching and learning activities for the learners to experience. Class preparation is a critical task for teachers, involving the meticulous planning and organization of lesson content to ensure effective instruction. This process includes designing lesson plans, selecting appropriate materials, and creating engaging activities that align with curriculum standards. Furthermore, motivated teachers are more proactive in using formative assessment strategies (Hattie, 2019) and demonstrate efficacy in administrative tasks (Bandura, 2019). In terms of complimentary tasks, intrinsic motivation fosters a culture of continuous improvement and collaboration among educators, leading to enhanced student outcomes and school effectiveness (Darling-Hammond, 2020). While teachers' primary tasks are to teach and to monitor student progress and development, it is also imperative for teachers to perform teaching-

related activities. These are sometimes called administrative tasks. Administrative tasks are an integral part of a teacher's responsibilities, encompassing a wide range of activities that support the overall functioning of the school. Administrative tasks are crucial for maintaining the structure and accountability of the educational environment (Ingersoll et al., 2019).

In addition to work tasks motivation, another related concept that significantly influences teachers' effectiveness and job satisfaction is self-efficacy. Self-efficacy refers to teachers' beliefs in their capabilities to organize and execute instructional tasks effectively (Bandura, 1997). Self-efficacy could influence various aspects of teaching, including instruction, adaptation to individual student needs, student motivation, classroom management, collaboration with colleagues and parents, and resilience in the face of change. Teachers with high levels of self-efficacy are more likely to approach instructional tasks with confidence and creativity, resulting in more engaging and effective lessons (Tschannen-Moran & Hoy, 2001). Moreover, self-efficacious teachers demonstrate greater adaptability and flexibility in tailoring instruction to meet the diverse learning needs and preferences of their students (Bandura, 2021).

Self-efficacy is also an indicator to ensure that instructions or teaching and learning activities are adjusted to individual student needs. Teachers with high self-efficacy are more likely to recognize and address diverse learning styles and abilities in their classrooms (Schunk & DiBenedetto, 2020). They feel confident in differentiating instruction and providing appropriate support for students who may need extra help or advanced challenges (Goddard et al., 2020). This adaptability is essential for creating an inclusive learning environment where all students can thrive. Teachers who believe in their ability to meet individual needs are also more persistent in finding effective strategies and interventions; their self-efficacy contributes to better student engagement and achievement, as they can tailor their teaching to ensure every student reaches their full potential.

Furthermore, self-efficacious teachers are adept at motivating students to set high expectations for themselves, persevere in the face of challenges, and take ownership of their learning (Tschannen-Moran & Hoy, 2001). Additionally, teachers with strong self-efficacy beliefs are better equipped to maintain discipline and create a positive classroom environment conducive to learning (Bandura, 1997). They could demonstrate effective classroom management strategies, establish clear expectations, and provide consistent support and encouragement to their students.

Another dimension of teaching that needs teacher self-efficacy is the area of student discipline. Teachers with high self-efficacy are confident in their ability to establish and enforce clear behavioral expectations and classroom rules (Tschannen-Moran & Hoy, 2020). They are more consistent in applying disciplinary measures and are better at de-escalating conflicts and addressing disruptive behavior. This confidence allows them to create a safe and orderly learning environment where students feel respected and focused on learning (Miller et al., 2021).

Moreover, self-efficacy is closely linked to teachers' ability to collaborate with colleagues and parents effectively. Those teachers who believe in their ability to work collaboratively are more likely to seek support, share resources, and engage in professional dialogue to enhance their practice (Tschannen-Moran & Hoy, 2001). They also demonstrate greater resilience in coping with change, whether it be curriculum reforms, policy shifts, or technological advancements, by viewing challenges as opportunities for growth and innovation (Bandura, 1997).

To sum of the efficacy of teachers, coping with changes and adapting to new challenges in the educational landscape would help teachers perform their duties and responsibilities. Teachers with high self-efficacy are more resilient and adaptable, able to embrace new technologies, curricula, and teaching methods (Vaughan, 2020). They view changes as opportunities for growth rather than obstacles, which enables them to stay current with educational advancements and improve their teaching practices.

The foregoing discussion elaborated how important teacher self-efficacy is in teaching and in the performance of teaching related duty. The succeeding discussions will also elucidate the importance of teacher self-efficacy and work task motivations and their roles in teacher effectiveness, by shaping teachers' beliefs in their abilities to manage classroom tasks, engage students, and foster a positive learning environment. As previously discussed, effective teachers can deliver high-quality instruction that engages students and fosters deep understanding of the material, leading to improved academic performance. Their ability to manage classrooms efficiently and create a positive learning environment also contributes to higher student motivation and reduced behavioral issues (Hattie, 2020). Effectiveness could be primarily characterized by a teacher’s ability to teach and deliver instructions. A deep understanding of the content allows teachers to explain concepts clearly, answer student questions confidently, and make connections between different topics (Ball et al., 2020). Teachers with strong subject knowledge are better equipped to create engaging and relevant lessons that capture students' interest and facilitate learning (Hill & Chin, 2021). Moreover, they can identify and address student misconceptions more effectively, ensuring a solid foundation in the subject (Cochran-Smith & Villegas, 2020).

Paired with effective delivery of instruction is assessment. It is a fundamental aspect of teacher effectiveness, as it provides critical insights into student learning and instructional impact. Effective teachers design and use a variety of assessment tools, including formative and summative assessments, to measure student progress and identify areas for improvement (Brookhart, 2021). They use assessment data to inform their instructional decisions and adjust their teaching strategies to meet student needs (Popham, 2020).

To make the foregoing components of teaching effectiveness possible, creating a positive learning environment is a key element. Effective teachers establish a classroom climate that is safe, inclusive, and conducive to learning (Pianta & Hamre, 2020). They build strong relationships with their students, promoting trust and respect, which are essential for a supportive learning atmosphere (Jennings & Greenberg, 2020).

Finally, a teacher could be considered effective when he or she can communicate well with students, colleagues, administrators, and stakeholders. Teachers who communicate clearly and effectively can convey complex ideas in an understandable manner, facilitating student comprehension (Fisher et al., 2021). They use a variety of communication strategies, including verbal explanations, visual aids, and interactive discussions to engage students and support their learning (Graham et al., 2021).

With the previous descriptions of what effective teaching is, in the context of motivation and efficacy, it could be delineated that teaching profession is tedious, taxing, and is a demanding task. In the context of the Philippines, teaching profession is governed by a trifocalized system, the Department of Education (DepEd) for Basic Education, Commission on Higher Education for Tertiary and Graduate Studies, and Technical Skills Development Authority (TESDA) for technical-vocational careers. Basic Education is managed by the stringent standards and regulations by DepEd. Filipino teachers undergo rigorous training and professional development to stay abreast of emerging trends, technologies, and pedagogical approaches. Despite challenges, teaching remains a sought-after profession in the Philippines, attracting individuals who are into social services and teaching inclined, as well as those who are looking for jobs with high rates of employability.

The DepEd's mandate extends beyond academic instruction to encompass the promotion of values education, citizenship, and lifelong learning among students. Teachers in DepEd-managed schools are tasked to implement national education policies, curriculum frameworks, and assessment standards to ensure consistency and quality across the educational system.

Lipa City, as situated within the province of Batangas exemplifies the diverse and dynamic landscape of education in the Philippines, particularly within the City Schools Division. With its large population and numerous educational institutions, Lipa City serves as a hub for learning, catering to thousands of students across various grade levels. Within the Schools Division of Lipa City which is governed by DepEd, teachers undertake a multitude of responsibilities beyond traditional classroom instruction. In addition to delivering curriculum content, educators in Lipa City are tasked with administrative duties, extracurricular activities, and community engagement initiatives to enrich students' learning experiences.

Through collaborative efforts among educators, administrators, and stakeholders, Lipa City's schools strive to create inclusive and nurturing environments where every student can thrive academically, socially, and emotionally. The Schools Division of Lipa City boasts curricular and curricular-related activities, but not limited to curriculum development in the form of creating modules and audiovisual learning materials; academic competitions such as press conferences, science congress, math quiz bees, etc.; sports involvement, technical and vocational skills competitions, foreign language integration to curriculum. Curriculum and teaching-related tasks are also being prided by them, such as the conduct of educational research, school-based management, and

teacher professionalization among others. All of which are dominated and/or manned by teachers in the field.

With teachers having so much on their plates and as characterized by the multifaceted dynamic educational landscape in Lipa City, teachers face numerous challenges in performing their tasks efficiently and effectively. The diverse range of teaching and non-teaching tasks assigned to them could often lead to time constraints and dilemmas, making it difficult to devote adequate attention to each aspect of their role. With the provision of DepEd Order no. 2, s. 2024 wherein administrative tasks will be removed to teachers, there are still a number of ancillary tasks or quasi-assignments that could emerge throughout the academic year.

The rationale for conducting a study entitled "Teachers' Work Tasks Motivation, Self-Efficacy, and Effectiveness: Basis for Professional Development Program" in the Schools Division of Lipa City roots down from the interconnected factors that impact teacher performance and student outcomes. As discussed earlier, teachers in Lipa City face a multitude of challenges, including diverse teaching and non-teaching tasks, resource limitations, and socio-economic factors, which can affect their motivation, self-efficacy, and effectiveness in the classroom. These challenges are worsened by the demands of the teaching profession, the expectations placed on educators, and the complexities of the educational landscape.

To be able to explore and describe work tasks motivation, self-efficacy, and effectiveness among K-12 Basic Education teachers in the Schools Division of Lipa City are essential, primarily because of several reasons. Teacher motivation could directly influence their engagement, commitment, and job satisfaction, which, in turn, impact student learning outcomes and overall school effectiveness. By exploring the factors that drive teacher motivation, such as intrinsic and extrinsic motivators, schools can develop strategies to enhance teacher morale, retention, and performance.

On the other hand, self-efficacy beliefs significantly influence teachers' instructional practices, classroom management, and ability to adapt to changing educational contexts. Teachers with high levels of self-efficacy are more likely to employ effective teaching strategies, provide differentiated instruction, and foster positive learning environments. Identifying areas of strength and areas for growth in teachers' self-efficacy can inform targeted professional development initiatives aimed at enhancing teaching effectiveness and student achievement.

Finally, describing teacher effectiveness as measured by subject matter knowledge, instructional planning and strategies, assessment practices, learning environment, and effective communication is an important aspect because it could be equated with quality education and positive student learning outcomes. By assessing teachers' effectiveness across these dimensions, schools can identify areas of improvement and provide targeted support and resources to enhance teaching practices and student learning experiences.

Therefore, conducting a study on teachers' work tasks motivation, self-efficacy, and effectiveness in Lipa City's Schools Division is essential for informing evidence-based professional development programs that is tailored to the needs of educators. By understanding the interconnectedness of these factors, schools can cultivate a culture of continuous improvement, foster teacher growth and development, and ultimately, contribute to the further enhancement of the quality of education for all students in Lipa City.

Research Objectives

This study aims to determine the relationship among work tasks motivation, self-efficacy, and teaching effectiveness of K-12 teachers in the Schools Division of Lipa City. More specifically, it seeks to attain the following objectives:

1. describe the profile of respondents in terms of sex, educational attainment, teaching position, and years in service.

2. assess the work tasks motivation of teachers with regard to class preparation, teaching, evaluation of students, administrative tasks, and complimentary tasks.

3. identify the teacher self-efficacy as to instruction, adapt instruction to individual needs, motivate students, maintain discipline, cooperate with colleagues and parents, and cope with change.

4. determine the teacher effectiveness as regards subject matter knowledge, instructional planning and strategies, assessment, learning environment, and effective communication.

5. test the significant difference in work tasks motivation, self-efficacy, and effectiveness when respondents are grouped according to profile variables.

6. test the significant relationship among the three variables.

7. propose a professional development program for K-12 teachers based on the results of the study.

METHODOLOGY

Research Design

The research employed a descriptive design, which focuses on systematically gathering information to accurately depict the characteristics of populations or phenomena, as outlined by Gay (2020). This method aims to provide a clear and precise snapshot of current conditions or behaviors, ensuring that the study environment remains

unaffected by the research process. By doing so, it allows for a detailed understanding of the subject under investigation without introducing bias or influence.

This research primarily dealt with quantitative data to describe existing phenomena and circumstances about the work task motivation, efficiency, and effectiveness of teachers. For this reason, this research design was deemed appropriate as utilized in this study. Quantitative data came from accomplished questionnaires. This questionnaire contained descriptive statements which were quantitatively rated by the respondents. The data were processed statistically to further attain research objectives.

Participants of the Study

This study sought the participation of the basic education teachers from the schools division of Lipa City or DEPED Lipa City. These basic education teachers belong to levels from kinder until grade 12. These levels encompass kindergarten, elementary school, high school, and senior high school, as described from the Philippine educational system.

The Schools division of Lipa City is an administrative unit in the DEPED Region IV-A CALABARZON within the DEPED Central Administration. Today, DEPED Lipa City oversees 61 public elementary schools, seven public elementary schools with junior high school, and 18 secondary schools which are strategically distributed all over the 20,940 hectares of Lipa City. The schools division office (SDO) is located at J.P. Laurel Highway, Barangay Marawoy, Lipa City, Batangas.

The population of the study is composed of 426 Basic Education teachers from Kindergarten to Grade 12. These participants were selected from the 1424 public school teachers from the Schools Division of Lipa City in Lipa City, Batangas. In determining the actual participant or the population of the study who will participate in answering the survey questionnaire, stratified non-proportional allocation was used. This refers to a sampling method wherein the size of the sample that is drawn from a particular stratum does not proportionate the relative size of that stratum. Moreover, schools with less than 20 teaching staff were excluded from the sampling procedure.

Data Gathering Instrument

After the topic was approved by the dissertation adviser, the researcher crafted research questionnaire based on the objectives of the study, validated research instruments, and related literature and studies available online and offline. Once the adviser and the researcher have already agreed and finalized the instrument, it undergone validation from a research and statistics expert. Consequently, when the instrument was validated, it was administered for pilot testing to determine its reliability.

The instrument is divided into four parts: profile of respondents, teacher's work tasks motivation, teacher's self-efficacy, and teacher's effectiveness. Part 1, the profile of respondents is a researcher-made part which aims to harvest the data on sex,

educational attainment, position, and years of teaching experience of the respondents through checkboxes survey.

Part II is work task motivation, adapted from Fernet (2008) was created and further validated to measure the teachers' motivation toward specific work tasks. This is designed to assess five motivational constructs toward six work tasks (e.g., class preparation, teaching). The instrument has five subdomains or sub-variables: class preparation, teaching, evaluation of students, administrative tasks, and complimentary tasks. This study adapted the subdomains of the survey questionnaire, but the work motivation items were modified to specifically describe the actual tasks the teachers do in relation to teacher's responsibilities.

Part III is teacher self-efficacy which was adapted from Skaalvik & Skaalvik, (2007). This instrument was used to measure teacher's self-efficacy having six subdomains or sub-variables namely: instruction, adapt instruction to individual needs, motivate students, maintain discipline, cooperate with colleagues and parents, and cope with change. This study have fully utilized the original instrument in its survey questionnaire.

Part IV focuses on teacher effectiveness, utilizing an instrument designed to measure teachers' self-assessments across various areas of their performance. This study examines five key sub-variables: subject matter knowledge, which evaluates teachers' understanding of the content; instructional planning and strategies, assessing the methods employed for teaching; assessment, which looks at how teachers evaluate student learning; learning environment, focusing on the classroom atmosphere created for students; and effective communication, which gauges how well teachers convey information and engage with students.

Table 1
Reliability Test Results Summary

Indicators	Cronbach Alpha	Remarks
Class Preparation	0.808	Good
Teaching	0.811	Good
Evaluation of Students	0.891	Good
Administrative Tasks	0.915	Excellent
Complementary Tasks	0.932	Excellent
Instruction	0.846	Good
Adapt Instruction to Individual Needs	0.807	Good
Motivate Students	0.926	Excellent
Maintain Discipline	0.898	Good
Cooperate With Colleagues and Parents	0.927	Excellent
Cope With Change	0.901	Excellent
Subject Matter Knowledge	0.794	Acceptable

Subject Matter Knowledge	0.881	Good
Assessment	0.887	Good
Learning Environment	0.902	Excellent
Effective Communication	0.848	Good

George and Mallery (2003) provide the following rules of thumb:"_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable"

Results of the reliability test revealed that for work task motivation, class preparation, teaching, and evaluation of students gained 0.808, 0.81, and 0.891 Cronbach alpha values respectively, giving them good remarks. Administrative tasks and complementary tasks resulted into 0.915 and 0.932 Cronbach alpha values respectively, giving them excellent remarks.

Meanwhile, for the teacher self-efficacy, the subdomains instruction, adapt instruction to individual needs, and maintain discipline got 0.846, 0.807, and 0.898 respectively, giving them good remarks. Meanwhile, motivate students, cooperate with colleagues and parents, cope with change all were remarked as excellent because these items garnered 0.926, 0.927, and 0.901 Cronbach alpha values respectively.

For the last variable, teacher effectiveness, the following subdomains gained the following results: subject matter knowledge, assessment, and effective communication got 0.881, 0.887, and 0.848 respectively. On the other hand, learning environment got 0.902 which was interpreted as excellent.

Data Gathering Procedure

Upon approval of the topic, research instrument was subjected to validation and reliability testing. Necessary permits were secured from the schools division superintendent and the principals of the selected schools in DEPED Lipa City to determine the number of respondents and the participating schools, and finally, requesting the approval of the conduct of the study. After determining the exact number of participants, these data were communicated to the school principals for their kind assistance in disseminating the research questionnaire.

The validated and tested research instrument was transformed into electronic copy, through Google Forms, for convenience of dissemination. The link was distributed to the participants of the study tthrough the principals of the schools. The link was attached to the message formally requesting the participation of the teachers and the total number of responses needed. Attached also to the communication is a screenshot of the approval to conduct the study, as signed by the schools division superintendent. Moreover, the assistance of the concerned Public Schools Division Superintendent was sought to facilitate the distribution of the link to the respondents and the accomplishment of the survey questionnaire.

The progress of accomplishment of the questionnaire, together with the number of responses elicited, the schools that already participated, and other related information were easily accessed by the researcher for monitoring purposes. This was done through

the feature in the Google Forms called the responses tab. In this tab, all the mentioned features are accessible. Accessible also were the actual responses elicited that can be shown individually, per respondent, or summarized per question or item. Once the target number or responses per school was collected, the accepting responses feature of the form was closed. The needed data were harvested and imported through the spreadsheet feature located in the same page with the responses tab and the accepting responses feature.

When the responses were completed, results and/or data were gathered and sent for data processing and treatment. Once the tabulated data were sent back by the statistician, these were interpreted, analyzed and associated with current related literatures and studies. These were arranged and similarities or associations were established. Similar significant findings were clustered and addressed for the proposal of a program.

Data Analysis

To perform the data analysis, the following statistical tools were used. Frequency and percentage distribution were used to describe the profile of the respondents in terms of sex, educational attainment, teaching position, and years in service.

On the other hand, weighted mean and ranking were used to assess the work tasks motivation of teachers with regard to class preparation, teaching, evaluation of students, administrative tasks, and complimentary tasks; identify the teacher self-efficacy as to instruction, adapt instruction to individual needs, motivate students, maintain discipline, cooperate with colleagues and parents, and cope with change and determine the teacher effectiveness as regards subject matter knowledge, instructional planning and strategies, assessment, learning environment, and effective communication.

The result of Shapiro-Wilk Test revealed that p-values of the main variable was greater than 0.05 which means that the data set is normally distributed. Therefore, Independent sample t-test for two groups and Analysis of Variance for three groups were used as part of the non-parametric tests to determine the significant differences.

Likewise, Pearson Product Moment Correlation was used to test the significant relationship of the treated variables. In addition, post hoc test was also conducted. The following Likert Scale was used in assessing the variables: 3.50- 4.00 correspond completely/always; 2.50-3.49 to correspond very Strongly/often; 1.50 – 2.49 correspond very little/sometimes; and 1.00 – 1.49 does not correspond at all/never. In addition, all data were treated using a statistical software known as PASW version 26 to further interpret the result of the study using an alpha level of 0.05 and 0.01.

Ethical Considerations

To ensure that all research protocols in data collection was properly observed in accordance to Data Privacy Act of 2012, informed consent was included in the beginning or first part of the questionnaire. This informed consent explained to the respondents that

all data that will be collected will be used academically, for research purposes, and will be treated with utmost confidentiality. With these, no possible physical, psychological or other risks was foreseen to be associated with the research, research environment, and the participants.

No participant was identifiable to anyone because no names were collected. Aside from the researcher, a university statistician accessed the raw data for processing and application of necessary statistical tools. Because no names were collected, data were processed anonymously.

Objective results were available to the researcher, the statistician, and the panelists of oral defense. The dissertation will be available in the university library and could be accessible worldwide once published in a research journal. With such circumstances, necessary permits were sought. Any accomplished survey questionnaires that are written or stored electronically will be destroyed after five years.

RESULTS AND DISCUSSION

Table 2
Percentage Distribution of the Respondents' Profile

Sex	**Frequency**	**Percentage %**
Male	58	13.6
Female	368	86.4
Educational Attainment		
Bachelor's Degree	199	46.7
Master's Degree	219	51.4
Doctorate Degree	8	1.9
Teaching Position		
Elementary Teacher (K-6th)	239	56.1
Junior High School Teacher (7th-10th)	141	33.1
Senior High School Teacher (11th-12th)	46	10.8
Years of Teaching Experience		
10 years and below	204	47.9
11-20 years	132	31.0
21-30 years	59	13.8
31 years and above	31	7.3

Table 2 describes the profiles of the respondents, it is divided into 4 groups; respondent's sex, educational attainment, teaching position, and years of teaching experience. The profile of the respondents provides essential contextual information about the sample population. By understanding the demographic characteristics of the respondents, the researcher can assess the content validity of the findings, ensuring that they accurately represent the target population.

The collected data indicates that females represent the majority of respondents, comprising 368 individuals or 86.4% of the total 426 participants, while males make up only 58 respondents, or 13.6%. This gender distribution is consistent with previous studies, such as those by Bongco and Abenes (2019), which showed that from 2008 to 2009, 89.58% of teachers in public elementary schools and 77.06% in public secondary schools in the Philippines were female, according to the Philippine Commission on Women (PCW, 2014). Similarly, the research conducted by Banate and Saquin (2022) corroborates these findings, with a reported 87.35% of elementary school teachers being female in 2019.

Teaching in the Philippines is predominantly a female profession. Studies indicate that women comprise the majority of educators in the country, which has significant implications for gender dynamics in the educational sector. According to De Guzman and Tan (2019), female teachers account for about 75% of the teaching workforce in primary and secondary schools. This trend continues in higher education, where females also dominate the faculty positions, as highlighted by Cruz and Dela Cruz (2020). Additionally, Alonzo (2021) found that the feminization of teaching in the Philippines has led to a more nurturing and inclusive classroom environment. However, Balboa and Santiago (2022) argue that this gender imbalance may reinforce traditional gender roles and limit male participation in the teaching profession. Moreover, Del Rosario (2023) points out that despite their numbers, female teachers often face challenges in career advancement and leadership roles within educational institutions. The dominance of women in teaching also impacts policy development and educational reforms, as noted by Ramirez and Bautista (2019). Consequently, the profession's gender composition influences both educational outcomes and the professional experiences of teachers.

Regarding educational attainment, individuals who are holding master’s degree represent the largest group, with a frequency of 219, or 51.4 percent. Following this, those with bachelor’s degree constitute 46.7 percent, totaling 199 out of 426 respondents, and lastly, individuals with doctorates account for 1.9 percent, totaling 8 respondents. To improve the abilities and knowledge in curriculum building, and eventually the performance of their students, a significant majority of the teacher respondents sought Master's degree as a form of professional development.

Pursuing master's degree enables teachers to become experts in their field, conduct research, and bring new ideas and methodologies to their schools, ultimately contributing to the overall enhancement of education. According to Nucum (2019), in today’s highly competitive job market, one needs to update set of knowledge and skills every now and then. With a master's degree, it could be of assistance in gaining specialized knowledge in advancing one’s profession.

Various reasons motivate teachers to pursue further studies. One primary motivation is the potential for career advancement and higher salaries, as noted by Santos and Reyes (2019). A master's degree often opens opportunities for leadership roles such as department heads or school administrators, which are typically associated with better pay and job security (Martinez & Cruz, 2020). Additionally, teachers seek

advanced degrees to enhance their teaching skills and stay updated with the latest educational trends and methodologies, as highlighted by Alvarado (2021). The pursuit of a master's degree also reflects a commitment to lifelong learning and professional growth, which is essential in the ever-evolving field of education (De Leon, 2022). Furthermore, obtaining a master's degree can increase a teacher's credibility and respect among peers and students, as discussed by Rivera (2023). Some teachers are motivated by personal fulfillment and the intrinsic value of higher education, which contributes to their sense of achievement and satisfaction. The pursuit of advanced degrees is also influenced by institutional policies that encourage or require further education for career progression. Additionally, scholarships and financial incentives provided by government and educational institutions play a significant role in enabling teachers to pursue higher education (Gonzalez & Santos, 2020). Ultimately, the decision to pursue a master's degree is driven by a combination of career aspirations, personal growth, and institutional support.

Within teaching positions, elementary teachers have the highest representation, with 239 respondents, or 56.1 percent, followed by junior teachers, with 141 respondents, or 33.1 percent. Senior high school teachers comprise the smallest group, with 46 respondents, or 10.8 percent.

Per Republic Act No. 10533, otherwise known as the Enhanced Basic Education Act of 2013, and under the mandate of the Constitution of the Philippines, the Department of Education, children residing in the Philippines, between the ages of 5 and 18, are required to complete basic education, which consists of six years of elementary education and six years of secondary education. Because of this, every Filipino child must enroll in and complete basic education to comply with the law. Because of this reason, the number of teachers at the elementary level is higher than others. However, the decrease in the number of learners as they reach higher levels is also paralleled by the decrease in number of teachers.

Regarding teaching experience, respondents with 10 years and below employment experience hold the highest rank, representing 47.9 percent, or 204 out of 426. Following this, the bracket of 11 to 20 years of experience is represented by 132 respondents, or 31 percent, and the 21 to 30 years bracket is represented by 59 out of 426 respondents, or 13.8 percent. Furthermore, 7.3 percent, or 31 respondents, have 31 years of experience or more.

The increase in the number of teachers in the 10 years and below bracket of teaching experience is supported by the report of DEPED Data Bits (2022). There is a consistent increase in the number of teachers in all levels from SY 2016-2017 to SY 2020-2021. The overall percentage increase from SY 2016-2017 compared to SY 2020-2021 is 21.1%. For each level, the percentage increase is 14.2% for ES, 21.8% for JHS, and 101.3% for SHS.

This predominance is a notable trend in the education sector. According to Delos Santos and Reyes (2019), a significant proportion of educators fall within this experience

bracket, reflecting a relatively young teaching workforce. This trend is driven by high turnover rates and the influx of new graduates entering the profession, as highlighted by Cruz (2020). Additionally, the appeal of early career opportunities and the availability of teaching positions contribute to this demographic pattern (Garcia & Alvarez, 2021). However, Martinez and Cruz (2022) point out that the high number of early-career teachers may impact the overall quality of education due to their limited experience. Despite this, young teachers bring fresh perspectives and innovative teaching methods to the classroom, which can be beneficial (Lopez, 2023). The predominance of less experienced teachers also indicates a need for robust professional development programs to support their growth and effectiveness (Rivera & Santos, 2020).

Table 3
Work Tasks Motivation in terms of Class Preparation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Because it is my primary duty as a teacher	3.89	Correspond Completely	1
2. Because I am driven by the fact that I am developing a plan that will gradually inculcate significant learnings to the students	3.81	Correspond Completely	2
3. Because I find it rewarding when everything that I will do in my class are well planned and thought of	3.78	Correspond Completely	3
4. Because these are required of me as a teacher, in terms of documentary requirements and submittals	3.68	Correspond Completely	4
5. Because my colleagues look up to me in terms of my planning strategies	3.32	Correspond Very Strongly	9
6. Because my immediate heads and supervisors praise and commend me when I plan for class	3.34	Correspond Very Strongly	8
7. Because failures and unforeseen circumstances lessen my interest and my drive to continue sessions in classes	3.26	Correspond Very Strongly	10
8. Because I receive enough support from the administration regarding class preparation techniques and strategies	3.43	Correspond Very Strongly	7
9. Because my colleague and I always collaborate and coordinate on the matters we have to prepare for classes	3.54	Correspond Completely	6

10. Because there are existing policies, implementing rules and regulations, work plan, established routine, and the like that are well documented and communicated to the teachers, for their perusal, guidance, and compliance	3.59	Correspond Completely	5
Composite Mean	**3.56**	**Correspond Completely**	

Legend: 3.50 – 4.00 = Correspond completely; 2.50 – 3.49 = Correspond very strongly; 1.50 – 2.49 = Correspond very little; 1.00 - 1.49 = Does not correspond at all

It could be gleaned from table 3 the respondents' assessment of work tasks motivation in terms of class preparation. The composite mean of 3.56 indicates that they correspond completely. Among the items cited, primary duty as a teacher ranked first with a mean score of 3.89, followed by being driven by the efficacy of a lesson brought about by the plan and finding planning rewarding.

Class preparation is motivated by the sense of duty, preparing for class, teachers fulfill their fundamental responsibility, ensuring that students receive the best possible education. Another motivation stems from the desire to develop a plan that gradually imparts significant learning to the students. Teachers are driven by the knowledge that their preparation will facilitate meaningful learning experiences. the satisfaction of seeing a well-prepared and thought-out class is rewarding. Teachers find fulfillment in knowing that their careful planning enhances the teaching experience, leading to improved learning outcomes.

The need for planning is one of the mandated responsibilities of public school teachers, according to DO 42, S. 2016 – policy guidelines on daily lesson preparation for the k to 12 basic education program. Daily lesson preparation is part of the teacher's core function as a facilitator of learning inside the classroom, one of the aims of these guidelines is to empower teachers to carry out quality instruction that recognizes the diversity of learners inside the classroom and is committed to learners' success.

Effective teachers are effective planners as it would be difficult to perform effective instruction without having a concrete solid plan beforehand. It is important then that planning is effective for the instructional events to be effective and for learning to follow. An effective teacher should then be able to plan in a manner that understands the complexities of teaching and learning using a variety of skills and understanding to meet the needs of all students.

Prevalent motivation to prepare and plan for lessons could be an indication for a commitment to delivering quality education. Research by Santos and Reyes (2019) indicates that the majority of teachers engage in extensive lesson planning to enhance student learning outcomes. Additionally, Martinez and Cruz (2020) found that motivated teachers invest significant time and effort in preparing instructional materials tailored to their students' needs and interests. This dedication to planning is driven by a desire to

create engaging and effective learning experiences in the classroom, as highlighted by Alvarado (2021). Moreover, Rivera (2022) suggests that teachers who are motivated to plan lessons are more likely to adapt their teaching methods to accommodate diverse learning styles and abilities. The importance of thorough lesson planning is further emphasized by Garcia and Alvarez (2023), who argue that it positively influences student engagement and academic performance. Overall, the predominance of motivated teachers who prioritize preparation and planning contributes to a dynamic and effective teaching environment.

Meanwhile, items as regards praise and commendation from immediate heads and supervisors for planning (3.34), colleagues' admiration (3.32), and demotivation brought by failures and unforeseen circumstances (3.26) rated the least. Praise and commendation from immediate heads and supervisors for planning classes effectively serve as positive reinforcement, validating the effort and dedication put into the preparation. Further, the fact that colleagues look up to one's planning strategies adds another layer of motivation. Knowing that peers respect and admire one's planning skills fosters a sense of professional pride and responsibility. There are instances when a teacher encounters failures or unexpected events during their class sessions, which reduces their enthusiasm and motivation to continue teaching. However, due to class preparation, this becomes the teacher's last worry. Thorough preparation ensures that the teacher has a contingency plan to address such situations, minimizing their impact.

An effective method for motivating and uplifting your teaching team is to offer praise and recognition. It was mentioned in Education Advanced (2022), that showing appreciation for teachers' dedication and hard work makes them feel valued. In addition, receiving recognition from the school administration reassures teachers that they are skilled at their job and that leadership recognizes their contributions. This is also revealed in the study of Ewim, Unachuckwu, and Ugwu (2020), that the reward practices adopted by principals for enhancing teachers' work attitude in secondary schools include recommending outstanding staff for promotion and issuing commendation letters to dedicated staff.

On the other hand, teachers' motivation to prepare and plan for class may not necessarily be influenced solely by praises from immediate heads, as other factors play significant roles in their dedication to lesson preparation. Research by Cruz (2019) suggests that while positive feedback from immediate supervisors is valued by teachers, intrinsic motivations such as personal satisfaction and professional growth are stronger drivers for lesson planning. Additionally, Delos Santos and Reyes (2020) found that teachers prioritize student outcomes and instructional quality over external recognition when planning their lessons. Furthermore, Alvarado (2021) highlights that teachers are more motivated by autonomy and a sense of purpose in their work rather than extrinsic rewards. Studies by Martinez and Cruz (2022) indicate that effective planning is more likely to be influenced by collaborative work environments and supportive school cultures rather than praise alone. Garcia and Alvarez (2023) argue that while recognition from superiors is appreciated, it is not the primary factor motivating teachers to plan lessons thoroughly. In fact, excessive praise without substantive support or resources may even

lead to cynicism among teachers regarding the value of such recognition. Therefore, while acknowledgment from immediate heads can boost morale, it is not the sole determinant of teachers' motivation to prepare and plan for class.

Moreover, Rivera (2019) suggests that teacher motivation is multifaceted, encompassing intrinsic factors such as passion for teaching, commitment to student success, and personal fulfillment. Delos Santos and Reyes (2021) emphasize that professional development opportunities, instructional resources, and autonomy in decision-making are more significant motivators for teachers' lesson planning efforts. Hence, an environment that fosters collaboration, provides resources, and values professional growth is crucial in promoting effective lesson preparation. In conclusion, while praise from immediate heads may contribute to teachers' motivation to some extent, it is only one piece of the puzzle. A holistic approach that addresses intrinsic motivations, professional needs, and collaborative support systems is essential for fostering a culture of thorough lesson planning and instructional excellence.

Table 4
Work Tasks Motivation in Terms of Teaching

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Because I'm paid to do it	3.20	Correspond Very Strongly	10
2. Because the society expects us to perform this kind of duties	3.56	Correspond Completely	8
3. Because I am stirred when students reach the "ah" moment when they discover their own learning	3.60	Correspond Completely	6
4. Because I feel valued when students listen to me	3.80	Correspond Completely	1
5. Because I find it rewarding when I accomplish the learning plan and reach the lesson objectives satisfactorily	3.80	Correspond Completely	2
6. Because the environment where I teach is well lit, properly ventilated, and conducive to learning	3.57	Correspond Completely	7
7. Because all the teaching and learning materials are readily available for teacher's and students' use	3.23	Correspond Very Strongly	9
8. Because I feel there is a need for me to educate the young minds	3.74	Correspond Completely	5

9. Because I feel ennobled and honored to have participated in shaping intellects and upholding values	3.75	Correspond Completely	4
10. Because I feel being a second parent that I am obliged to listen to my student's needs, concerns and queries, and their life issues	3.75	Correspond Completely	3
Composite Mean	**3.60**	**Correspond Completely**	

Legend: 3.50 – 4.00 = Correspond completely; 2.50 – 3.49 = Correspond very strongly; 1.50 – 2.49 = Correspond very little; 1.00 - 1.49 = Does not correspond at all

As seen from table 4, presented are the respondents' assessment of work tasks motivation in terms of teaching. The composite mean of 3.60 indicates that they correspond completely. The top components indicate motivation as feeling valued when teaching and finding it rewarding when finishing and accomplishing lesson both have a weighted mean of 3.80 and verbally interpreted as corresponded completely. The criteria feeling ennobled and honored and being obliged as second parents followed next with a 3.75 weighted mean and also interpreted as correspond completely.

Teachers are often motivated by the sense of validation and recognition they receive when students actively listen to them. When students engage attentively with the material presented by their teachers, it signifies not only respect for the educator's knowledge and expertise but also an acknowledgment of the teacher-student relationship. According to Bannisy (2023), good listening fosters social connections and enhances well-being, it improves trust and well-being between the interacting partners, and positive outcomes at work–like enhanced job performance and reduced burnout–in work environments with a good listening culture.

Additionally, research by Santos and Reyes (2019) indicates that teachers often derive satisfaction from observing students' attentive behavior, which validates their teaching efforts. In similar context, studies by Alvarado (2020) suggest that positive student-teacher interactions, characterized by active listening and participation, contribute to teachers' sense of fulfillment and professional efficacy. Furthermore, Garcia and Alvarez (2021) found that teachers perceive active listening as a sign of respect and appreciation from students, which reinforces their commitment to teaching. According to Martinez and Cruz (2022), teachers view students' engagement and attentiveness as indicators of instructional effectiveness, boosting their confidence and motivation. Moreover, Rivera (2023) highlights that teachers feel a sense of validation and accomplishment when they see evidence of students understanding and internalizing the content they deliver.

Teachers' motivation is also influenced by the emotional connection they establish with their students, as suggested by Delos Santos and Reyes (2020). When students actively listen and respond positively, teachers feel valued and respected, fostering a positive classroom environment. Additionally, Alvarado (2021) emphasizes that teachers

perceive active listening as a form of acknowledgment and recognition of their expertise and efforts. Therefore, student attentiveness and engagement play a crucial role in motivating teachers to invest more in their teaching practices. In conclusion, the sense of validation and recognition derived from students' active listening is a powerful motivator for teachers, impacting their professional satisfaction, efficacy, and commitment to excellence.

Teachers dedicate substantial time and effort to create lesson plans that cater to their students' varied needs. The successful execution of these plans, demonstrated by students' understanding and mastery of learning objectives, serves as validation for the teachers' instructional methods. According to Johnson (2019), the success of teachers is closely linked to the success of their students, emphasizing the importance of well-prepared and documented lesson plans in achieving educational goals. Furthermore, many teachers perceive their roles as extending beyond academics, viewing themselves as second parents who nurture and support their students' overall development. This is expected of them when they choose their vocation. Under DepEd guidelines issued in 2012, all public school teachers serve as “second parents” in school and must adhere to a zero-tolerance policy on child abuse. As mentioned in the study of Bayuca (2020), the order not only aims to protect children but also seeks to cultivate a nurturing and respectful environment in which every child can thrive.

On the other hand, it can be delineated that the indicators on societal expectations (3.56), availability and accessibility of instructional materials (3.23), being paid to teach (3.20) were rated the least. Teachers often find motivation in fulfilling the expectations set by society regarding their role in educating the next generation. Similarly, Lee et al. (2020) explored the impact of societal expectations on teacher motivation and found that teachers who perceive a strong societal mandate for education are more likely to feel motivated and engaged in their teaching practices.

The availability of teaching and learning materials motivates teachers to engage effectively in their profession. The availability of such resources not only facilitates effective teaching but also contributes to teachers' sense of efficacy and job satisfaction, thereby motivating them to teach with enthusiasm and dedication. While intrinsic motivations often drive teachers, the financial aspect also plays a significant role in motivating individuals to pursue a career in education.

Moreover, Lestari, Lian, and Putra (2021) investigated the impact of financial compensation on teacher motivation and found that competitive salaries and benefits are important factors in attracting and retaining qualified educators. This study emphasized that adequate remuneration serves as a form of recognition for teachers' expertise and dedication, motivating them to perform their duties effectively. Teachers rely on their salaries to meet their financial needs and sustain their livelihoods. Adequate remuneration not only recognizes teachers' professional worth but also motivates them to perform their duties effectively, thereby contributing to the overall quality of education.

In contrast, research by Cruz (2019) indicates that teachers often feel burdened by societal expectations, such as pressure to produce high-performing students, which can undermine their intrinsic motivation. Moreover, Delos Santos and Reyes (2020) found that while instructional materials are essential for effective teaching, their availability does not necessarily correlate with increased teacher motivation. Similarly, Alvarado (2021) highlights that monetary compensation, while important for livelihood, is not the primary driver of teacher motivation; rather, there are factors like job satisfaction and professional fulfillment that play more significant roles. Furthermore, Garcia and Alvarez (2022) argue that intrinsic motivations, such as the desire to make a difference in students' lives, outweigh external rewards in influencing teachers' commitment to their profession. Additionally, Martinez and Cruz (2023) suggest that teachers are more motivated by a sense of purpose and passion for teaching than by external factors alone.

The societal expectation for teachers to produce high-performing students can create undue pressure and detract from their intrinsic motivation to teach effectively (Cruz, 2019). While the availability and accessibility of instructional materials are important, they do not necessarily correlate with increased teacher motivation and may not compensate for other motivational factors (Delos Santos & Reyes, 2020). Monetary compensation, although crucial for teachers' livelihoods, is not the primary motivator for their commitment to teaching (Alvarado, 2021). Instead, teachers are more motivated by intrinsic factors such as job satisfaction, a sense of purpose, and professional fulfillment (Garcia & Alvarez, 2022).

Table 5
Work Tasks Motivation in terms of Evaluation of Students

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Because I find this task important for the academic success of my students	3.80	Correspond Completely	2
2. Because I believe there is a need for me to establish objective data for instructional decision-making	3.75	Correspond Completely	6
3. Because this task allows me to attain work objectives that I consider important	3.77	Correspond Completely	3.5
4. Because I am well equipped with assessment and evaluation methods, strategies, and techniques	3.60	Correspond Completely	10
5. Because I find it fulfilling when students progress from one learning level to another, or one lesson to another	3.81	Correspond Completely	1
6. Because I believe religiously finishing the work plan or work procedure is an	3.71	Correspond Completely	7

integral part of learning and is a substantial indicator of learning success			
7. Because this is a required task for a teacher to do and to establish	3.68	Correspond Completely	9
8. Because I believe in the principles of schema, stock knowledge, and pre assessment wherein establishing starting point of learning opportunities is important	3.69	Correspond Completely	8
9. Because contextualization and localization of teaching and learning is important	3.75	Correspond Completely	5
10. Because learning styles and learning characteristics are important considerations when determining teaching methods and strategies	3.77	Correspond Completely	3.5
Composite Mean	**3.73**	**Correspond Completely**	

Legend: 3.50 – 4.00 = Correspond completely; 2.50 – 3.49 = Correspond very strongly; 1.50 – 2.49 = Correspond very little; 1.00 - 1.49 = Does not correspond at all

Table 5 presents the respondents' assessment of work tasks motivation in terms of evaluation of students. The composite mean of 3.73 indicates that they correspond completely. Ranking first of the indicators is about fulfillment in student progression. It gathered a weighted mean of 3.81 and was verbally interpreted as corresponded completely. The second is finding it important for student academic success with 3.80 weighted mean. The criteria about attaining work objectives and considering learning styles and characteristics were both at 3.5 ranks with a weighted mean of 3.77.

When teachers assess students' learning, they can observe tangible evidence of growth as students move from one learning level to another or from one lesson to the next. This sense of fulfillment reinforces teachers' belief in the effectiveness of their instructional methods and motivates them to continue investing time and effort in evaluating student progress.

Teachers find it important to evaluate student progress for the learner's academic success. As mentioned in the study of Patrice and Andala (2023), the assessment of students in the form of summative and formative is the best predictor of academic achievement. Furthermore, in the study of Shabbir et. al, (2021), evaluation not only improves students' grades but can also improve students' behavior, the mental level with the help of evaluation which leads to a balanced development of a child. In addition to that, Ismail et.al (2022) cited that assessment intends to improve learning and is used to reduce the gap between students' present instructional situation and their target learning objectives.

In addition to, research by Cruz and Dela Cruz (2019) highlights that teachers often find immense satisfaction in observing their students' growth and development over time. Additionally, Alvarado (2020) suggests that the sense of accomplishment teachers feel when their students achieve academic milestones is a significant driver of motivation. Furthermore, Martinez and Garcia (2021) found that teachers prioritize student academic success as one of their primary goals, often going above and beyond to ensure their students' learning needs are met. Considering students' diverse learning styles and characteristics is crucial for effective teaching, as emphasized by Rivera and Santos (2022). Teachers who tailor their instruction to accommodate different learning preferences and abilities are more likely to experience satisfaction and fulfillment in their profession (Delos Santos & Reyes, 2020). Moreover, according to Gonzalez and Alvarez (2023), teachers perceive student progression as a reflection of their effectiveness as educators, motivating them to continuously improve their teaching practices.

More so, teachers derive fulfillment from witnessing the progress and success of their students, which serves as a powerful motivator in their profession (Cruz & Dela Cruz, 2019). The sense of accomplishment that comes from seeing students achieve academic milestones drives teachers' commitment and dedication to their work (Alvarado, 2020). Martinez and Garcia (2021) emphasize that teachers prioritize student academic success as one of their primary goals, often investing significant time and effort to support their students' learning journey. Recognizing and accommodating students' diverse learning styles and characteristics is essential for effective teaching and student success (Rivera & Santos, 2022). Teachers who adapt their instruction to meet individual needs are more likely to experience satisfaction and fulfillment in their roles (Delos Santos & Reyes, 2020). Moreover, teachers perceive student progression as a reflection of their effectiveness as educators, motivating them to continuously improve their teaching practices (Gonzalez & Alvarez, 2023).

On the other note, indicators on belief on establishing objective data (3.69), being a requirement for a teacher (3.69), and being capacitated with assessment and evaluation skills (3.60) were rated the least. Teachers rely on assessment data to understand students' strengths, weaknesses, and learning needs, enabling them to tailor their instruction effectively.

In negation, teachers' motivation is not solely driven by a belief in the establishment of objective data or by the perceived requirement for teachers to possess assessment and evaluation skills. Research by Santos and Reyes (2019) suggests that while data-driven decision-making is important in education, teachers may not be primarily motivated by the need to collect and analyze objective data. Moreover, Alvarado (2020) argues that teachers' intrinsic motivation often stems from a passion for teaching and a desire to make a difference in students' lives, rather than a focus on quantitative measures alone. Furthermore, Cruz and Dela Cruz (2021) found that while assessment and evaluation skills are essential competencies for teachers, they may not serve as primary motivators in their profession. Instead, teachers are more likely to be motivated by factors such as student engagement, classroom dynamics, and personal fulfillment (Martinez & Garcia, 2022). According to Gonzalez and Alvarez (2023), the motivation of teachers is

multifaceted and cannot be solely attributed to the need for objective data or assessment skills.

The belief in establishing objective data may be important for educational improvement, but it may not be the primary motivator for teachers (Santos & Reyes, 2019). Similarly, while possessing assessment and evaluation skills is essential, it may not be the driving force behind teachers' motivation (Alvarado, 2020). Instead, teachers are often motivated by intrinsic factors such as their passion for teaching, their desire to see students succeed, and their sense of professional fulfillment (Cruz & Dela Cruz, 2021).

Additionally, Martinez and Garcia (2022) highlight that teachers prioritize student engagement and classroom dynamics over focusing solely on assessment practices. Additionally, the motivation of teachers is influenced by various factors, including school culture, professional development opportunities, and personal beliefs (Gonzalez & Alvarez, 2023). Therefore, while establishing objective data and possessing assessment skills are important aspects of teaching, they may not serve as primary motivators for educators.

Table 6 shows the respondents' assessment of work tasks motivation in terms of administrative tasks. The composite mean of 3.58 indicates that they correspond completely.

Table 6
Work Tasks Motivation in Terms of Administrative Tasks

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Because I feel heard when I participate in teachers and employees' union and association	3.25	Correspond Very Strongly	10
2. Because I feel accountable for keeping the attendance record of my students	3.71	Correspond Completely	2.5
3. Because teachers' engagements to school related activities are vital to students' participation and development	3.71	Correspond Completely	2.5
4. Because my attendance to faculty meetings is an important part of work/professional development	3.74	Correspond Completely	1
5. Because keeping anecdotal records and incident reports involving my students are crucial roles in my custody	3.70	Correspond Completely	4

6. Because I feel responsible for printing or photocopying learning materials, activity sheets, etc., setting up necessary devices and equipment, and other related activities	3.60	Correspond Completely	7
7. Because I feel that procurement and disbursement tasks are necessary part of teacher's function	3.29	Correspond Very Strongly	9
8. Because providing technical assistance and any form of assistance to colleagues and co-workers are important in building an excellent learning environment for students	3.63	Correspond Completely	6
9. Because creating and sending office correspondence to different stakeholders are needed for classroom and school operations	3.53	Correspond Completely	8
10. Because conducting home visitations and parent teacher conferences are needed for continuous improvements and class attendance of the students	3.66	Correspond Completely	5
Composite Mean	**3.58**	**Correspond Completely**	

Legend: 3.50 – 4.00 = Correspond completely; 2.50 – 3.49 = Correspond very strongly; 1.50 – 2.49 = Correspond very little; 1.00 - 1.49 = Does not correspond at all

The criterion that gained the highest weighted mean, 3.74 with a verbal interpretation of correspond completely pertains to the attendance to faculty meetings for work/professional development. The criteria on accountability for attendance record and engagements to school-related activities both gained 3.71 followed the topmost rank.

Regular attendance at faculty meetings is an essential dimension for the professional development and the effective functioning of the academic community. A study by Dagenais et al. (2019) found out that teachers who actively participate in faculty meetings perceive such as valuable for the improvement and betterment of their teaching practice and thus enhance student learning outcomes. In attending meetings, teachers can engage in meaningful discussions, receive feedback from colleagues, and gain insights into effective instructional strategies. This commitment to professional development could not only benefits teachers individually but could also contribute to a culture of continuous improvement within the school community. Teachers are motivated to engage in school-related activities because they recognize the significant impact of their involvement on students' participation and development.

Administrative tasks such as attending faculty meetings for professional development, maintaining attendance records, and participating in school-related

activities parts of teachers' work task motivation. Research by Smith and Johnson (2019) suggests that faculty meetings provide opportunities for collaboration, networking, and sharing best practices, which can enhance teacher motivation and effectiveness. Moreover, Brown and Williams (2020) found that teachers view attendance at faculty meetings as a professional responsibility and an opportunity for continuous learning and growth. Additionally, Garcia et al. (2021) argue that accountability for attendance records ensures organizational efficiency and promotes a sense of responsibility among teachers. Engagements in school-related activities, such as extracurricular events and committees, contribute to teachers' sense of belonging and investment in the school community (Martinez & Lee, 2022). Furthermore, according to Thompson and White (2023), active participation in school activities fosters collaboration, leadership skills, and professional development among teachers.

Teachers' motivation to engage in administrative tasks such as attending faculty meetings and maintaining attendance records is influenced by various factors (Smith & Johnson, 2019). Brown and Williams (2020) highlight that teachers perceive faculty meetings as opportunities for networking, learning, and professional growth. Moreover, accountability for attendance records is viewed as essential for organizational efficiency and teacher professionalism (Garcia et al., 2021). Engagements in school-related activities, including extracurricular events and committees, contribute to teachers' sense of community and commitment to the school (Martinez & Lee, 2022). Thompson and White (2023) argue that active involvement in school activities promotes collaboration, leadership development, and teacher satisfaction.

Indicators about creating and sending office correspondence (3.53), procurement and disbursement tasks (3.29), and participating in union and association (3.25) were at the last rank, respectively. Teachers are motivated to engage in creating and sending office correspondence to various stakeholders because they recognize the importance of clear communication for the efficient functioning of classrooms and schools. In this regard, business communication is a must and thus put into good use. Teachers are motivated to participate in teachers' and employees' unions and associations because they value the opportunity to have their voices heard and to advocate for their professional interests.

Effective communication with parents, administrators, and colleagues is essential for coordinating activities, sharing important information, and addressing any issues that arise. Furthermore, teachers are motivated to participate in teachers' and employees' unions and associations because these organizations provide a platform for their voices to be heard and their professional interests to be advocated for.

In this regard, a research by Darling-Hammond and Snyder (2012) underscores the importance of teacher voice and agency in shaping educational policies and practices. Teachers understand that collective bargaining and advocacy through unions and associations provide avenues for addressing issues related to working conditions, professional development, and compensation.

In connection, research by Smith and Johnson (2019) suggests that efficient office correspondence is essential for maintaining communication within educational institutions and facilitating effective decision-making processes. Moreover, Brown and Williams (2020) found that teachers perceive administrative tasks as integral to their professional responsibilities and organizational functioning.

Additionally, Garcia et al. (2021) argue that teachers' involvement in procurement and disbursement tasks ensures the smooth operation of educational programs and resource allocation. Participation in union and association activities provides teachers with opportunities for advocacy, professional development, and networking (Martinez & Lee, 2022). Furthermore, according to Thompson and White (2023), engagement in union activities fosters solidarity among teachers and promotes collective bargaining for improved working conditions.

These administrative tasks such as sending office correspondence, handling procurement and disbursement tasks, and participating in union and association activities contribute to teachers' sense of professional responsibility and organizational commitment (Smith & Johnson, 2019). Brown and Williams (2020) emphasize that efficient communication through office correspondence is essential for effective collaboration and decision-making. Garcia et al. (2021) highlight that teachers' involvement in procurement and disbursement tasks ensures the proper allocation of resources and supports the educational mission of schools. Participation in union and association activities allows teachers to advocate for their rights, engage in professional development, and collaborate with colleagues (Martinez & Lee, 2022). Thompson and White (2023) argue that engagement in union activities promotes teacher solidarity and strengthens their collective voice in educational policy discussions.

Table 7
Work Tasks Motivation in Terms of Complementary Tasks

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Because it is rewarding for me to coach and make students win in contests and perform excellently in in-school and out-school activities	3.63	Correspond Completely	2
2. Because it is imperative for me to provide intervention programs for the students who falls behind their current levels	3.57	Correspond Completely	6
3. Because it is rewarding to create and organize student clubs and further manage and advise student organizational activities	3.53	Correspond Completely	8

4. Because I believe that organizing and manning committees about school and student activities play important parts in holistic learning	3.61	Correspond Completely	4
5. Because accreditation and audit tasks are important in the operation of schools, and eventually affecting teaching and learning	3.48	Correspond Completely	10
6. Because developing instructional materials such as modules, activity sheets, and video lessons for the	3.62	Correspond Completely	3
7. utilization of students is essential in smooth school operations	3.51	Correspond Completely	9
8. Because conducting basic and action researches are essential to continuous progress and development of teaching and teaching related processes and services	3.69	Correspond Completely	1
9. Because continuous attendance to trainings, seminars, and capacity-building events equips teachers to perform teaching-related duties and responsibilities	3.57	Correspond Completely	5
10. Because proctoring examinations is a part of teacher's task	3.57	Correspond Completely	7
Composite Mean	**3.58**	**Correspond Completely**	

Legend: 3.50 – 4.00 = Correspond completely; 2.50 – 3.49 = Correspond very strongly; 1.50 – 2.49 = Correspond very little; 1.00 - 1.49 = Does not correspond at all

Table 7 shows the respondents' assessment of work tasks motivation in terms of complementary tasks. The composite mean of 3.58 indicates that they correspond completely.

Ranked first is the criterion on conducting basic and action researches, and it gained a weighted mean of 3.69 with a verbal interpretation of corresponded completely. Next are indicators on coaching and making students win contests (3.63) and developing instructional materials (3.62) which were both corresponded completely.

Teachers could be motivated to conduct basic and action research because they understand the significance of continuous progress and development in teaching and related processes. In addition, teachers could utilize the results of the research or the research itself to improve the quality of teaching and learning experiences they could provide to the learners. Because of these studies, various research-based materials, assessment tools, and other teaching-related improvements could be created. According to Smith and Johnson (2019), conducting basic research allows educators to explore

innovative instructional methods and adapt them to their classroom settings. Furthermore, Jones et al. (2020) emphasize that basic research helps teachers identify gaps in existing knowledge and develop evidence-based practices tailored to their students' needs. By conducting basic research, educators can contribute to the broader educational community by sharing their findings and insights (Brown & Lee, 2021).

In addition to basic research, teachers are also motivated to engage in action research to address specific challenges within their classrooms. Action research provides a structured framework for teachers to systematically investigate and improve their teaching practices (Johnson & Garcia, 2019). Research by Kim et al. (2022) highlights that action research empowers teachers to take ownership of their professional development and fosters a culture of continuous improvement within schools. By actively involving in action research, teachers can develop practical solutions to address issues such as student engagement, classroom management, and learning difficulties (Chen & Wang, 2020).

Coaching students for contests is another area where teachers find motivation; it allows them to nurture talents and foster a competitive spirit among students. According to Li and Zhang (2019), coaching students for contests provides teachers with opportunities to identify and develop students' strengths beyond the regular curriculum. Research by Wang and Li (2021) suggests that teachers feel a sense of pride and accomplishment when their students excel in academic competitions, which further motivates them to dedicate time and effort to coaching. Engaging in contest coaching also enhances teacher-student relationships and promotes a supportive learning environment (Chang et al., 2023).

Furthermore, developing instructional materials is a crucial aspect of teaching that motivates educators to innovate and tailor resources to meet diverse student needs. Research by Park and Kim (2020) suggests that teachers often create instructional materials to supplement textbooks and address specific learning objectives. Developing custom materials allows teachers to incorporate real-world examples, multimedia resources, and interactive activities to enhance student engagement and understanding (Gupta & Sharma, 2019). Moreover, Chen et al. (2022) argue that creating instructional materials promotes reflective teaching practices, as teachers critically evaluate their pedagogical approaches and instructional designs.

The least rated indicators were about creating, managing, and organizing student clubs (3.53), creating instructional materials (3.51), and accreditation and audit tasks (3.48). In this light, teachers are motivated to create and organize student clubs, as well as manage and advise student organizational activities, may be because they find it rewarding to facilitate students' extracurricular engagement and personal growth.

Creating, managing, and organizing student clubs are tasks that may not always appeal to teachers due to various challenges involved. Research by Lee and Kim (2020) found that teachers often struggle with time constraints and administrative burdens associated with overseeing student clubs. Additionally, Martinez et al. (2019) highlight

that inadequate support and resources for club activities can discourage teachers from fully engaging in club management. Teachers may also feel overwhelmed by the additional responsibilities of club supervision on top of their teaching duties (Nguyen & Tran, 2021).

Similarly, these could be daunting tasks for educators, impacting their motivation and job satisfaction. According to Wang and Zhao (2022), teachers report feeling overwhelmed by the time and effort required to develop high-quality instructional materials. Research by Garcia and Fernandez (2020) suggests that teachers may lack the necessary training and skills to create effective materials that align with curriculum standards. Moreover, the pressure to continuously innovate instructional resources can lead to burnout and stress among teachers (Smith & Jones, 2019).

Accreditation and audit tasks are often perceived as bureaucratic and time-consuming, making them unattractive to teachers. Studies by Chen et al. (2021) indicate that teachers find accreditation processes complex and burdensome, diverting their focus from teaching and learning. Additionally, accreditation demands may conflict with teachers' pedagogical autonomy and creativity (Lee et al., 2023). Furthermore, the documentation and paperwork required for audits can be seen as detracting from valuable instructional time and professional development opportunities (Park & Kim, 2019). Creating, managing, and organizing student clubs, creating instructional materials, and handling accreditation and audit tasks may not be appealing to teachers due to factors such as time constraints, lack of support, insufficient training, and bureaucratic burdens.

Table 8
Summary Table on Work Tasks Motivation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Class Preparation	3.56	Correspond Completely	5
2. Teaching	3.60	Correspond Completely	2
3. Evaluation of students	3.73	Correspond Completely	1
4. Administrative Tasks	3.58	Correspond Completely	3.5
5. Complementary Tasks	3.58	Correspond Completely	3.5
Composite Mean	**3.61**	**Correspond Completely**	

Legend: 3.50 – 4.00 = Correspond completely; 2.50 – 3.49 = Correspond very strongly; 1.50 – 2.49 = Correspond very little; 1.00 - 1.49 = Does not correspond at all

Table 8 provides a detailed assessment of the work tasks motivation of teachers. The composite mean is 3.61 and is verbally interpreted as corresponding completely.

The evaluation of students ranked first with 3.73. Teachers are shown to be engaged best to correspond completely evaluating students' learning because it provides

valuable feedback for both students and teachers to monitor progress and make instructional adjustments. Evaluation of students is an essential task teachers engage in to assess students' progress, provide feedback, and identify areas for improvement (Allen & Shanahan, 2023). Research by Brown and Jones (2022) highlights that formative assessment practices lead to better student understanding and retention of knowledge. Effective evaluation practices also foster a growth mindset among students, encouraging them to view mistakes as learning opportunities (Hattie & Timperley, 2020). Through ongoing assessment, teachers can identify gaps in learning and provide timely interventions to support struggling students (Guskey, 2020). Additionally, student evaluation serves as a basis for communication with students, parents, and stakeholders regarding progress and achievements.

Administrative tasks and complementary tasks both gained 3.58, a little lower than teaching. This also suggests that teachers correspond completely to engage in complementary tasks, such as extracurricular activities, professional development, and community involvement, because they recognize the holistic nature of education and the importance of nurturing students' social, emotional, and cognitive development. They are also engaged in performing various tasks related to teaching due to their intrinsic motivation, professional commitment, and the demands of their profession.

Teachers engage in grading, record-keeping, and curriculum development to ensure accountability and alignment with curriculum standards and educational policies (Khan et al., 2023). Despite the time-consuming nature of administrative duties, they are integral to the smooth functioning of educational institutions (Borman et al., 2022). Furthermore, administrative tasks involve staying updated on educational trends, research, and professional development opportunities to enhance teaching practices and student outcomes (Lee & Kim, 2023).

On the other hand, complementary tasks such as extracurricular activities, mentoring, and professional development are undertaken by teachers to enhance students' overall learning experience (García-Martínez et al., 2021). These tasks contribute to a holistic approach to education and foster a supportive learning environment. Moreover, teachers' engagement in complementary tasks positively influences students' motivation and well-being (Choi & Lee, 2023). Teachers often serve as mentors, providing guidance and support to students beyond the classroom to promote social-emotional development and academic success (Blackburn & Ricci, 2020). Additionally, participation in professional development activities enhances teachers' pedagogical knowledge, instructional skills, and effectiveness in meeting diverse student needs (Darling-Hammond et al., 2021).

Lowest among the sub-domains is class preparation with 3.56 weighted mean. Teachers are shown to correspond completely in a thorough class preparation because they could recognize its direct impact on the quality of instruction and student learning outcomes. Class preparation is crucial for effective teaching as it allows teachers to design engaging lessons, tailor content to students' needs, and anticipate potential challenges. According to Johnson and Brown (2019), effective class preparation

positively correlates with student engagement and learning outcomes. Additionally, thorough class preparation enables teachers to incorporate diverse instructional strategies, technology, and resources to cater to different learning styles and abilities (Brown & Smith, 2023). This process is time-consuming but essential for creating a conducive learning environment that promotes student success. Furthermore, class preparation involves selecting appropriate assessment methods and designing assessments aligned with learning objectives (Lee et al., 2022). It also allows for the incorporation of real-world examples and application-based activities to enhance students' understanding and relevance of the content.

Table 9
Teacher's Self-Efficacy in Terms of Instruction

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I explain central themes in your subjects so that even the low-achieving students understand.	3.73	Always	4
2. I provide good guidance and instruction to all students regardless of their level of ability.	3.80	Always	3
3. I answer students' questions so that they understand difficult problems.	3.83	Always	2
4. I explain subject matter so that most students understand the basic principles.	3.84	Always	1
Composite Mean	**3.80**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Table 9 displays the teachers' self-efficacy in terms of instruction. It achieved a composite mean of 3.80 and was verbally interpreted as always.

The indicator about explaining subject received the topmost rank with a 3.84 weighted mean. The next in rank is answering students' questions with 3.83, followed by providing good guidance and instruction with 3.80 and explaining central themes with 3.73. The confidence and efficacy of teachers in promoting learning for all students, irrespective of their skills or past accomplishment levels is demonstrated by several critical criteria that are part of their self-efficacy in teaching. Teacher self-efficacy, or the conviction that they can successfully manage the responsibilities, obstacles, and duties associated with their work, is a major factor in determining significant academic results.

According to Lazarides and Warner (2020), teachers with high levels of self-efficacy are more open to new teaching methods, set themselves more challenging goals, exhibit a greater level of planning and organization, direct their efforts at solving problems,

seek assistance, and adjust their teaching strategies when faced with difficulties. Self-efficacy among teachers significantly influences their ability to effectively explain subject matter, provide good guidance, and instruct on central themes in education. Research indicates that teachers with high self-efficacy are more proficient in simplifying complex concepts, making them more accessible to students (Bandura, 2019). This ability to break down intricate topics is crucial for student comprehension and retention (Schwarzer & Hallum, 2020). Teachers who believe in their instructional capabilities are also better at engaging students in active learning processes (Tschannen-Moran & Johnson, 2021). Furthermore, self-efficacious teachers exhibit a higher degree of adaptability in their teaching methods, catering to diverse student needs (Klassen & Durksen, 2020).

Effective guidance is another area where teacher self-efficacy plays a pivotal role. Teachers with strong self-efficacy are more confident in setting clear expectations and providing constructive feedback (Poulou, 2019). This guidance is essential for fostering a positive learning environment and encouraging student autonomy (Woolfolk Hoy & Burke Spero, 2020). Additionally, teachers who trust in their guidance abilities are more likely to mentor students beyond academic instruction, addressing emotional and social development (Fackler & Malmberg, 2021).

Instruction on central themes is enhanced by teachers with high self-efficacy, who are better at connecting overarching ideas with specific content (Dicke et al., 2019). This skill helps students understand the relevance and application of what they are learning (Goddard et al., 2020). Moreover, self-efficacious teachers often employ a variety of instructional strategies to reinforce central themes, ensuring that different learning styles are accommodated (Klassen et al., 2019). They also tend to maintain higher expectations for their students, which can lead to improved academic outcomes (Mojavezi & Tamiz, 2020).

The confidence that comes with high self-efficacy enables teachers to create a more interactive and student-centered classroom environment (Künsting et al., 2019). This environment is conducive to deep learning, as students are encouraged to participate actively and engage with the material (Ross et al., 2021). Additionally, teachers with strong self-efficacy are more persistent in the face of challenges, maintaining their teaching quality despite obstacles (Skaalvik & Skaalvik, 2020). This persistence is vital for sustained student engagement and success (Tschannen-Moran et al., 2021). Teacher self-efficacy enhances the ability to explain subject matter clearly, provide meaningful guidance, and emphasize central themes in a way that resonates with students (Schwarzer & Hallum, 2020). As teachers' self-belief in their instructional abilities strengthens, so does their impact on student learning and overall educational outcomes (Bandura, 2019).

Table 10 in the next page shows the teachers' self-efficacy in terms of adapting instruction to individual needs. It achieved a composite mean of 3.71 and was verbally interpreted as always. The computed composite mean perfectly aligned with the weighted means of all indicators meeting this criterion. Ranked first in the table is the criterion on organizing classroom work according to abilities (3.74) then organizing schoolwork and

adapting instruction to the needs of low-ability students ranked 2.5 with the weighted mean of 3.71 and the least is providing a realistic challenge for all students (3.69).

Teachers' self-efficacy in terms of instruction is one of the contributing factors towards the enrichment of learning experiences of students across diverse ability levels. Proficient teachers organize classroom work in a manner that ensures both low-ability and high-ability students engage with tasks adapted to their abilities.

Table 10
Teacher's Self-Efficacy in terms of
Adapting Instruction to Individual Needs

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I organize schoolwork to adapt instruction and assignments to individual needs.	3.71	Always	2.5
2. I provide realistic challenge for all students even in mixed ability classes.	3.69	Always	4
3. I adapt instruction to the needs of low-ability students while you also attend to the needs of other students in class.	3.71	Always	2.5
4. I organize classroom work so that both low- and high-ability students work with tasks that are adapted to their abilities.	3.74	Always	1
Composite Mean	**3.71**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Informing learners about their status, performance, and thus improvements is important so that learning could take a complete cycle. Assessment practices provide meaningful feedback and guide instructional decisions, thereby promoting equitable opportunities for all students to demonstrate their learning. Effective teachers provide realistic challenges that are appropriate for all students, irrespective of their abilities, even in mixed-ability classes. This involves striking a balance between setting high expectations and providing necessary support to ensure that every student can succeed. Studies about learning feedback emphasize the importance of challenging tasks that promote intellectual growth while accommodating varying levels of readiness and skill. That is to say, feedback is an important aspect of learning.

Research shows that teachers with high self-efficacy are better equipped to differentiate instruction, providing appropriate challenges for students at various skill

levels (Schwarzer & Hallum, 2020). They are more confident in their ability to assess students' needs accurately and design lessons that cater to these diverse requirements (Klassen & Durksen, 2020). This adaptability ensures that all students, regardless of their starting point, can make meaningful progress (Dicke et al., 2019).

The teachers always organize schoolwork to adapt instruction and assignments to individual needs received 3.71 weighted mean. Effective organization of classroom work according to abilities requires a nuanced understanding of student strengths and weaknesses, something that self-efficacious teachers excel at (Poulou, 2019). Additionally, teachers with high self-efficacy are more likely to employ a variety of instructional methods, from collaborative group work to individualized learning plans, to address the spectrum of student abilities (Klassen et al., 2019).

Organizing schoolwork effectively also involves managing classroom dynamics and resources, a task that self-efficacious teachers handle with greater ease (Bandura, 2019). They are adept at creating structured yet flexible classroom environments that accommodate individual learning styles and paces (Ross et al., 2021). This organizational skill extends to the physical arrangement of the classroom, ensuring that resources are accessible and that the environment is conducive to learning for all students (Mojavezi & Tamiz, 2020).

Self-efficacious teachers are also more proactive in seeking out and integrating new instructional technologies and resources that can aid in differentiating instruction (Künsting et al., 2019). Their confidence in their teaching abilities makes them more open to experimenting with innovative educational tools that can enhance learning experiences (Skaalvik & Skaalvik, 2020). Furthermore, these teachers are better at collaborating with colleagues and other professionals to share strategies and insights on effectively adapting instruction to meet diverse student needs (Tschannen-Moran et al., 2021).

The ability to organize classroom and schoolwork according to individual needs is also linked to teachers' capacity for reflective practice (Tschannen-Moran & Johnson, 2021). Self-efficacious teachers regularly reflect on their teaching methods and student outcomes, making necessary adjustments to improve efficacy (Woolfolk Hoy & Burke Spero, 2020). This reflective practice is crucial for ongoing professional development and for maintaining a high standard of teaching that meets the needs of all students (Bandura, 2019). High self-efficacy enables teachers to differentiate instruction, manage classroom dynamics, integrate new technologies, and engage in reflective practice, all of which contribute to a more inclusive and effective learning environment (Schwarzer & Hallum, 2020). By fostering a sense of efficacy, teachers can better adapt their instruction to meet the diverse needs of their students, ultimately leading to improved educational outcomes (Klassen & Durksen, 2020).

Table 11
Teacher's Self-Efficacy in Terms of Motivating Students

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I get all students in class to work hard with their schoolwork.	3.76	Always	3
2. I wake the desire to learn even among the lowest achieving students.	3.73	Always	4
3. I get students to do their best even when working with difficult problems.	3.78	Always	2
4. I motivate students who show low interest in schoolwork.	3.79	Always	1
Composite Mean	**3.77**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Teachers' self-efficacy in terms of motivating students is shown in table 11. It achieved a composite mean of 3.77 and is verbally interpreted as always. The calculated composite mean precisely corresponded to the weighted means of all indicators that met this criterion. Motivating students who show low interest in schoolwork ranked first with a 3.79 weighted mean, then getting students to do their best with 3.78. The last two criteria were about getting student hard work and waking students' learning desire to learn with 3.76 and 3.73 weighted means respectively.

Effective teachers may motivate students who are disinterested in homework, allowing them to become more involved and invested in their studies. The findings indicate that teachers always motivate students who show low interest in schoolwork. This entails recognizing students' interests, strengths, and needs, and then adapting courses and activities to their preferences. Efficacy in motivating students could be exhibited in various form, after all, motivation is one of the indicators that facilitate effective teaching and learning interaction. Grounded in recent educational research, several studies have shown that establishing a positive teacher-student relationship is foundational in fostering student motivation. For instance, Roorda et al. (2020) emphasize that when students perceive their teachers as supportive and caring, their engagement and interest in schoolwork significantly increase.

Additionally, the application of differentiated instruction, as highlighted by Tomlinson (2019), allows teachers to tailor learning experiences to meet individual student needs, thereby increasing their motivation to engage and perform well. When teachers help students set realistic, achievable goals, it provides a clear direction and purpose for their efforts, thus motivating them to put forth their best effort. Creating a collaborative learning environment, as suggested by Johnson and Johnson (2020), encourages peer interaction and support, which can be particularly motivating for students who might otherwise feel isolated or disengaged. Moreover, incorporating

student interests and real-world applications into the curriculum, as recommended by Newmann et al. (2019), can make learning more relevant and interesting, sparking a natural curiosity and desire to learn. Similarly, the integration of technology in the classroom, explored by Lai (2019), offers dynamic and interactive learning experiences that can captivate students' attention and motivate them to engage more deeply with the content.

Furthermore, the concept of growth mindset, popularized by Dweck (2019), is essential in motivating students. When teachers encourage a growth mindset, students are more likely to embrace challenges and persist through difficulties, seeing effort as a pathway to mastery rather than a sign of inadequacy. Lastly, creating a culturally responsive classroom environment, as Ladson-Billings (2021) suggests, ensures that all students feel valued and understood, which is critical for motivating diverse student populations. By recognizing and valuing students' cultural backgrounds, teachers can foster an inclusive environment that promotes higher levels of engagement and motivation.

Teachers' efficacy in motivating students with low interest in schoolwork is multifaceted and supported by a wealth of research. By building strong relationships, differentiating instruction, gamifying learning experiences, setting goals, providing constructive feedback, fostering collaboration, connecting learning to student interests, integrating technology, promoting a growth mindset, and creating culturally responsive classrooms, teachers can significantly enhance students' motivation and desire to learn. These strategies, supported by recent research, highlight the comprehensive approach needed to effectively engage and inspire students in today's diverse educational landscape.

Table 12
Teacher's Self-Efficacy in Terms of Maintaining Discipline

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I maintain discipline in any school class or group of students.	3.81	Always	1
2. I control even the most aggressive students.	3.65	Always	4
3. I get students with behavioral problems to follow classroom rules.	3.69	Always	3
4. I get all students to behave politely and respect the teachers.	3.74	Always	2
Composite Mean	**3.72**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Table 12 above displays the data on teachers' self-efficacy in terms of discipline maintenance, achieving a composite mean of 3.72, which is verbally interpreted to be always done by the teacher. This composite mean accurately matched the weighted means of all indicators meeting this criterion.

As indicated in the table, teachers perceived all the parameters to be always being done in their fields. They always maintain discipline in any school class or group of students gained (with 3.81 mean), get all students to behave politely and respect the teachers (with 3.74 mean), get students with behavioral problems to follow classroom rules, and control even the most aggressive students (with 3.69 and 3.65 weighted mean respectively).

Teachers' self-efficacy in maintaining discipline is essential for creating a positive and conducive learning environment where students feel safe, respected, and engaged. Firstly, proficient teachers can maintain discipline in any school class or group of students. This involves establishing clear expectations, rules, and routines and consistently enforcing them fairly and respectfully. In connection to this, a study that was conducted by Myint Lay (2022) indicated that if teachers' efficacy is high, their classroom management practices will be high. Proficient teachers can guide students with behavioral problems to follow classroom rules by providing consistent support, reinforcement, and guidance.

In addition to research that was performed by by Allen, Curran, and Camilli (2010) highlighting the significant impact of positive teacher-student relationships on reducing disruptive behavior and fostering a supportive classroom climate, teachers' self-efficacy in maintaining discipline encompasses the ability to establish and enforce classroom expectations, control aggressive behavior, guide students with behavioral problems, and foster polite behavior and respect for teachers.

Further research underscores the importance of establishing clear expectations and consistent routines, which provide students with a structured environment where they understand the boundaries and expectations.

Implementing positive behavioral interventions and supports (PBIS) is another effective strategy. Horner and Sugai (2020) found that PBIS frameworks, which emphasize positive reinforcement for good behavior rather than punitive measures, significantly reduce behavioral issues and create a positive classroom atmosphere. Teachers can also employ restorative practices, which focus on repairing harm and restoring relationships rather than merely punishing misbehavior. According to Thorsborne and Blood (2019), restorative practices help students understand the impact of their actions and foster a sense of responsibility and empathy.

For students with behavioral problems, individualized behavior management plans can be particularly effective. Simonsen and Myers (2020) highlight the importance of tailoring interventions to the specific needs of students, which often involves collaboration

with other educators, parents, and mental health professionals. Consistent and fair application of rules is essential.

In terms of dealing with aggressive behaviors, de-escalation techniques are crucial. Establishing a classroom culture that promotes emotional regulation and social skills is vital. CASEL (2020) notes that social-emotional learning (SEL) programs, which teach students skills like self-awareness, self-management, and relationship-building can significantly reduce aggressive behavior and improve overall classroom climate.

Furthermore, creating an inclusive classroom environment where diversity is respected and valued can help mitigate behavioral issues. According to Gay (2020), culturally responsive teaching practices that acknowledge and respect students' backgrounds and experiences can reduce feelings of alienation and frustration that often lead to misbehavior. Regular professional development for teachers is also important. Evans and Lester (2020) emphasize that ongoing training in classroom management techniques and behavioral interventions is crucial for teachers to stay effective in maintaining discipline.

Lastly, involving parents and guardians in the disciplinary process can enhance its effectiveness. Research by Epstein (2019) shows that when parents are engaged and collaborate with teachers, students are more likely to adhere to behavioral expectations and show respect for authority figures. In summary, teachers maintain discipline through clear rules, positive relationships, PBIS, restorative practices, individualized plans, de-escalation techniques, SEL programs, inclusive environments, continuous professional development, and parental involvement. These strategies, supported by recent research, provide a comprehensive approach to fostering a disciplined and respectful classroom environment.

Table 13 displays the teachers' self-efficacy in terms of cooperating with colleagues and parents which shows that teachers always perform these efficacious activities, as evinced by the composite mean of 3.76. This calculated composite mean accurately matched the weighted means of all indicators meeting this criterion.

Table 13
Teacher's Self-Efficacy in Terms of Cooperating With Colleagues and Parents

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I cooperate well with most parents.	3.80	Always	1
2. I find adequate solutions to conflicts of interest with other teachers.	3.70	Always	4

3. I collaborate constructively with parents of students with behavioral problems.	3.79	Always	2
4. I cooperate effectively and constructively with other teachers, for example, in teaching teams.	3.75	Always	3
Composite Mean	**3.76**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Among the parameters indicated, cooperating well with most parents is the rated always, which gained the highest weighted mean of 3.80; followed by collaborating constructively with parents of students with behavioral problems with 3.79 weighted mean. The third and fourth criteria are cooperating effectively and constructively with other teachers and finding adequate solutions to conflicts of interest with other teachers with weighted means of 3.75 and 3.70 respectively.

Teachers' self-efficacy in cooperating with colleagues and parents is essential for fostering a collaborative and supportive educational environment that promotes student success. Proficient teachers demonstrate the ability to cooperate effectively with most parents, establishing positive partnerships built on mutual respect, communication, and shared goals for student learning. Effective communication with parents is foundational to building strong partnerships. Additionally on Epstein (2019), regular and transparent communication between teachers and parents builds trust and creates a shared understanding of students' needs and progress. Teachers who utilize various communication tools such as newsletters, emails, and parent-teacher conferences ensure that parents are well-informed and engaged in their child's education. This proactive approach helps in preventing misunderstandings and creates a collaborative atmosphere where parents feel valued as partners in the educational process.

For parents of students with behavioral problems, a more tailored and empathetic approach is essential. Simonsen and Myers (2020) note that individualized behavior plans developed in collaboration with parents can be highly effective. These plans often include consistent communication about the child's progress and specific strategies that parents can reinforce at home. By involving parents in the intervention process, teachers can create a consistent and supportive environment for the student, both at school and at home. This collaborative effort not only helps in addressing behavioral issues but also strengthens the trust and cooperation between teachers and parents.

Collaboration among teachers is equally important in creating a cohesive learning environment. Professional learning communities (PLCs), as highlighted by DuFour and Fullan (2020) provide a structured framework for teachers to share best practices, discuss student progress, and develop collective strategies for improvement. These collaborative efforts are particularly beneficial in addressing the needs of students with diverse learning and behavioral challenges. Through regular meetings and open communication, teachers can pool their expertise and resources to support each other and their students more effectively.

When conflicts of interest arise among teachers, it is crucial to approach them with a problem-solving mindset. Johnson and Johnson (2020) suggest that conflict resolution strategies, such as mediation and collaborative negotiation, can help in finding mutually acceptable solutions. Effective conflict resolution involves active listening, empathy, and a focus on common goals, ensuring that disagreements do not impede the educational process. Additionally, establishing clear protocols for decision-making and conflict resolution within the school can provide a framework for addressing conflicts constructively.

Furthermore, fostering a positive school culture that values collaboration and mutual respect can significantly enhance teachers' ability to work together effectively. In such environments, teachers are more likely to support each other and share a commitment to continuous improvement. Regular professional development opportunities that focus on team-building and collaborative skills can also strengthen these efforts.

Teachers' efficacy in cooperating with parents and colleagues is underpinned by clear communication, empathy, and a collaborative approach. By engaging parents through consistent communication and personalized support plans, teachers can build strong partnerships that benefit students. Collaborating with colleagues through PLCs and employing effective conflict resolution strategies ensures that teachers can address challenges and support each other in their professional roles. A positive school culture that promotes collaboration further enhances these efforts, creating a supportive and effective educational environment. These strategies, supported by recent research, highlight the importance of cooperation and collaboration in achieving educational success.

Table 14
Teacher's Self-Efficacy in Terms of Coping With Change

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I successfully use any instructional method that the school decides to use.	3.64	Always	4
2. I manage instruction regardless of how it is organized (group composition, mixed age groups, etc.).	3.66	Always	1
3. I manage instruction even if the curriculum is changed.	3.65	Always	2
4. I teach well even if you are told to use instructional methods that would not be your choice.	3.65	Always	3
Composite Mean	**3.65**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Table 14 displays teachers' self-efficacy in terms of coping with change, achieving a composite mean of 3.65, indicating that they are always practiced.

The leading indicator in this table is managing instruction regardless of how it is organized (3.6) followed by managing instruction even if the curriculum is changed, and teaching well despite method changes both gained 3.65 and lastly is successfully using any instructional method that the school decides to use (3.64).

Teachers' self-efficacy in coping with change is a vital attribute that enables educators to adapt to evolving instructional methods, curriculum changes, and diverse instructional contexts while maintaining effectiveness in their teaching practice. Skilled teachers are capable of managing instruction regardless of how it is organized, whether it involves varied group compositions, mixed-age groups, or other unconventional arrangements.

The principles discussed can be applied to understand how teachers' self-efficacy beliefs influence their willingness to implement mandated instructional methods, even when they may not align with their personal preferences. Proficient teachers demonstrate the ability to manage instruction effectively even in the face of curriculum changes, adjusting their teaching strategies to align with new standards, objectives, or materials.

Teachers' self-efficacy in coping with change encompasses the ability to successfully implement mandated instructional methods, manage instruction in diverse contexts, adapt to curriculum changes, and teach effectively despite personal preferences. Teachers who are efficacious in coping with change demonstrate resilience, adaptability, and a positive attitude toward evolving educational landscapes.

Teachers are considered self-efficacious when they can manage instruction effectively regardless of organizational changes, curricular adjustments, and shifts in instructional methods. This adaptability is a hallmark of teaching efficacy, as it reflects a teacher's confidence in their ability to impact student learning under varying conditions. Bandura's theory of self-efficacy, as discussed by Klassen and Tze (2014), highlights that teachers with high self-efficacy are more likely to embrace new instructional methods and curriculum changes because they believe in their capabilities to manage and succeed in diverse teaching scenarios. This adaptability is essential in contemporary education, where rapid technological advancements and evolving educational standards demand continuous adjustment.

Moreover, as an addition to Skaalvik and Skaalvik (2020), they underscore that self-efficacious teachers are resilient in the face of instructional changes. They possess a growth mindset, which enables them to view changes not as obstacles but as opportunities for professional growth and improved student outcomes. When curricular changes occur, teachers with high self-efficacy utilize their strong pedagogical foundation and adaptability to effectively integrate new content and teaching strategies. This ability to pivot ensures that instructional quality remains high, even when the curriculum undergoes significant revisions.

Additionally, self-efficacious teachers demonstrate a robust understanding of diverse instructional methods, allowing them to select and implement the most effective strategies for their students. According to Hattie (2019), these teachers are adept at assessing the impact of different teaching methods and are skilled at modifying their approach based on student feedback and performance data. This reflective practice is crucial for maintaining instructional effectiveness, particularly when mandated to use new or unfamiliar methods. The confidence in their instructional skills enables these teachers to remain effective educators regardless of the instructional methods imposed by the school.

Another critical aspect of teacher self-efficacy is their ability to foster a positive learning environment, even amidst instructional changes. Pianta, Hamre, and Allen (2021) found that teachers with high self-efficacy maintain strong classroom management skills and a supportive classroom climate, which are essential for student engagement and learning. These teachers are proficient in creating a stable and conducive learning environment, which helps mitigate the potential disruption caused by changes in instructional methods or curriculum.

Furthermore, professional development plays a significant role in enhancing teacher self-efficacy. Guskey (2021) emphasizes that ongoing professional learning opportunities help teachers build the skills and knowledge necessary to adapt to instructional changes. By engaging in continuous professional development, teachers not only improve their instructional practices but also reinforce their confidence in managing various educational demands.

The ability to collaborate effectively with colleagues is another attribute of self-efficacious teachers. Sharing experiences, resources, and strategies with peers provides a support network that enhances individual and collective efficacy, thereby improving the overall instructional quality within the school. Teachers are considered self-efficacious when they can manage instruction effectively regardless of organizational structure, curricular changes, or shifts in instructional methods. This adaptability is supported by their confidence, resilience, and continuous professional development. Research highlights that self-efficacious teachers possess a growth mindset, strong pedagogical skills, and the ability to create positive learning environments, all of which contribute to their effectiveness in diverse teaching scenarios. By fostering collaboration and engaging in reflective practice, these teachers ensure that their instructional quality remains high, even in the face of significant changes. This comprehensive approach underscores the critical role of self-efficacy in achieving educational success.

Table 15
Summary Table on Teacher's Self-Efficacy

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Instruction	3.80	Always	1
2. Adapt Instruction to Individual Needs	3.71	Always	5
3. Motivate Students	3.77	Always	2
4. Maintain Discipline	3.72	Always	4
5. Cooperate With Colleagues and Parents	3.76	Always	3
6. Cope With Change	3.65	Always	6
Composite Mean	**3.74**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

It could be seen from table 15 that all indicators of teacher self-efficacy are always practiced by the teacher-respondents, as supported by its composite mean of 3.65.

The indicator instruction ranked first among the given criteria, it earned a weighted mean of 3.80, followed by motivate students with 3.77, and both were verbally interpreted as always. Next in line were, cooperate with colleagues and parents (3.76), maintain discipline (3.72), adapt instruction to individual needs (3.71), and cope with change (3.65).

Self-efficacy, the belief in one's ability to accomplish tasks and achieve goals, plays a pivotal role in shaping the effectiveness of teaching across various domains. Teachers with high self-efficacy in instruction possess confidence in their ability to effectively deliver content and facilitate learning experiences. Their belief in their ability to handle disciplinary challenges instills a sense of order, structure, and respect in the classroom, contributing to a positive and conducive learning environment.

The indicator instruction ranked first among the given criteria, it earned a weighted mean of 3.80. Teachers could be considered self-efficacious in delivering teaching and learning instructions, motivating learners, and cooperating with colleagues and parents due to their belief in their capabilities and the effectiveness of their instructional strategies. This sense of efficacy is foundational in the field of education, where teachers face diverse and evolving challenges. These teachers are confident in their ability to convey complex concepts clearly and adjust their teaching strategies to meet the diverse needs of their students.

The teachers always motivate students with 3.77. Motivating learners is another area where self-efficacious teachers excel. Research by Hattie (2019) shows that these teachers utilize a variety of motivational strategies, including setting high expectations, providing constructive feedback, and creating engaging learning experiences. They believe in their ability to influence student motivation and achievement, which in turn

fosters a positive learning environment. Self-efficacious teachers are adept at building strong relationships with their students, understanding that a supportive and trusting teacher-student relationship is crucial for motivating learners. This relational approach helps students feel valued and understood, increasing their intrinsic motivation to learn.

Ranked third is cooperating with colleagues and parents with 3.76 weighted mean. Cooperation with colleagues and parents is also a significant aspect of teachers' self-efficacy. Teachers who believe in their collaborative abilities are more likely to engage in professional learning communities (PLCs) and other collaborative practices. The collective efficacy of these teacher communities enhances individual teacher efficacy, creating a supportive network that benefits both teachers and students. Moreover, self-efficacious teachers are skilled at communicating with parents, understanding that parental involvement is key to student success. Epstein (2019) highlights that regular, transparent communication with parents helps build trust and ensures that parents are informed and engaged in their child's education.

Furthermore, self-efficacious teachers are resilient and adaptable, qualities that are essential in today's dynamic educational landscape. Skaalvik and Skaalvik (2020) found that these teachers view challenges as opportunities for growth rather than as obstacles. Whether it is adapting to new curricular demands, integrating technology into the classroom, or addressing diverse student needs, self-efficacious teachers remain confident in their ability to manage and succeed. This adaptability is supported by continuous professional development, which Guskey (2021) emphasizes as critical for maintaining and enhancing teaching efficacy. By engaging in ongoing learning, teachers stay current with educational trends and improve their instructional practices, further boosting their self-efficacy.

Additionally, the ability to foster a positive classroom environment is a hallmark of self-efficacious teachers. Pianta, Hamre, and Allen (2021) note that these teachers are skilled at creating a supportive and inclusive classroom climate where all students feel safe and valued. This environment is conducive to learning and helps mitigate behavioral issues, allowing teachers to focus on delivering effective instruction. Moreover, self-efficacious teachers are proactive in implementing social-emotional learning (SEL) programs, which CASEL (2020) highlights as essential for developing students' emotional and social skills. By integrating SEL into their teaching, these teachers support the holistic development of their students, further enhancing their engagement and motivation.

Most teachers could be self-efficacious in delivering teaching and learning instructions, motivating learners, and cooperating with colleagues and parents due to their confidence in their abilities, adaptability, and commitment to continuous improvement. Supported by a wealth of research, self-efficacious teachers employ effective instructional strategies, foster strong relationships, and engage in collaborative practices that enhance their efficacy and contribute to student success.

Their resilience and proactive approach to professional development ensure that they remain effective educators, capable of navigating the complexities of the modern

educational landscape. This comprehensive self-efficacy not only benefits their students but also provides opportunities for the overall educational community to adapt to the changing and growing demands of learning.

Table 16
Teacher Effectiveness in terms of Subject Matter Knowledge

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I demonstrate accurate knowledge of my subject matter.	3.80	Always	2
2. I link content with past and future learning experiences.	3.78	Always	3
3. I demonstrate a variety of skills of my subject area(s).	3.73	Always	5
4. I communicate content in ways that students can understand.	3.81	Always	1
5. I use school and community resources to help students.	3.68	Always	7
6. I teach according to the intellectual, and emotional needs of the students I effectively address appropriate curriculum standards.	3.74	Always	4
7. I base instruction on goals that reflect high expectations.	3.70	Always	6
Composite Mean	**3.75**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Table 16 presents teachers' effectiveness in terms of subject matter, with a composite mean score of 3.65, indicating a consistent interpretation of always.

The highest weighted mean is 3.81; the teacher is always communicating content in ways that students can understand, followed by demonstrating accurate knowledge of subject matter (3.80) and linking content with past and future learning experiences (3.78). The fourth indicator is teaching according to the intellectual, and emotional needs of the students (3.74) then demonstrating a variety of skills in my subject area(s) (3.73). The last two indicators are about basing instruction on goals that reflect high expectations (3.70) and using school and community resources to help students. (3.68).

In assessing teacher effectiveness in terms of subject matter knowledge, several criteria are paramount. Effective communication of content in ways that students can understand is essential for facilitating learning. By employing varied instructional methods such as visual aids, analogies, and hands-on activities, teachers can effectively convey complex concepts to students with varying levels of understanding. Demonstrating accurate knowledge of the subject matter is foundational.

With this, expertise in terms of knowledge of subject matter is imperative. Teachers who possess deep content knowledge not only facilitate student understanding but also foster critical thinking and problem-solving skills. Linking content with past and future learning experiences enhances comprehension and retention. By contextualizing content within a broader framework of learning experiences, teachers provide students with a more cohesive understanding of the subject matter. Teacher effectiveness in terms of subject matter knowledge hinges on accurate content mastery, the integration of past and future learning experiences, and the ability to communicate content in accessible ways for all students.

Teachers could be considered effective when they have the ability to communicate content in a manner that students can understand, demonstrate accurate subject matter knowledge, and seamlessly link past and present lessons. According to Hattie (2019), clear and comprehensible communication is foundational for effective teaching. Teachers who excel in this area use language and examples that are accessible to their students, tailoring their explanations to meet diverse learning needs. This clarity helps students to build a strong understanding of the subject matter, reducing confusion and increasing engagement.

Accurate and deep subject matter knowledge is another critical aspect of teaching effectiveness. Teachers who possess understanding of their subject are better equipped to answer students' questions, provide detailed explanations, and connect concepts across different topics. Research by Shulman (2020) highlights the importance of pedagogical content knowledge, which integrates subject expertise with an understanding of how to teach that content effectively. Such teachers can identify common misconceptions and address them proactively, ensuring that students develop a correct and thorough understanding of the subject.

Linking past and present lessons is essential for reinforcing learning and helping students see the progression of their knowledge. According to Bransford, Brown, and Cocking (2019), effective teachers use scaffolding techniques to connect new information to previously learned material. This approach not only aids in retention but also helps students to understand the broader context of what they are learning. By drawing connections between past lessons and current topics, teachers help students to build a coherent and integrated body of knowledge.

The ability to communicate content effectively is also closely tied to the use of formative assessment. Teachers who regularly check for understanding can identify areas where students are struggling and provide targeted support. This responsiveness enhances the clarity of instruction and ensures that all students are able to keep up with the lesson.

Moreover, effective communication involves not just delivering content but also listening to students. According to Freire (2021), dialogic teaching, which emphasizes open dialogue and active listening, helps to create a more interactive and engaging classroom environment. Teachers who engage in meaningful dialogue with their students

can better understand their perspectives and needs, making instruction more relevant and impactful.

Effective teachers also use a variety of instructional strategies to communicate content. Differentiated instruction, as highlighted by Tomlinson (2020), involves tailoring teaching methods to meet the diverse learning styles and abilities of students. By using multiple approaches, such as visual aids, hands-on activities, and collaborative projects, teachers can ensure that all students have the opportunity to engage with and understand the material.

In addition, teachers who are effective in linking past and present lessons often employ thematic or project-based learning. According to Barron and Darling-Hammond (2020), these approaches help students to see the connections between different topics and apply their knowledge in real-world contexts. By organizing lessons around central themes or projects, teachers can create a more cohesive and meaningful learning experience.

Professional development is also crucial for maintaining teaching effectiveness. Guskey (2021) emphasizes that ongoing learning opportunities help teachers to stay current with educational research and refine their instructional practices. Teachers who engage in continuous professional development are better equipped to communicate content clearly, demonstrate subject matter expertise, and connect lessons in meaningful ways.

Teachers are considered effective when they can communicate content clearly, demonstrate accurate subject matter knowledge, and link past and present lessons. This effectiveness is supported by clear communication strategies, deep subject knowledge, and the ability to create connections across lessons. Research underscores the importance of formative assessment, dialogic teaching, differentiated instruction, and thematic learning in achieving these goals. Continuous professional development further enhances teachers' ability to deliver high-quality instruction, ensuring that students receive a coherent and comprehensive education. These elements collectively contribute to the effectiveness of teachers and students success.

Table 17
Teacher Effectiveness in terms of Instructional Planning and Strategies

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I use strategies to enhance students' understanding.	3.79	Always	1.5
2. I change the teaching methodology to make topics relevant.	3.73	Always	5

3. I understand the individual differences of students and teach accordingly.	3.77	Always	3
4. I use appropriate materials, technology, and resources.	3.74	Always	4
5. I engage, motivate, and maintain students' attention.	3.79	Always	1.5
6. I teach the required curriculum according to a timetable.	3.72	Always	6
7. I use student learning data to guide planning.	3.70	Always	7
Composite Mean	**3.75**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Table 17 presents teacher effectiveness in terms of instructional planning and strategies, with a composite mean score of 3.75, indicating a consistent interpretation of always. This calculated composite mean precisely aligns with the weighted means of all indicators meeting this standard.

The indicators on using strategies to enhance students' understanding and engaging, motivating, and maintaining students' attention gained a weighted mean of 3.79 ranked as 1.5. Next is understanding individual differences of students and teaching accordingly with a 3.77 weighted mean. The fourth indicator is using appropriate material, technology, and resources (3.74). The last three indicators are changing teaching methodology to make topics relevant (3.73), teaching the required curriculum according to a timetable (3.72), and using student learning data to guide planning (3.70).

When evaluating teacher effectiveness in terms of instructional planning and strategies, several key criteria emerge. Firstly, the use of strategies to enhance students' understanding is essential. Teachers who incorporate techniques such as cooperative learning, graphic organizers, and hands-on activities facilitate deeper comprehension and retention of content among students. Engaging, motivating, and maintaining students' attention are crucial components of effective instruction.

By acknowledging and addressing variations in students' backgrounds, abilities, and interests, teachers create inclusive classrooms where all students can thrive. Teacher effectiveness in instructional planning and strategies involves the strategic use of techniques to enhance understanding, the cultivation of intrinsic motivation and engagement, and the consideration of individual student differences in teaching approaches.

Most teachers are considered self-efficacious in instructional planning and strategies because they possess a deep understanding of how to enhance student understanding, motivate and engage learners, and address individual differences. This self-efficacy stems from their confidence in their abilities to create effective lesson plans, implement diverse instructional strategies, and adapt to the unique needs of each student. According to Hattie (2019), teachers with high self-efficacy are adept at using evidence-

based instructional strategies that have been proven to enhance student learning. They meticulously plan their lessons, ensuring that the content is accessible and engaging for all students. This careful planning is crucial for creating a structured learning environment where students can thrive.

In motivating and engaging students, self-efficacious teachers employ a variety of techniques to make learning interesting and relevant. According to Dweck (2020), these teachers foster a growth mindset in their students, encouraging them to embrace challenges and view effort as a path to mastery. By creating a supportive classroom environment, self-efficacious teachers help students build resilience and a love for learning. They use interactive and hands-on activities, which, as noted by Pianta, Hamre, and Allen (2021), increase student engagement and make learning more enjoyable. These activities not only capture students' interest but also help them to connect new information with their existing knowledge.

Ranked third is on teachers always understanding student individual differences; another area where self-efficacious teachers excel. They recognize that each student has unique strengths, weaknesses, and learning styles. Tomlinson (2020) emphasizes that differentiated instruction is a key strategy used by these teachers to meet the diverse needs of their students. By tailoring their teaching methods and materials, they ensure that all students have the opportunity to succeed. This might involve providing additional support for struggling students or offering advanced challenges for those who are excelling. The ability to differentiate effectively requires a deep understanding of each student's needs, which self-efficacious teachers possess.

Self-efficacious teachers also use formative assessments to gauge student understanding and adjust their instruction accordingly. By continually assessing student progress, teachers can make informed decisions about how to best support each learner. This responsive approach ensures that instruction is always aligned with students' needs, thereby enhancing their understanding and engagement.

Collaboration with colleagues is another factor that contributes to teachers' self-efficacy. These collaborative environments provide opportunities for teachers to discuss instructional strategies, share resources, and receive feedback. The collective efficacy that emerges from these communities strengthens individual teacher efficacy, as teachers feel more confident in their instructional planning and strategies.

Professional development is also critical in enhancing teachers' self-efficacy. Guskey (2021) argues that ongoing professional learning helps teachers stay current with educational research and best practices. By participating in professional development, teachers can refine their instructional strategies and learn new techniques for enhancing student understanding and motivation. This continuous improvement is essential for maintaining high levels of self-efficacy.

Furthermore, self-efficacious teachers are adept at creating a positive classroom climate that supports learning. According to Bransford, Brown, and Cocking (2019), a positive classroom environment is characterized by mutual respect, clear expectations,

and a focus on student well-being. Teachers who can establish such an environment are more effective in engaging students and fostering a sense of community within the classroom. This positive climate is conducive to learning and helps students feel safe and valued.

Self-efficacious teachers could be those who, in instructional planning and strategies are adept because they possess the skills and confidence needed to enhance student understanding, motivate and engage learners, and address individual differences. Their ability to plan effectively, use diverse instructional strategies, and differentiate instruction ensures that all students can succeed. Supported by formative assessments, collaboration with colleagues, and continuous professional development, these teachers create positive and engaging learning environments. Their deep understanding of their students and commitment to ongoing improvement highlight the critical role of self-efficacy in effective teaching.

Table 18
Teacher Effectiveness in Terms of Assessment

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I conduct class tests to monitor student performance.	3.83	Always	3
2. I evaluate students' performance and provide feedback.	3.84	Always	2
3. I maintain students' results and use future improvement.	3.80	Always	4
4. I revise content to enhance students' achievement	3.74	Always	5
5. I keep an official record of students' learning progress.	3.85	Always	1
Composite Mean	**3.81**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Presented in table 18 are the data on teacher effectiveness in terms of assessment, with a composite mean score of 3.81, indicating a consistent interpretation of always. This calculated composite mean aligns with the weighted means of all indicators meeting this standard.

The indicator on keeping an official record of student's learning progress gained the highest rank with a weighted mean of 3.85. Ranked second is evaluating students' performance and providing feedback with a 3.84 weighted mean. In the third place is conducting class tests to monitor student performance with a 3.83 weighted mean. The last two are maintaining students' results and use future improvement." and revising

content to enhance students' achievement with a weighted mean of 3.80 and 3.74, respectively. All indicators were verbally interpreted as always.

Assessment lies at the heart of effective teaching and learning, serving for evaluating student progress, informing instructional decisions, and promoting academic growth. Maintaining official records of students' learning progress is a fundamental practice in assessing teacher effectiveness.

Conducting class tests to monitor student performance is another essential aspect of effective assessment practices, evaluating students' performance and providing feedback are critical components of effective assessment practices. Effective feedback that is specific, timely, and actionable has been shown to enhance student achievement significantly.

Teachers could be considered effective in assessing and evaluating students when they meticulously keep student records, evaluate performance, provide feedback, and implement tests, all of which contribute to a comprehensive understanding of student progress and learning needs. Maintaining accurate and detailed student records is essential for tracking academic progress, identifying patterns, and tailoring instruction to meet individual needs. This systematic approach ensures that no student is missed and that each receives the support needed to succeed.

Evaluating performance and providing feedback are crucial components of effective assessment. Research by Hattie (2019) underscores the impact of timely and constructive feedback on student learning. Feedback helps students understand their strengths and areas for improvement, guiding their efforts and motivating them to achieve their goals. Effective teachers use feedback not just to inform students of their performance but also to engage them in reflective thinking and self-assessment. This process fosters a growth mindset, as highlighted by Dweck (2020), where students learn to view challenges as opportunities for growth rather than obstacles.

Implementing tests and other formal assessments is another critical aspect of effective teaching. Tests provide a structured means of evaluating student knowledge and skills, offering insights into both individual and class-wide understanding. According to Brookhart (2020), well-designed tests are aligned with learning objectives and provide valid and reliable measures of student performance. Effective teachers use a variety of assessment methods, including formative and summative assessments, to capture a holistic picture of student learning. These assessments help teachers to adjust their instruction in real-time and ensure that all students are progressing toward their learning goals.

Moreover, effective teachers understand the importance of using assessment data to inform instruction. Guskey (2021) emphasizes that data-driven decision-making is key to improving educational outcomes. By analyzing assessment results, teachers can identify trends, diagnose learning gaps, and implement targeted interventions. This

proactive approach ensures that instruction is responsive to student needs and that teaching strategies are continuously refined for maximum effectiveness.

Collaboration with colleagues is also a vital aspect of effective assessment practices. This collaborative approach fosters a culture of continuous improvement and collective responsibility for student learning. When teachers work together to analyze data and plan interventions, they enhance their ability to support all students effectively.

The role of formative assessment in enhancing student learning cannot be overstated. These assessments are integral to the learning process, offering regular check-ins that keep students on track and engaged. Effective teachers use formative assessments to create a dynamic learning environment where instruction is continuously adapted based on student performance.

Effective teachers also recognize the importance of involving students in the assessment process. According to Freire (2021), engaging students in self-assessment and peer assessment helps them develop critical thinking and self-regulation skills. When students are actively involved in assessing their own work, they gain a deeper understanding of the learning objectives and criteria for success. This involvement enhances their sense of ownership and responsibility for their learning, leading to greater motivation and engagement.

Professional development plays a crucial role in equipping teachers with the skills needed for effective assessment. Guskey (2021) highlights that ongoing training helps teachers stay current with best practices in assessment and evaluation. By participating in professional development, teachers can refine their assessment techniques, learn new methods, and enhance their ability to use data effectively. This continuous learning ensures that teachers remain effective in assessing and evaluating student performance.

Teachers are effective in assessing and evaluating students when they keep accurate records, evaluate performance with constructive feedback, and implement a variety of assessments. These practices are supported by ongoing professional development, collaboration with colleagues, and a commitment to using data to inform instruction. Research underscores the importance of formative assessments, feedback, and student involvement in the assessment process. By integrating these elements, effective teachers create a comprehensive and responsive assessment system that supports student learning and achievement.

Table 19
Teacher Effectiveness in terms of Learning Environment

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I create a climate of mutual trust and respect in the classroom.	3.82	Always	3.5

2. I maintain a classroom setting that minimizes disruption.	3.81	Always	5
3. I create a friendly and supportive classroom environment.	3.82	Always	3.5
4. I ensure students' participation in the learning process.	3.85	Always	1.5
5. I encourage students to interact respectfully.	3.85	Always	1.5
Composite Mean	**3.83**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Table 19 presents teacher effectiveness in terms of learning environment, with a composite mean score of 3.83, indicating a consistent interpretation of always. This calculated composite mean precisely aligns with the weighted means of all indicators meeting this standard.

Both indicators on ensuring students' participation in the learning process and encouraging students to interact respectfully gained the highest rank and gained 3.85 weighted means. Also both criteria on creating a climate of mutual trust and respect in the classroom and creating a friendly and supportive classroom environment gained the second to the highest rank with a weighted mean of 3.82. Last rated is the indicator on maintaining a classroom setting that minimizes disruption with 3.81.

Creating a conducive learning environment involves fostering a climate of mutual trust and respect in the classroom. Roorda et al. (2011) found that teacher-student connections are critical for developing a healthy learning environment. Teachers who value trust and respect develop relationships with their pupils, resulting in improved engagement and motivation. Furthermore, maintaining a classroom environment that minimizes interruption is critical for maximizing learning possibilities. Brophy and McCaslin (2010) underlined the importance of classroom management practices in fostering a positive learning environment. Teachers can reduce disturbances and keep their students focused on learning by adopting clear expectations, routines, and procedures.

Creating a welcoming and supportive classroom climate is essential for enhancing student well-being and academic success. Positive interactions between teachers and students boost engagement and achievement levels. When teachers foster a sense of belonging and acceptance, they cultivate an inviting classroom atmosphere where students feel valued and encouraged to take risks in their learning. Additionally, promoting active student participation in the learning process leads to greater understanding and retention of knowledge. Encouraging students to interact properly with one another creates a collaborative learning atmosphere. Teachers foster communication skills and a culture of mutual respect and understanding by providing chances for peer participation and conversation.

Table 20
Teacher Effectiveness in Terms of Effective Communication

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I use correct vocabulary and grammar in speaking & writing.	3.72	Always	5
2. I explain lessons according to the age and ability of the student.	3.80	Always	4
3. I respond to students' questions in appropriate language.	3.80	Always	3
4. I show empathy over the perspectives of the students without being biased or prejudiced.	3.81	Always	2
5. I show active communication and welcome interactive communication with students.	3.81	Always	1
Composite Mean	**3.79**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

Table 20 shows the result of the survey on teacher effectiveness in terms of effective communication, with a composite mean score of 3.79, indicating a consistent interpretation of always. This calculated composite mean precisely aligns with the weighted means of all indicators meeting this standard.

Both indicators on showing empathy over the perspectives of the students without being biased or prejudiced and showing active communication and welcome interactive communication with students gained the highest rank and gained 3.81 weighted means verbally interpreted as always. Also both criteria on explaining lessons according to the age and ability of student and responding to students' questions in appropriate language gained the second to the highest rank with a weighted mean of 3.80. Last but not least, the indicator using correct vocabulary and grammar in speaking & writing with ranked last with weighted mean of 3.72.

Effective communication is an indicator of teacher effectiveness, encompassing various dimensions that contribute to student engagement and comprehension. Showing active communication and welcoming interactive communication with students cultivates a collaborative learning environment where students feel valued and engaged. Research by Sun H-L et al. (2022) highlights the positive impact of teacher-student interaction on student engagement and academic achievement. By encouraging open dialogue, active listening, and collaborative problem-solving, teachers foster a sense of ownership and empowerment among students, promoting active participation in the learning process.

Teachers play a crucial role in cultivating empathetic behavior in students, which is essential for creating a supportive and collaborative learning environment. Demonstrating empathy helps students feel valued and appreciated, rather than inferior,

thereby enhancing their learning experiences. Building understanding relationships among students and between teachers and students encourages this empathetic approach. Additionally, teachers must respond to students' questions in a manner that promotes comprehension and encourages inquiry. The way teachers communicate significantly impacts students' interest and attitude, contributing to a fun and effective learning atmosphere.

To demonstrate empathy towards their students' perspectives without bias or prejudice, teachers may observe active engagement in communication, welcoming interactive dialogues, tailoring lessons to the age and ability of their students and responding to questions in an appropriate language. According to Cooper (2020), empathetic teachers can understand and appreciate their students' viewpoints and emotional states, which fosters a trusting and supportive classroom environment. This empathy helps teachers to connect with students on a personal level, making them feel valued and understood. Such a connection is crucial for creating a positive learning atmosphere where students feel safe to express themselves and engage in learning activities.

Active communication in education is a vital process that goes beyond merely sharing information; it includes listening to students and fostering a two-way dialogue. Freire (2021) highlights the significance of dialogic teaching, which promotes meaningful conversations between teachers and students. This method allows students to express their thoughts, ask questions, and engage actively in their learning, thereby enhancing their motivation and involvement. Teachers who practice active listening show respect for student input, which further boosts engagement. Additionally, encouraging interactive communication is essential for social interaction, which contributes to cognitive development. By creating opportunities for collaborative learning, teachers facilitate the development of critical thinking and problem-solving skills among students.

Tailoring lessons to the age and ability of students is another critical aspect of effective communication. Tomlinson (2020) highlights the importance of differentiated instruction, which involves adapting teaching methods and materials to meet the diverse needs of learners. Effective teachers are skilled at presenting content in ways that are accessible and engaging for their students, considering factors such as developmental stage, prior knowledge, and individual learning styles. This adaptability ensures that all students can understand and engage with the material, regardless of their starting point. Additionally, responding to students' questions in appropriate language is essential for maintaining clarity and comprehension. Hattie (2019) notes that effective teachers use language that is suitable for their students' age and developmental level. By simplifying complex concepts and using examples that are relevant to students' experiences, teachers can make learning more relatable and easier to grasp. This clear communication helps to prevent misunderstandings and ensures that students can follow along with the lesson.

Creating an inclusive and respectful classroom environment is also crucial for effective communication. By showing respect for different cultures and perspectives,

teachers can foster an inclusive atmosphere where all students feel welcome and valued. This inclusivity is fundamental for building a classroom community where open and honest communication can flourish. Moreover, effective teachers are aware of the impact of their own biases and strive to communicate in ways that are fair and unbiased. According to Milner (2020), teachers who are conscious of their implicit biases can better ensure that their interactions with students are equitable and respectful. This self-awareness helps to create a classroom environment where all students are treated with dignity and respect.

Professional development is key to enhancing teachers' communication skills. Guskey (2021) emphasizes that ongoing training helps teachers to refine their communication techniques and stay current with best practices. By participating in professional development, teachers can learn new strategies for engaging students, fostering dialogue, and responding to diverse learning needs. This continuous improvement is essential for maintaining high standards of communication in the classroom. Effective communication also involves clear and consistent feedback. According to Brookhart (2020), providing timely and constructive feedback helps students to understand their progress and areas for improvement. Feedback should be specific, actionable, and delivered in a manner that encourages students to reflect and take ownership of their learning. This feedback loop is crucial for supporting student growth and development.

Practices on demonstrating empathy, engaging in active and interactive communication, tailoring lessons to the developmental needs of their students, and responding appropriately to questions are supported by ongoing professional development, a commitment to inclusivity and respect, and a focus on providing clear and constructive feedback. Research underscores the importance of empathy, dialogic teaching, differentiated instruction, and culturally responsive practices in fostering effective communication. By integrating these elements into their teaching, effective teachers create a supportive and engaging learning environment that promotes student success.

Table 21 provides a summary of the teacher's effectiveness. The composite mean is 3.79 and is verbally interpreted as always. All the elements that met this criterion had a weighted mean that was identical to the calculated composite mean.

Table 21
Summary Table on Teacher Effectiveness

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Subject Matter Knowledge	3.75	Always	4.5
2. Instructional Planning and Strategies	3.75	Always	4.5
3. Assessment	3.81	Always	2

4. Learning Environment	3.83	Always	1
5. Effective Communication	3.79	Always	3
Composite Mean	**3.79**	**Always**	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

From the table, it can be seen that learning environment gathered the highest weighted mean, 3.83, and verbally interpreted as always. Assessment (3.81) and effective communication (3.79) gained the second and third spot. The indicators subject matter knowledge and instructional planning strategies both gained 3.75.

Teacher effectiveness refers to a set of within-person attributes—personality, motivation, beliefs, and dispositions—that interact with contextual factors (cultural, social, educational) to influence student outcomes, according to Educational Research Review (2019). Creating a positive and inclusive learning environment is essential for teacher effectiveness, as it sets the stage for student engagement, motivation, and academic success. A supportive learning environment is characterized by clear expectations, mutual respect, and opportunities for collaboration. Teachers who establish a positive classroom climate foster a sense of belonging and psychological safety, where students feel valued, respected, and motivated to learn.

Classroom environments that promote collaboration, autonomy, and a growth mindset foster greater academic success among students. Effective classroom management strategies, such as proactive behavior management and equitable classroom practices, contribute to a conducive learning environment. Improvement practices play a crucial role in informing instruction and promoting student learning. Clear and effective communication is essential for fostering positive teacher-student relationships and facilitating learning.

Teachers who communicate clearly, provide constructive feedback, and actively listen to students' perspectives promote a sense of trust and engagement in the classroom. Moreover, effective communication enhances instructional delivery and ensures that students understand learning objectives and expectations (Salamondra, 2021). Effective teachers carefully plan their instruction and employ a variety of strategies to meet the diverse needs of students.

According to Marzano (2019), effective teachers create classrooms where students feel respected and valued, which in turn fosters a sense of belonging and motivation to learn. This environment is nurtured through consistent routines, clear expectations, and positive relationships between students and teachers. When students feel secured and supported, they are more likely to take academic risks and engage deeply with the material.

In addition to creating a positive classroom climate, effective teachers are adept at performing learning assessments and evaluations. Assessments are essential tools for understanding student progress and guiding instruction. Moreover, Guskey (2021) emphasizes that effective assessments are aligned with learning objectives and provide

meaningful data that can be used to improve instructional practices. By using a variety of assessment methods such as quizzes, observations, and student reflections, teachers can gain a comprehensive understanding of student performance and needs.

Effective communication involves not only delivering clear and understandable instructions but also actively listening to students and engaging in meaningful dialogue. According to Freire (2021), dialogic teaching, which emphasizes open communication and collaboration help to build a more interactive and engaging learning environment. Teachers who communicate effectively can explain complex concepts in ways that are accessible to students of varying abilities and backgrounds. Hattie (2019) notes that clarity in communication is linked to higher student achievement, as it helps to prevent misunderstandings and ensures that students know what is expected of them.

Furthermore, effective communication extends beyond the classroom to interactions with parents and colleagues. Epstein (2019) discusses the importance of family and community involvement in education. When teachers communicate effectively with parents, they can build strong partnerships that support student learning at home and in the community. This collaboration enhances the overall educational experience and helps to address any issues that may arise. Additionally, effective teachers collaborate with their colleagues to share best practices, discuss student progress, and develop cohesive instructional strategies.

Professional development is crucial for maintaining and enhancing teacher effectiveness. Guskey (2021) argues that ongoing professional learning helps teachers to stay current with educational research and best practices. By participating in professional development, teachers can refine their skills in creating conducive learning environments, conducting assessments, and communicating effectively. This continuous improvement is essential for adapting to the evolving needs of students and the educational landscape.

Creating a conducive learning environment also involves differentiating instruction to meet the diverse needs of students. Tomlinson (2020) emphasizes the importance of differentiated instruction in addressing the varying abilities, interests, and learning styles within a classroom. Effective teachers use a range of instructional strategies and materials to ensure that all students have access to the curriculum and can succeed. This approach requires a deep understanding of each student's needs and the flexibility to adapt teaching methods accordingly.

Skills on the ability to provide a conducive learning environment, perform learning assessments and evaluations, and communicate effectively are interrelated and collectively contribute to a successful teaching and learning experience. Research underscores the importance of a positive classroom climate, ongoing assessment and feedback, clear and interactive communication, and professional collaboration in achieving these goals. By continuously improving these aspects of their practice, teachers can enhance their effectiveness and support student success.

Table 22
Difference of Responses on Work Tasks Motivation when Grouped According to Profile

Sex	F-value	p-value	Interpretation
Class Preparation	0.393	0.531	Not Significant
Teaching	4.739	0.030	Significant
Evaluation of students	8.736	0.003	Significant
Administrative Tasks	1.858	0.174	Not Significant
Complementary Tasks	5.878	0.016	Significant
Educational Attainment			
Class Preparation	0.607	0.546	Not Significant
Teaching	2.412	0.091	Not Significant
Evaluation of students	0.735	0.480	Not Significant
Administrative Tasks	1.245	0.289	Not Significant
Complementary Tasks	0.925	0.397	Not Significant
Teaching Position			
Class Preparation	2.703	0.068	Not Significant
Teaching	0.553	0.575	Not Significant
Evaluation of students	0.717	0.489	Not Significant
Administrative Tasks	0.862	0.423	Not Significant
Complementary Tasks	0.830	0.437	Not Significant
Years of Teaching Experiences			
Class Preparation	2.964	0.032	Significant
Teaching	1.521	0.208	Not Significant
Evaluation of students	1.031	0.379	Not Significant
Administrative Tasks	1.733	0.160	Not Significant
Complementary Tasks	2.971	0.032	Significant

Legend: Significant at p-value < 0.05

Table 22 presents the comparison of responses on work tasks motivation when grouped according to profile. It was observed that there was a significant difference in teaching, evaluation of students, and complementary tasks when grouped according to sex; and on class preparation and complementary tasks when grouped according to years of teaching since the obtained p-values were less than the alpha level. This means that the responses differ statistically and it was found that females and teaching for more than 31 years have better assessment than others.

On the significant difference of responses on teaching when grouped according to sex, research indicates that there are differences in work task motivation between male and female teachers. Differences in work task motivation based on sex also extend to the evaluation of students. Variation in work task motivation based on sex also influences preferences for complementary tasks among teachers.

Work task motivation also varies based on teachers' years of experience, particularly in relation to class preparation. Relating to this, variation in work task

motivation based on years of experience also influences preferences for complementary tasks among teachers.

The motivation for teaching, assessing and evaluating students, and performing complementary tasks can differ significantly between male and female teachers due to various psychological, social, and contextual factors. Research by Klassen and Tze (2019) indicates that gender differences in motivation can be attributed to varying levels of self-efficacy and work-life balance considerations. Female teachers often report higher intrinsic motivation for teaching, driven by a strong desire to nurture and support students' development. This nurturing aspect is closely tied to societal expectations and traditional gender roles that position women as caregivers, which can influence their professional motivations and priorities.

Moreover, female teachers tend to emphasize the importance of creating supportive and inclusive classroom environments. According to a study by Van den Borre, De Fraine, and Van Damme (2020), women are more likely to adopt student-centered teaching practices that focus on the emotional and social needs of students. This approach aligns with their intrinsic motivation to foster a positive learning atmosphere and address the diverse needs of their students. In contrast, male teachers often prioritize discipline and structure in the classroom, which reflects a more extrinsic motivation driven by the desire to maintain control and authority.

When it comes to assessment and evaluation, gender differences also emerge. Female teachers are generally more inclined to use formative assessments and provide ongoing feedback to support student learning. This preference for continuous assessment reflects their commitment to student growth and development, as well as their empathy and understanding of individual student needs. Male teachers, on the other hand, may lean towards summative assessments and standardized testing, valuing objective measures of student performance. This approach can be linked to a more analytical and results-oriented mindset, which is often encouraged in men through socialization and educational experiences.

The performance of complementary tasks, such as administrative duties and extracurricular activities, also shows gender-based differences. Female teachers are often more involved in tasks that require collaboration and community building, such as organizing school events and participating in parent-teacher associations.

Work-life balance is another critical factor influencing motivation and task performance. Klassen and Tze (2019) found that female teachers often face greater challenges in balancing professional responsibilities with family obligations, which can impact their motivation and energy levels. Despite these challenges, women often demonstrate a high level of dedication to their teaching roles, driven by their intrinsic motivation and commitment to student success. Male teachers, while also facing work-life balance issues, may experience different pressures and societal expectations, which can shape their professional motivations and priorities differently.

Professional development and career advancement opportunities also play a role in shaping motivation. According to a study by Smith and Gorard (2020), women in teaching are often motivated by opportunities for professional growth and development, seeking out training and mentoring to enhance their skills and knowledge. This pursuit of continuous improvement reflects their commitment to providing high-quality education and staying current with best practices. Male teachers, while also valuing professional development, may be more motivated by opportunities for leadership and career advancement, driven by a desire for recognition and status within the profession.

Gender differences in motivation are also influenced by perceptions of self-efficacy and job satisfaction. Female teachers often report higher levels of job satisfaction and a stronger sense of self-efficacy in their teaching roles, which can enhance their motivation and performance. This positive self-perception is linked to their empathetic and supportive teaching style, which fosters a sense of fulfillment and purpose. Male teachers, while also experiencing job satisfaction, may derive their motivation more from external validation and achievements, such as student performance and career progression.

The motivation for teaching, assessing and evaluating students, and performing complementary tasks differs between male and female teachers due to a complex interplay of psychological, social, and contextual factors. Female teachers tend to be driven by intrinsic motivation, empathy, and a commitment to student well-being, while male teachers often emphasize discipline, structure, and extrinsic motivators. These differences are reflected in their approaches to teaching, assessment, and task performance, and are influenced by work-life balance, professional development opportunities, and perceptions of self-efficacy. Understanding these gender-based differences can help in creating supportive and equitable work environments that recognize and address the unique motivations and challenges faced by male and female teachers.

The motivation for teaching, assessing and evaluating students, and performing complementary tasks can differ significantly between male and female teachers due to various psychological, social, and contextual factors. Research by Klassen and Tze (2019) indicates that gender differences in motivation can be attributed to varying levels of self-efficacy and work-life balance considerations. Female teachers often report higher intrinsic motivation for teaching, driven by a strong desire to nurture and support students' development. This nurturing aspect is closely tied to societal expectations and traditional gender roles that position women as caregivers, which can influence their professional motivations and priorities.

Moreover, female teachers tend to emphasize the importance of creating supportive and inclusive classroom environments. According to a study by Van den Borre, De Fraine, and Van Damme (2020), women are more likely to adopt student-centered teaching practices that focus on the emotional and social needs of students. This approach aligns with their intrinsic motivation to foster a positive learning atmosphere and address the diverse needs of their students. In contrast, male teachers often prioritize discipline and structure in the classroom, which reflects a more extrinsic motivation driven by the desire to maintain control and authority.

When it comes to assessment and evaluation, gender differences also emerge. Female teachers are generally more inclined to use formative assessments and provide ongoing feedback to support student learning. This preference for continuous assessment reflects their commitment to student growth and development, as well as their empathy and understanding of individual student needs. Male teachers, on the other hand, may lean towards summative assessments and standardized testing, valuing objective measures of student performance. This approach can be linked to a more analytical and results-oriented mindset, which is often encouraged in men through socialization and educational experiences.

The performance of complementary tasks, such as administrative duties and extracurricular activities, also shows gender-based differences. Female teachers are often more involved in tasks that require collaboration and community building, such as organizing school events and participating in parent-teacher associations.

Work-life balance is another critical factor influencing motivation and task performance. Klassen and Tze (2019) found that female teachers often face greater challenges in balancing professional responsibilities with family obligations, which can impact their motivation and energy levels. Despite these challenges, women often demonstrate a high level of dedication to their teaching roles, driven by their intrinsic motivation and commitment to student success. Male teachers, while also facing work-life balance issues, may experience different pressures and societal expectations, which can shape their professional motivations and priorities differently.

Professional development and career advancement opportunities also play a role in shaping motivation. According to a study by Smith and Gorard (2020), women in teaching are often motivated by opportunities for professional growth and development, seeking out training and mentoring to enhance their skills and knowledge. This pursuit of continuous improvement reflects their commitment to providing high-quality education and staying current with best practices. Male teachers, while also valuing professional development, may be more motivated by opportunities for leadership and career advancement, driven by a desire for recognition and status within the profession.

Gender differences in motivation are also influenced by perceptions of self-efficacy and job satisfaction. Female teachers often report higher levels of job satisfaction and a stronger sense of self-efficacy in their teaching roles, which can enhance their motivation and performance. This positive self-perception is linked to their empathetic and supportive teaching style, which fosters a sense of fulfillment and purpose. Male teachers, while also experiencing job satisfaction, may derive their motivation more from external validation and achievements, such as student performance and career progression.

Motivation for teaching, assessing and evaluating students, and performing complementary tasks could differ between male and female teachers due to a complex interplay of psychological, social, and contextual factors. Female teachers tend to be driven by intrinsic motivation, empathy, and a commitment to student well-being, while

male teachers often emphasize discipline, structure, and extrinsic motivators. These differences are reflected in their approaches to teaching, assessment, and task performance, and are influenced by work-life balance, professional development opportunities, and perceptions of self-efficacy. Understanding these gender-based differences can help in creating supportive and equitable work environments that recognize and address the unique motivations and challenges faced by male and female teachers.

The motivation for class preparation and the performance of complementary tasks vary significantly among teachers with different years of teaching experience due to various factors including professional development, burnout, self-efficacy, and evolving educational priorities. Experienced teachers often display high levels of efficiency in class preparation due to their accumulated knowledge and refined instructional strategies. According to a study by Huberman (2019), veteran teachers tend to have well-established routines and a deep understanding of curriculum requirements, allowing them to prepare lessons more effectively and with greater confidence. This proficiency can lead to a higher intrinsic motivation, as experienced teachers are able to focus more on innovative teaching methods and student engagement rather than the basics of lesson planning.

In contrast, novice teachers often face challenges in class preparation due to their limited experience and familiarity with the curriculum. Research by Ingersoll and Strong (2020) indicates that beginning teachers typically spend more time on lesson planning and often experience higher levels of stress and anxiety about meeting instructional standards. This initial struggle can affect their motivation, leading to a reliance on prescribed materials and a more cautious approach to teaching. However, this phase also presents an opportunity for growth and development, as new teachers bring fresh perspectives and enthusiasm to their roles, which can positively impact their motivation over time.

The performance of complementary tasks, such as administrative duties, extracurricular activities, and collaboration with colleagues, also differs among teachers based on their experience. Experienced teachers often take on leadership roles within the school, such as mentoring new teachers, leading professional development sessions, and participating in school committees. Their extensive experience allows them to navigate these tasks with confidence and effectiveness, further enhancing their job satisfaction and motivation.

For less experienced teachers, complementary tasks can be a source of both opportunity and challenge. As noted by Smith and Gorard (2020), novice teachers may feel overwhelmed by the additional responsibilities beyond their core teaching duties, which can impact their overall job satisfaction and motivation. However, engaging in these tasks also provides valuable learning experiences and opportunities for professional growth. New teachers often bring energy and innovative ideas to extracurricular activities and collaborative projects, which can invigorate the school environment and foster a culture of continuous improvement.

Professional development plays a crucial role in shaping the motivation of teachers at different stages of their careers. For experienced teachers, ongoing professional development is essential for maintaining enthusiasm and staying updated with the latest educational trends and research. According to Guskey (2021), veteran teachers who actively engage in professional learning opportunities are more likely to remain motivated and committed to their teaching practice. On the other hand, professional development for novice teachers often focuses on building foundational skills and confidence. Effective induction programs and mentorship can significantly boost the motivation of new teachers by providing support and guidance during their initial years.

Burnout is another factor that influences the motivation of teachers with varying levels of experience. Huberman (2019) suggests that experienced teachers are at risk of burnout due to the cumulative stress of years of teaching and the demands of maintaining high standards. This burnout can lead to a decline in motivation, particularly for tasks that are perceived as routine or administrative. Conversely, novice teachers may experience burnout due to the steep learning curve and the pressures of adapting to a new professional environment. Addressing burnout through supportive school cultures and work-life balance initiatives is crucial for sustaining motivation across all experience levels.

Self-efficacy, or the belief in one's ability to succeed also affects teachers' motivation for class preparation and complementary tasks. Experienced teachers often have higher self-efficacy, as their years of practice have reinforced their skills and knowledge. This confidence translates into a greater willingness to take on additional responsibilities and explore innovative teaching strategies. In contrast, new teachers may struggle with self-efficacy, particularly in their early years. According to Bandura (2020), building self-efficacy through positive feedback, professional development, and supportive mentorship is essential for fostering motivation and resilience among novice teachers.

Motivation for class preparation and the performance of complementary tasks varies among teachers with different years of teaching experience due to factors such as professional development, burnout, self-efficacy, and evolving educational priorities. Experienced teachers often exhibit high levels of efficiency and confidence, allowing them to excel in both instructional and complementary tasks. Novice teachers, while facing initial challenges, bring enthusiasm and new ideas that contribute positively to the school environment. Professional development, supportive school cultures, and strategies to enhance self-efficacy are key to sustaining motivation across all levels of teaching experience.

Table 23
Difference of Responses on Teacher Self-Efficacy when Grouped According to Profile

Sex	f-value	p-value	Interpretation
Instruction	22.623	0.000	Significant
Adapt Instruction to Individual Needs	7.640	0.006	Significant
Motivate Students	18.749	0.000	Significant
Maintain Discipline	7.777	0.006	Significant
Cooperate With Colleagues and Parents	32.974	0.000	Significant
Cope With Change	3.329	0.069	Not Significant
Educational Attainment			
Instruction	0.419	0.658	Not Significant
Adapt Instruction to Individual Needs	0.360	0.698	Not Significant
Motivate Students	0.068	0.934	Not Significant
Maintain Discipline	2.091	0.125	Not Significant
Cooperate With Colleagues and Parents	1.748	0.175	Not Significant
Cope With Change	2.313	0.100	Not Significant
Teaching Position			
Instruction	1.081	0.340	Not Significant
Adapt Instruction to Individual Needs	1.835	0.161	Not Significant
Motivate Students	0.910	0.403	Not Significant
Maintain Discipline	0.066	0.936	Not Significant
Cooperate With Colleagues and Parents	0.075	0.928	Not Significant
Cope With Change	0.100	0.905	Not Significant
Years of Teaching Experiences			
Instruction	1.194	0.312	Not Significant
Adapt Instruction to Individual Needs	1.425	0.235	Not Significant
Motivate Students	0.868	0.458	Not Significant
Maintain Discipline	2.205	0.087	Not Significant
Cooperate With Colleagues and Parents	0.703	0.551	Not Significant
Cope With Change	3.097	0.027	Significant

Legend: Significant at p-value < 0.05

Table 23 displays the comparison of responses on teacher self-efficacy when grouped according to profile. It was observed that there was a significant difference when grouped according to sex except on coping with change; and years of teaching

experience when grouped again according to coping with change since the obtained p-values were less than the alpha level. This means that the responses differ statistically and it was found that females and teaching for more than 31 years have better assessment than others.

Variations in teacher self-efficacy based on sex can influence instructional practices. Differences in teacher self-efficacy based on sex can also impact the ability to adapt instruction to individual student needs. Variations in teacher self-efficacy based on sex can influence the ability to motivate students. Moreover, differences in teacher self-efficacy based on sex can impact the ability to maintain discipline in the classroom and can influence the ability to cooperate with colleagues and parents.

Differences in teacher self-efficacy based on years of teaching experience can influence the ability to cope with change. Teacher self-efficacy, which encompasses delivering teaching and learning instruction, adapting instruction to individual needs, motivating students, maintaining discipline, and cooperating with colleagues and parents, could vary between male and female teachers due to several factors including socialization, gender norms, and professional experiences. In terms of delivering teaching and learning instruction, research by Goodwin and Kahn (2019) indicates that male teachers often exhibit higher confidence in their subject matter expertise, potentially stemming from societal expectations that position men as authoritative figures in academic disciplines. This confidence translates into a higher sense of self-efficacy when presenting content and managing classroom discussions. Female teachers, while equally knowledgeable, may experience lower self-efficacy due to internalized stereotypes and biases. However, their teaching often benefits from a strong emphasis on relational skills and empathy, which enhances their ability to connect with students and facilitate understanding.

When it comes to adapting instruction and teaching to individual needs, female teachers frequently excel. According to a study by Johnson and Blackwell (2020), women are more likely to adopt student-centered approaches, focusing on differentiating instruction to cater to diverse learning styles and needs. This adaptability is driven by their intrinsic motivation to support all students, reflecting a nurturing attitude that is often culturally associated with women. Male teachers, while capable of adapting instruction, may be more inclined to follow structured lesson plans and standardized methods, which can sometimes limit flexibility but provide consistency and predictability in teaching.

Motivating students also reveals gender-based differences in self-efficacy. Female teachers often employ relational and emotional strategies to engage students, creating a supportive and inclusive classroom environment that fosters motivation. As highlighted by Van den Borre et al. (2020), their approach includes understanding students' social and emotional needs, which enhances intrinsic motivation and engagement. Male teachers, on the other hand, may use more authoritative and performance-based methods to motivate students, emphasizing achievement and discipline. This approach can be effective in promoting extrinsic motivation and high academic standards but may not always address the holistic needs of students.

Maintaining discipline is another area where gender differences in self-efficacy are evident. Male teachers often report higher confidence in managing classroom behavior and enforcing rules, which aligns with traditional gender roles that associate men with authority and control. According to Marzano (2019), their discipline strategies tend to be more structured and punitive, aiming to maintain order and minimize disruptions. Female teachers, while also effective in maintaining discipline, typically use more relational and restorative approaches, focusing on building positive relationships and understanding the root causes of behavioral issues. This method fosters a more supportive classroom environment but may require more time and emotional labor.

Cooperating with colleagues and parents showcases distinct gender-based differences as well. Female teachers are generally more collaborative and communicative, often engaging in professional learning communities and seeking support from colleagues. In terms of parent-teacher interactions, female teachers tend to emphasize building strong relationships with parents, involving them in their children's education, and fostering a partnership approach. This strategy aligns with their empathetic and relational style, which can lead to positive outcomes for student learning and behavior.

Male teachers, while also capable of effective collaboration, may adopt a more independent approach to their professional responsibilities. According to Smith and Gorard (2020), men are often motivated by a desire for autonomy and may focus on individual accomplishments and leadership roles. This can result in less frequent but potentially more impactful collaborations, as male teachers may take on mentoring roles or lead professional development initiatives. In parent-teacher interactions, male teachers might emphasize clear communication and setting expectations, aiming to establish authority and professionalism.

The impact of work-life balance on self-efficacy is also significant and varies by gender. Klassen and Tze (2019) found that female teachers often face greater challenges in balancing professional duties with family responsibilities, which can affect their overall job satisfaction and energy levels. Despite these challenges, many women demonstrate resilience and a strong commitment to their teaching roles, driven by intrinsic motivation and a desire to support their students. Male teachers, while also dealing with work-life balance issues, may experience different societal pressures and expectations, which can shape their professional motivations and sense of efficacy differently.

Burnout is another factor that influences self-efficacy and shows gender differences. Huberman (2019) suggests that female teachers are at a higher risk of burnout due to the emotional labor involved in their relational teaching practices and the demands of balancing multiple roles. Addressing burnout through supportive school cultures and work-life balance initiatives is crucial for sustaining motivation and effectiveness among female teachers. Male teachers, while also susceptible to burnout, may experience it differently, often related to pressures of maintaining classroom discipline and meeting performance standards.

Gender differences in perceptions of self-efficacy and job satisfaction is another concern. Female teachers often report higher levels of job satisfaction and a stronger sense of self-efficacy in their relational and inclusive teaching practices. This positive self-perception is linked to their empathetic approach and commitment to student well-being, which fosters a sense of fulfillment and purpose. Male teachers, while also experiencing job satisfaction, may derive their motivation more from external validation and achievements, such as student performance and career progression.

Teacher self-efficacy in delivering teaching and learning instruction, adapting instruction to individual needs, motivating students, maintaining discipline, and cooperating with colleagues and parents varies between male and female teachers due psychological, social, and contextual factors. Female teachers tend to emphasize relational and inclusive teaching practices, formative assessments, and empathetic communication, while male teachers often focus on authoritative teaching styles, summative assessments, and clear, direct communication. Professional development, work-life balance, burnout, and perceptions of self-efficacy also contribute to these gender differences. Understanding these distinctions can help in creating supportive and equitable work environments that recognize and address the unique strengths and challenges faced by male and female teachers.

Teacher self-efficacy in coping with change could significantly vary among teachers with different years of teaching experience due to their accumulated skills, adaptability, and resilience developed over time. Novice teachers often face challenges in coping with change due to their limited experience and developing pedagogical skills, which can lead to lower self-efficacy when implementing new teaching strategies or adapting to curriculum changes (Johnson & Blackwell, 2020). They may struggle with classroom management and integrating innovative instructional methods, impacting their confidence and effectiveness. In contrast, experienced teachers tend to have higher self-efficacy in coping with change because of their extensive practice and familiarity with diverse teaching environments and challenges (Goodwin & Kahn, 2019). This experience enables them to draw on a repertoire of strategies and solutions when faced with new situations, enhancing their adaptability and resilience.

Additionally, experienced teachers are more likely to have developed strong professional networks and support systems, which are crucial in navigating changes effectively (Smith & Gorard, 2020). These networks provide access to resources, collaboration opportunities, and emotional support, contributing to higher self-efficacy. Furthermore, experienced teachers often engage in continuous professional development, which keeps them updated on new educational trends and practices, further boosting their confidence in coping with change (Klassen & Tze, 2019). In contrast, novice teachers may feel overwhelmed by the rapid pace of change and the constant demand for adaptation, resulting in higher stress levels and lower self-efficacy (Huberman, 2019).

The ability to reflect on past experiences also plays a crucial role in self-efficacy. Experienced teachers can draw from previous successes and challenges to inform their

approach to new changes, providing a sense of competence and assurance (Van den Borre et al., 2020). This reflective practice is less developed in novice teachers, who may not have as many experiences to reference, leading to uncertainty and lower self-efficacy. Moreover, experienced teachers often possess better-developed problem-solving skills, allowing them to navigate complex changes more effectively (Marzano, 2019). Their ability to anticipate potential issues and proactively address them enhances their confidence and capability in managing change.

Conversely, the enthusiasm and openness of novice teachers towards innovation can sometimes offset their lack of experience, as they may be more willing to experiment with new approaches and technologies (Freire, 2021). This willingness to embrace change can lead to innovative practices and improved self-efficacy over time, as they gain successful experiences. However, without adequate support and mentoring, this enthusiasm can wane, leading to burnout and reduced self-efficacy (Smith & Gorard, 2020).

Teacher self-efficacy in coping with change could also vary significantly with years of teaching experience. Experienced teachers generally exhibit higher self-efficacy due to their extensive practice, developed support networks, continuous professional development, reflective practices, and problem-solving skills. Novice teachers, while enthusiastic, may struggle with lower self-efficacy due to their limited experience and developing pedagogical skills, highlighting the importance of support and mentoring to foster their adaptability and resilience.

Table 24
Difference of Responses on Teacher Effectiveness when Grouped According to Profile

Sex	**F-value**	**p-value**	**Interpretation**
Subject Matter Knowledge	14.806	0.000	Significant
Instructional Planning and Strategies	9.592	0.002	Significant
Assessment	8.777	0.003	Significant
Learning Environment	13.583	0.000	Significant
Effective Communication	11.658	0.001	Significant
Educational Attainment			
Subject Matter Knowledge	0.655	0.520	Not Significant
Instructional Planning and Strategies	0.312	0.732	Not Significant
Assessment	0.832	0.436	Not Significant
Learning Environment	1.185	0.307	Not Significant
Effective Communication	1.804	0.166	Not Significant
Teaching Position			
Subject Matter Knowledge	1.099	0.334	Not Significant
Instructional Planning and Strategies	0.125	0.882	Not Significant

Assessment	1.125	0.326	Not Significant
Learning Environment	0.922	0.399	Not Significant
Effective Communication	1.462	0.233	Not Significant
Years of Teaching Experiences			
Subject Matter Knowledge	1.647	0.178	Not Significant
Instructional Planning and Strategies	1.048	0.371	Not Significant
Assessment	1.729	0.160	Not Significant
Learning Environment	0.988	0.398	Not Significant
Effective Communication	0.929	0.427	Not Significant

Legend: Significant at p-value < 0.05

Table 24 presents the comparison of responses on teacher effectiveness when grouped according to profile. It was observed that there was a significant difference when grouped according to sex because the obtained p-values were all less than the alpha level. This means that the responses differ statistically and based on the survey conducted, it was found that females have better assessment than males.

Based on the results, it could be gleaned that variations in teacher effectiveness based on sex can influence subject matter knowledge. Moreover, it could also be discerned from the results that the differences in teacher effectiveness based on sex can also impact instructional planning and strategies.

Additionally, variations in teacher effectiveness based on sex can influence the assessment practices of the respondents. The findings also revealed that differences in teacher effectiveness based on sex can impact the learning environment. In terms of differences in the responses as regards teacher effectiveness based on sex, it could influence the communication skills. It could also be delineated that when it comes to teacher effectiveness, the differences in responses based on years of teaching experience can impact the ability to cope with change.

Teacher self-effectiveness, encompassing subject matter knowledge, instructional planning and strategies, assessment, learning environment, and effective communication, often differs between male and female teachers due to a range of psychological, social, and contextual factors. Subject matter knowledge is a crucial component of teacher effectiveness, and research suggests that gender differences can influence perceptions of competency and expertise in this area. According to Goodwin and Kahn (2019), male teachers often display higher self-efficacy regarding their subject matter knowledge, which can be attributed to societal expectations and gender norms that traditionally position men as more authoritative figures in academic fields. This heightened self-efficacy enables male teachers to confidently deliver complex content and engage students in deeper analytical discussions.

On the other hand, female teachers, while equally knowledgeable, may experience lower self-efficacy related to subject matter due to internalized stereotypes and biases.

According to Johnson and Blackwell (2020), female teachers often exhibit strong relational skills and empathy, which can positively impact their instructional strategies. They tend to adopt student-centered approaches, focusing on creating inclusive and supportive learning environments that cater to the diverse needs of their students. This emphasis on relational pedagogy enhances their effectiveness in instructional planning and strategies, allowing them to differentiate instruction and provide personalized support to students.

In terms of assessment, gender differences are evident in the types of assessments utilized and the feedback provided. Female teachers are more likely to employ formative assessments and provide ongoing, constructive feedback, fostering a growth mindset in their students. The creation of a conducive learning environment also shows gender-specific tendencies. Female teachers are generally more adept at building inclusive and emotionally supportive classrooms, as noted by Van den Borre et al. (2020). Their ability to foster positive student-teacher relationships and address the social and emotional needs of students contributes to a safe and nurturing learning environment. Male teachers, while also capable of creating supportive classrooms, often emphasize discipline and order, reflecting a different aspect of a conducive learning environment. According to Marzano (2019), this approach can be effective in maintaining classroom management and ensuring a focused learning atmosphere.

Effective communication is another area where gender differences in self-effectiveness are observed. Female teachers often excel in empathetic communication, actively listening to students and encouraging open dialogue. Freire (2021) underscores the importance of dialogic teaching, which is frequently practiced by female educators who prioritize building strong interpersonal connections with their students. Male teachers, while also effective communicators, may adopt a more direct and authoritative style, which can be beneficial in conveying clear expectations and maintaining classroom order. Hattie (2019) notes that clarity in communication is crucial for student understanding and achievement, and male teachers' straightforward approach can effectively achieve this clarity.

Professional development and career progression also influence gender differences in self-effectiveness. According to Smith and Gorard (2020), female teachers often seek out continuous professional development to enhance their skills and knowledge, driven by a desire for self-improvement and professional growth. This commitment to lifelong learning positively impacts their instructional effectiveness and ability to adapt to new teaching methods and technologies. Male teachers, while also valuing professional development, may focus more on leadership opportunities and career advancement, motivated by a desire for recognition and status within the profession.

Klassen and Tze (2019) found that female teachers often juggle professional responsibilities with family obligations, which can affect their energy levels and overall job satisfaction. Despite these challenges, women demonstrate resilience and dedication to their teaching roles, driven by intrinsic motivation and a strong sense of commitment to

their students. Male teachers, although also facing work-life balance issues, may experience different societal pressures and expectations, which can shape their professional motivations and effectiveness differently.

Huberman (2019) suggests that female teachers are at a higher risk of burnout due to the emotional labor involved in their relational teaching practices and the demands of balancing multiple roles. Addressing burnout through supportive school cultures and work-life balance initiatives is crucial for sustaining motivation and effectiveness among female teachers. Male teachers, while also susceptible to burnout, may experience it differently, often related to pressures of maintaining classroom discipline and meeting performance standards.

Gender differences in perceptions of self-efficacy and job satisfaction also play a significant role. Female teachers often report higher levels of job satisfaction and a stronger sense of self-efficacy in their relational and inclusive teaching practices. This positive self-perception is linked to their empathetic approach and commitment to student well-being, which fosters a sense of fulfillment and purpose. Male teachers, while also experiencing job satisfaction, may derive their motivation more from external validation and achievements, such as student performance and career progression.

Table 25
Relationship Between Work Task Motivation and Teacher Self-Efficacy

Class Preparation	r-value	p-value	Interpretation
Instruction	.472**	0.000	Highly Significant
Adapt Instruction to Individual Needs	.494**	0.000	Highly Significant
Motivate Students	.492**	0.000	Highly Significant
Maintain Discipline	.417**	0.000	Highly Significant
Cooperate With Colleagues and Parents	.475**	0.000	Highly Significant
Cope With Change	.510**	0.000	Highly Significant
Teaching			
Instruction	.528**	0.000	Highly Significant
Adapt Instruction to Individual Needs	.504**	0.000	Highly Significant
Motivate Students	.532**	0.000	Highly Significant
Maintain Discipline	.452**	0.000	Highly Significant
Cooperate With Colleagues and Parents	.503**	0.000	Highly Significant
Cope With Change	.481**	0.000	Highly Significant
Evaluation of Students			
Instruction	.668**	0.000	Highly Significant
Adapt Instruction to Individual Needs	.586**	0.000	Highly Significant

Motivate Students	.616**	0.000	Highly Significant
Maintain Discipline	.555**	0.000	Highly Significant
Cooperate With Colleagues and Parents	.600**	0.000	Highly Significant
Cope With Change	.569**	0.000	Highly Significant
Administrative Tasks			
Instruction	.545**	0.000	Highly Significant
Adapt Instruction to Individual Needs	.553**	0.000	Highly Significant
Motivate Students	.553**	0.000	Highly Significant
Maintain Discipline	.459**	0.000	Highly Significant
Cooperate With Colleagues and Parents	.593**	0.000	Highly Significant
Cope With Change	.603**	0.000	Highly Significant
Complementary Tasks			
Instruction	.497**	0.000	Highly Significant
Adapt Instruction to Individual Needs	.549**	0.000	Highly Significant
Motivate Students	.539**	0.000	Highly Significant
Maintain Discipline	.475**	0.000	Highly Significant
Cooperate With Colleagues and Parents	.577**	0.000	Highly Significant
Cope With Change	.616**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 25 shows the association between work task motivation and teacher self-efficacy. The computed r-values indicate a moderate direct correlation and the resulting p-values were less than the alpha level. This means that a significant relationship exists and implies that the better the work tasks motivation, the better the teacher's self-efficacy.

It could be gleaned from the aforementioned results that work task motivation significantly impacts teacher self-efficacy in class preparation. The education environment significantly influences teacher self-efficacy in teaching. The work task motivation plays a significant role in shaping teacher self-efficacy in evaluating students.

The work task motivation plays a significant role in shaping teacher self-efficacy in evaluating students; this influences handling administrative tasks and in performing complementary tasks. Teachers who are intrinsically motivated exhibit higher levels of self-efficacy because they derive personal satisfaction and a sense of accomplishment from their work, which enhances their confidence in their teaching abilities (Klassen & Tze, 2019). This intrinsic motivation often leads to greater persistence in the face of challenges, as these teachers are driven by internal rewards such as the joy of teaching and seeing their students succeed. When teachers are motivated by their tasks, they are more likely to engage in reflective practices and continuous professional development, which further boosts their self-efficacy (Goodwin & Kahn, 2019).

Work task motivation also fosters a positive attitude towards teaching, which is crucial for maintaining high levels of self-efficacy. Teachers who find their work meaningful and fulfilling are more likely to set high goals for themselves and their students, leading to improved performance and satisfaction (Johnson & Blackwell, 2020). This positive mindset creates a conducive learning environment, where both teachers and students thrive. Additionally, motivated teachers are more likely to adopt innovative teaching strategies and adapt to changes in the curriculum, enhancing their self-efficacy through successful implementation and positive feedback from students (Smith & Gorard, 2020).

Extrinsic motivation, such as recognition and rewards, also plays a role in enhancing teacher self-efficacy. When teachers receive positive feedback and acknowledgment for their efforts, it reinforces their belief in their teaching abilities and motivates them to maintain high standards (Klassen et al., 2020). However, the impact of extrinsic motivation on self-efficacy is often mediated by intrinsic factors, as the most effective teachers are those who balance external rewards with internal satisfaction (Marzano, 2019).

Teacher self-efficacy, in turn, influences work task motivation by shaping teachers' perceptions of their capabilities and the value they place on their tasks. Teachers with high self-efficacy are more likely to view their tasks as achievable and worthwhile, which enhances their motivation and commitment to their work (Freire, 2021).

The supportive school environment also plays a critical role in fostering the relationship between work task motivation and teacher self-efficacy. Schools that provide professional development opportunities, collaborative teaching cultures, and supportive leadership enhance teachers' motivation and self-efficacy (Smith & Gorard, 2020). When teachers feel supported and valued, they are more likely to invest in their professional growth and feel confident in their abilities, which positively impacts their motivation and teaching outcomes (Van den Borre et al., 2020).

Furthermore, the alignment between teachers' personal goals and the school's mission enhances work task motivation and self-efficacy. Teachers who perceive their work as aligned with their personal values and professional aspirations are more motivated and exhibit higher self-efficacy (Johnson & Blackwell, 2020). This alignment fosters a sense of purpose and direction, which is crucial for sustaining motivation and confidence in the long term (Goodwin & Kahn, 2019).

The relationship between work task motivation and teacher self-efficacy also extends to student outcomes. Teachers who are motivated and self-efficacious are more effective in engaging and motivating their students, leading to higher academic achievement and positive attitudes towards learning (Marzano, 2019). This impact on students further reinforces teachers' self-efficacy, as they see the tangible results of their efforts, which boosts their motivation to continue striving for excellence (Klassen & Tze, 2019).

Gender differences also play a role in the relationship between work task motivation and self-efficacy. Female teachers often exhibit higher levels of intrinsic motivation and relational teaching practices, which enhance their self-efficacy and effectiveness (Smith & Gorard, 2020). Male teachers, while also motivated, may place more emphasis on external rewards and performance metrics, which can influence their self-efficacy differently (Klassen et al., 2020).

Table 26
Relationship Between Work Tasks Motivation and Teacher Effectiveness

Class Preparation	r-value	p-value	Interpretation
Subject Matter Knowledge	.432**	0.000	Highly Significant
Instructional Planning and Strategies	.482**	0.000	Highly Significant
Assessment	.431**	0.000	Highly Significant
Learning Environment	.417**	0.000	Highly Significant
Effective Communication	.436**	0.000	Highly Significant
Teaching			
Subject Matter Knowledge	.459**	0.000	Highly Significant
Instructional Planning and Strategies	.515**	0.000	Highly Significant
Assessment	.520**	0.000	Highly Significant
Learning Environment	.490**	0.000	Highly Significant
Effective Communication	.444**	0.000	Highly Significant
Evaluation of Students			
Subject Matter Knowledge	.605**	0.000	Highly Significant
Instructional Planning and Strategies	.621**	0.000	Highly Significant
Assessment	.627**	0.000	Highly Significant
Learning Environment	.583**	0.000	Highly Significant
Effective Communication	.571**	0.000	Highly Significant
Administrative Tasks			
Subject Matter Knowledge	.564**	0.000	Highly Significant
Instructional Planning and Strategies	.569**	0.000	Highly Significant
Assessment	.527**	0.000	Highly Significant
Learning Environment	.504**	0.000	Highly Significant
Effective Communication	.567**	0.000	Highly Significant
Complementary Tasks			
Subject Matter Knowledge	.538**	0.000	Highly Significant
Instructional Planning and Strategies	.538**	0.000	Highly Significant
Assessment	.507**	0.000	Highly Significant
Learning Environment	.508**	0.000	Highly Significant
Effective Communication	.537**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 26 above indicates the association between work task motivation and teacher effectiveness. The computed r-values indicate a moderate direct correlation and the resulting p-values were less than the alpha level. This means that significant relationship exists and implies that the better the work tasks motivation , the more effective the teachers are.

It could be gleaned from the findings that work tasks motivation significantly influences teacher self-efficacy in class preparation. The work task motivation significantly influences teacher self-efficacy in teaching. Moreover, the work task motivation plays a significant role in shaping teacher self-efficacy in evaluating students. The work task motivation influences teacher self-efficacy in handling administrative tasks.

The work task motivation influences teacher self-efficacy in performing complementary tasks. The relationship between work task motivation and teacher effectiveness is highly significant, deeply impacting various dimensions of teaching and learning. Motivated teachers exhibit a strong commitment to their professional responsibilities, which translates into enhanced effectiveness in delivering instruction, engaging students, and fostering a positive learning environment (Klassen & Tze, 2019).

On the other hand, intrinsic motivation, driven by a passion for teaching and the desire to make a difference in students' lives, leads to greater job satisfaction and dedication, resulting in higher teacher effectiveness (Goodwin & Kahn, 2019). Teachers who are intrinsically motivated are more likely to invest in continuous professional development, stay abreast of new educational practices, and implement innovative teaching strategies that cater to diverse student needs (Johnson & Blackwell, 2020).

Moreover, extrinsic motivation, such as recognition, rewards, and career advancement opportunities, reinforces teachers' efforts and contributes to their overall effectiveness. When teachers receive acknowledgment and support from their administration and peers, it boosts their morale and encourages them to strive for excellence in their teaching practices (Marzano, 2019). This positive reinforcement creates a virtuous cycle where motivated teachers feel valued and empowered, leading to improved teaching outcomes and higher student achievement (Smith & Gorard, 2020). The supportive school environment plays a critical role in nurturing both intrinsic and extrinsic motivation, providing the necessary resources and professional development opportunities that enhance teacher effectiveness (Klassen et al., 2020).

Furthermore, motivated teachers are more adept at creating an engaging and inclusive classroom environment. Their enthusiasm and passion for teaching are contagious, inspiring students to participate actively and take ownership of their learning (Van den Borre et al., 2020). This positive classroom climate fosters student motivation, leading to better academic performance and a deeper understanding of the subject matter (Goodwin & Kahn, 2019). Effective teachers, driven by their motivation, use a variety of instructional methods to cater to different learning styles, ensuring that all students have access to quality education (Johnson & Blackwell, 2020).

Motivation also influences teachers' resilience and ability to cope with stress and challenges. Teachers who are motivated by their work are more likely to view challenges as opportunities for growth and development rather than obstacles (Klassen & Tze, 2019). This resilience enables them to adapt to changing educational demands, implement new curricula, and incorporate technology into their teaching, all of which are essential for maintaining high levels of effectiveness in a dynamic educational landscape (Smith & Gorard, 2020). Additionally, motivated teachers are more likely to seek out collaborative opportunities with colleagues, sharing best practices and supporting each other in their professional growth (Vangrieken et al., 2017).

The alignment between teachers' personal goals and the mission of the school further enhances their motivation and effectiveness. When teachers perceive their work as meaningful and aligned with their values, they are more likely to invest in their professional responsibilities and strive for excellence (Johnson & Blackwell, 2020). This sense of purpose and direction is crucial for sustaining long-term motivation and effectiveness, as it provides teachers with a clear vision of the impact they want to make in their students' lives (Freire, 2021).

The relationship between motivation and effectiveness also extends to teachers' ability to engage with parents and the wider school community. Motivated teachers recognize the importance of building strong relationships with parents and involving them in their children's education, which enhances student support and academic outcomes (Marzano, 2019). Effective communication and collaboration with parents are key components of teacher effectiveness, and motivated teachers are more likely to initiate and maintain these positive relationships (Smith & Gorard, 2020).

There is a significant connection between a teacher's motivation and their effectiveness, particularly in engaging with parents and the broader school community, motivated teachers understand the crucial role that strong relationships with parents play in enhancing student support and academic success. This understanding drives them to actively seek out and foster these relationships. Teachers who are motivated are more inclined to communicate and collaborate effectively with parents, recognizing that such partnerships can lead to improved educational outcomes for students.

Consequently, the effectiveness of teachers is partly dependent on their motivation to build and sustain these positive interactions, as supported by research findings from Marzano (2019) also Smith and Gorard (2020). This inference suggests that increasing teacher motivation could lead to better parent-teacher relationships, ultimately benefiting student achievement.

Table 27
Relationship Between Teacher Self-Efficacy and Teacher Effectiveness

Instruction	r-value	p-value	Interpretation
Subject Matter Knowledge	.690**	0.000	Highly Significant
Instructional Planning and Strategies	.695**	0.000	Highly Significant
Assessment	.685**	0.000	Highly Significant
Learning Environment	.681**	0.000	Highly Significant
Effective Communication	.668**	0.000	Highly Significant
Adapt Instruction to Individual Needs			
Subject Matter Knowledge	.681**	0.000	Highly Significant
Instructional Planning and Strategies	.670**	0.000	Highly Significant
Assessment	.631**	0.000	Highly Significant
Learning Environment	.610**	0.000	Highly Significant
Effective Communication	.600**	0.000	Highly Significant
Motivate Students			
Subject Matter Knowledge	.652**	0.000	Highly Significant
Instructional Planning and Strategies	.679**	0.000	Highly Significant
Assessment	.662**	0.000	Highly Significant
Learning Environment	.645**	0.000	Highly Significant
Effective Communication	.610**	0.000	Highly Significant
Maintain Discipline			
Subject Matter Knowledge	.634**	0.000	Highly Significant
Instructional Planning and Strategies	.637**	0.000	Highly Significant
Assessment	.642**	0.000	Highly Significant

Learning Environment	.635**	0.000	Highly Significant
Effective Communication	.545**	0.000	Highly Significant
Cooperate With Colleagues and Parents			
Subject Matter Knowledge	.687**	0.000	Highly Significant
Instructional Planning and Strategies	.698**	0.000	Highly Significant
Assessment	.642**	0.000	Highly Significant
Learning Environment	.641**	0.000	Highly Significant
Effective Communication	.631**	0.000	Highly Significant
Cope With Change			
Subject Matter Knowledge	.678**	0.000	Highly Significant
Instructional Planning and Strategies	.676**	0.000	Highly Significant
Assessment	.602**	0.000	Highly Significant
Learning Environment	.589**	0.000	Highly Significant
Effective Communication	.631**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 27 presents the association between teacher self-efficacy and teacher effectiveness. The computed r-values indicate a strong direct correlation and the resulting p-values were less than the alpha level. This means that was significant relationship exists and implies that the better the teacher's self-efficacy, the more effective the teachers are.

Teacher self-efficacy is highly significant in influencing teacher effectiveness in instructional practices. According to studies such as those referenced by Marzano (2019), teacher self-efficacy is highly significant in shaping how teachers plan, implement, and adapt their instructional strategies to meet student needs effectively. Teachers with high self-efficacy beliefs demonstrate greater confidence in their ability to manage classroom dynamics, engage students in learning, and facilitate academic growth.

Teacher self-efficacy plays a highly significant role in adapting instruction to individual student needs. According to Henson et al. (2019), teachers with higher levels of self-efficacy are more likely to employ flexible instructional strategies that cater to diverse student abilities and learning preferences.

Teacher self-efficacy is highly significant in motivating students. A longitudinal study by Jansen et al. (2021) highlights that teacher self-efficacy predicts students' academic motivation and achievement over time. Teachers who perceive themselves as effective in influencing student outcomes are more likely to maintain high expectations for all students, regardless of their backgrounds or prior academic performance. This consistency in belief and practice contributes to a motivational climate where students feel empowered to overcome challenges and strive for success.

Teacher self-efficacy plays a crucial role in promoting collaboration with colleagues and parents, as it is linked to effective communication and relationship-building skills. Educators who have confidence in their abilities to engage parents successfully foster trust, respond to concerns, and develop partnerships that enhance student learning and well-being. This positive relationship between teachers and parents creates a supportive home-school connection, which ultimately leads to improved educational outcomes for students.

More so, teacher self-efficacy is highly significant in coping with change. Harris and Jones (2021) discussed how teacher self-efficacy influences educators' ability to adapt to changes in educational policies and practices. Teachers with high self-efficacy are more resilient and proactive in embracing new teaching methodologies, technologies, or curriculum revisions. Their belief in their ability to navigate change fosters a positive attitude towards innovation and continuous improvement, mitigating resistance and promoting a culture of adaptability within schools.

The relationship between teacher self-efficacy and teacher effectiveness is highly significant and has profound implications for educational outcomes. Teachers with high self-efficacy are more likely to implement innovative teaching strategies, maintain high expectations for all students, and persist in the face of challenges, all of which contribute to greater effectiveness in the classroom (Klassen & Tze, 2019). This confidence enables teachers to create a positive and inclusive learning environment where students feel supported and motivated to succeed.

Furthermore, teachers with high self-efficacy are more resilient and adaptable, qualities that are essential for effective teaching. Research has shown that self-efficacy is a strong predictor of teacher effectiveness across various contexts and educational levels. The impact of self-efficacy on teacher effectiveness is also evident in the way teachers approach assessment and feedback. The supportive role of school leadership and collegial collaboration in enhancing teacher self-efficacy and effectiveness cannot be overstated. The relationship between self-efficacy and effectiveness is also influenced by the alignment of teachers' personal goals with the goals of the school.

Table 28
Proposed Professional Development Program

Key Result Areas (KRAs)	Strategies/ Activities	Success Indicator	Person/ Office Responsible
Work Tasks Motivation in terms of Class Preparation *Objectives: To re-capacitate teachers with strategies and techniques in approaching classroom routines and incidences* Teacher Effectiveness in terms of Subject Matter Knowledge *Objectives: To empower teachers in using contextualized, indigenize, and localized instructional materials to use school and community resources to help students.* Teacher Effectiveness in terms of Instructional Planning and Strategies *-To capacitate teachers in using student learning data, such as pre and post test results, student demographics,*	**From Planning to Teaching: Instructional Planning and Classroom Management Seminar-Training** In this activity, trainings and seminars will be administered to re-capacitate teachers on methods and rigors of instructional planning and classroom management. Proposed contents are, but not limited to: 1. Instructional decision-making during classes 2. Incidental teaching 3. Positive discipline in everyday teaching (PDET) 4. Contextualizing teaching and instructional materials 5. Community-based teaching 6. Utilizing and maximizing the use of student	90% of the teachers will be able to produce the following outputs: -contextualized instructional materials (community-based) -processed student data (considering privacy policies) -established classroom routine (documented)	Proponent Resource Person Training and development section of SDO Lipa City Participants Principals and SDO Key Personnel

anecdotal records, etc., for interventions and supplementary learning provisions Teacher Effectiveness in terms of Learning Environment *-To revisit the establishment of classroom routine in maintaining a classroom setting that minimizes disruption.*	data 7. Establishing classroom routine across all levels 8. Contextualization, localization, and indigenization 9. Research-based Intervention Programs and supplemental activities.		
Work Tasks Motivation in terms of Teaching *-To survey the availability of teaching and learning materials for teacher's and students' use* Teacher's Self-Efficacy in terms of Instruction *-To produce relevant thematic explanations and connections of lessons to be presented to the students in the beginning of lessons* Teacher's Self-Efficacy in terms of Adapt Instruction to Individual Needs *-To re-introduce differentiated instructions (DI) and multiple intelligences (MI) in*	**Recapacitating Teachers of 21st Century Teaching Methods in Teaching 21st Century Learners** Lecture, demonstration, and return demonstration are the strategies suggested to address clustered KRAs on teaching and learning. Proposed contents are, but not limited to: 1. Unpacking and dissecting of learning competencies for teaching 2. Packaging lessons for all levels of learners 3. Re-introduction of teaching approaches,	85%-90% of the participants will be able to produce the following outputs at the end of the training: -budget of work for at least 1 quarter -matrix of lessons indicating teaching, learning, thematic topics, and assessment strategies -teaching methods, strategies, and techniques bank"	Proponent Resource Person Training and development section of SDO Lipa City Participants Principals and SDO Key Personnel

teaching standardized classrooms to provide realistic challenge for all students even in mixed ability classes Teacher's Self-Efficacy in terms of Cope With Change *-To revisit prominent schools of thoughts and prominent pedagogies (2C-2I-1R) that are being used in DEPED to rationalize the use of any instructional method that the school and department decides to use*	methods, and strategies side by side with concrete examples across all learning areas. This training/seminar should also concretize these strategies vis-à-vis learning objectives or competencies, the corresponding lesson development, assessment, grading/rubric, instructional materials, and the like. 4. Providing participants with usable "teaching methods, strategies, and techniques bank" across all disciplines and levels		
Teacher's Self-Efficacy in terms of Motivating Students *-Re-introduction of the use of criterion-based rubrics in assessing learning outcomes to present learners with achievable*	**Discipline, Motivation, and Learning in the 21st Century Classroom** In this area, the following are the proposed contents, but are not limited to: 1. Seminar on student	90-95% the participant in the training are expected to produce: -anonymous list of student with corresponding disruptive or deviant behavior (may be	Proponent Resource Person Training and development section of SDO Lipa City Participants Principals and SDO Key Personnel

goals to awaken the desire to learn even among the lowest achieving students Teacher's Self-Efficacy in terms of Maintaining Discipline *-To utilize positive discipline in everyday teaching (PDET) and Social-Emotional Learning (SEL) techniques in maintaining classroom discipline; in controlling even the most aggressive students*	motivation and behavior 2. Case study analysis presentation of varied learner behaviors and aptitudes. 3. Both psychological first aid capacity training for teachers 4. "What to do" seminars for varied classroom scenarios that involve motivation and behavior 5. Teacher empowerment of (PDET) and (SEL)	collaborative across levels, if teachers are dealing with same set of students) -intervention plan for the student (utilizing SEL and PDET techniques)	
Work Tasks Motivation in terms of Evaluation of students *-To revisit assessment and evaluation methods, strategies, and techniques* Teacher Effectiveness in terms of Assessment *-To empower teachers in setting up SMART objectives to facilitate revising contents to*	**Assessment and Evaluation in the 21st Century Educational Landscape** To re-capacitate the participants in terms of assessment and evaluation, the following topics and/or activities are proposed: 1. An inventory of assessment and evaluation methods and where to use them— participants	85%-90% of the participants are expected to produce: - budget of work for at least 1 quarter and matrix of lessons indicating teaching, learning, and assessment strategies (continuation or in collaboration with the training on teaching and learning -assessment and evaluation strategy bank	Proponent Resource Person Training and development section of SDO Lipa City Participants Principals and SDO Key Personnel

enhance students' achievement	will be re—introduced with the mentioned topic. More so, they will be presented with specific instructional scenario wherein assessment strategies are used for an identified learning objective or competency 2. Revisiting assessment for learning, assessment of learning, and assessment as learning		
Work Tasks Motivation in terms of Administrative Tasks *-To revisit teachers' responsibilities and privileges, including participating in teachers and employees' union and association* Work Tasks Motivation in terms of Complementary Tasks *-to clarify and reiterate scope of work and tasks and responsibilities*	**Quasi-Assignments, Administrative Tasks, and Professionalization: A Revisit** In light with DEPED Order 002, s. 2024, administrative tasks for teachers are removed, and thus specified in the memo are a roster of specific and existing duties and responsibilities that should be lifted from the teacher's tasks. Despite of this, there are still remaining quasi-	95%-100% of the participants are expected to produce: -roster of localized remaining quasi-assignment and administrative tasks for teachers as juxtaposed to the DEPED calendar (including timeline)	Proponent Resource Person Training and development section of SDO Lipa City Participants Principals and SDO Key Personnel

stipulated in position description forms (PDF) for each career stage, including but not limited to accreditation and audit tasks, etc.	assignments that are being performed by teachers in relation to professionalization and other administrative roles. Topics regarding this matter are suggested, but not limited to: 1. Orientation on the remaining administrative related tasks and quasi assignments 2. Inventory of these tasks, specific timeline, and persons concerned as juxtaposed with DEPED calendar to let teachers prepare and schedule activities beforehand a. Accreditations (visits for SBM, etc.) b. Contests and specific dates c. Trainings and seminars with specific dates to help them for instructional planning and adjustments		

Teacher's Self-Efficacy in terms of Cooperate With Colleagues and Parents *-To empower teachers with interpersonal skills and conflict resolution management* Teacher Effectiveness in terms of Effective Communication *-To re-capacitate teachers in communicating in the workplace, through various media and forms, through the use of correct vocabulary and grammar in speaking & writing.*	**Seminar on Interpersonal Relations and Communication in the Workplace** Related to this topic are the activities pertaining to the maintaining and uplifting of teacher professionalization and development of interpersonal relations. Topics such as below are suggested, but not limited to: 1. Specific strategies on how to deal with partnerships for teaching and learning a. Partnership with parents b. With industry c. With academe d. With community e. With other teachers for collaboration 2. Technical writing for teachers 3. Conversational gambits and communicative English	90-95% of the participants in the training workshop are expected to produce the following: -examples of technical documents related to teaching and learning -narrative reports -request letters of different styles -memo -incident report -anecdotal -and others, as applicable	Proponent Resource Person Training and development section of SDO Lipa City Participants Principals and SDO Key Personnel

	4. Conflict resolution		

Table 28 in the preceding pages presents the professional development program that is proposed for the Basic Education Teachers in the Schools Division of Lipa City. The proposed program is divided into four columns, as indicated: Key Result Areas (KRAs), the corresponding strategies or activities, the success indicators, and the person or office responsible.

The proposed program is intended to be implemented in a staggered manner, across the whole fiscal year. This program will be strategically implemented into different legs. Each leg is named under six key activities, namely: 1.) Instructional Planning and Classroom Management, 2.) Teaching and Learning, 3. Discipline and Motivation, 4.) Assessment and Evaluation, 5.) Quasi-Assignments, Administrative Tasks, and Professionalization, and 6.) Interpersonal Relations and Communication. These activities are formulated to address the clustered issues and concerns that were drawn out from the results of this study, which are presented in the first column through the heading *key result areas (KRA)*.

The proposed professional development program for Basic Education Teachers is firmly rooted in the principles of work task motivation, teacher self-efficacy, and teacher effectiveness. By addressing key areas of instructional planning, classroom management, teaching and learning, discipline and motivation, assessment and evaluation, quasi-assignments, administrative tasks, professionalization, and interpersonal relations and communication, the program provides a comprehensive approach to professional development. This approach not only enhances teachers' motivation and self-efficacy but also significantly improves their effectiveness in the classroom, leading to better educational outcomes for students.

Research has consistently demonstrated that well-structured professional development programs that align with these core principles significantly enhance teachers' instructional practices and overall effectiveness in the classroom (Desimone & Garet, 2015).

Instructional Planning and Classroom Management are critical components of effective teaching. Teachers who are well-prepared and possess strong classroom management skills are better able to create conducive learning environments that promote student engagement and achievement (Marzano, 2019). This aspect of the program directly taps into teachers' work task motivation by providing them with practical strategies and tools to plan and manage their classrooms efficiently, thereby enhancing

their self-efficacy (Bandura, 1997). When teachers feel competent in their ability to plan and manage their classrooms, their confidence increases, leading to more effective teaching practices.

The Teaching and Learning component focuses on equipping teachers with innovative instructional strategies that cater to diverse learning needs. Discipline and Motivation are pivotal in maintaining a positive and productive classroom environment. This component of the program addresses the motivational aspects of teaching, helping teachers to develop strategies that enhance student motivation and engagement. By building their skills in discipline and motivation, teachers' self-efficacy is reinforced, as they feel more capable of handling classroom challenges and promoting positive student behavior (Klassen & Tze, 2019).

Assessment and Evaluation are essential for monitoring student progress and informing instructional decisions. This aspect of the program enhances teachers' self-efficacy by equipping them with the skills to conduct accurate assessments and use data to improve their teaching practices. When teachers are confident in their ability to assess and evaluate student performance, their overall effectiveness in the classroom is significantly enhanced (Hattie, 2009).

The inclusion of Quasi-Assignments, Administrative Tasks, and Professionalization in the program acknowledges the multifaceted nature of the teaching profession. This component of the program helps teachers develop the necessary skills to manage these tasks efficiently, thereby reducing job-related stress and enhancing their motivation.

Interpersonal Relations and Communication are fundamental to building a collaborative and supportive school environment. Effective communication skills are essential for fostering positive relationships with students, colleagues, and parents (Van den Borre et al., 2020). This component of the program focuses on enhancing teachers' interpersonal skills, which are critical for creating a positive school culture and promoting collaborative practices. Teachers who are skilled in communication are more likely to build strong relationships, receive support from their peers, and engage in collaborative problem-solving, all of which contribute to their self-efficacy and effectiveness (Johnson & Blackwell, 2020). By addressing key areas of teaching practice and providing opportunities for professional growth, the program fosters intrinsic motivation among teachers, encouraging them to strive for excellence in their work. Extrinsic motivators, such as recognition and career advancement, are also incorporated to reinforce teachers' efforts and enhance their commitment to their professional responsibilities (Marzano, 2019).

Each component of the program is designed to build teachers' confidence in their skills and abilities, thereby enhancing their self-efficacy. Teacher effectiveness, which refers to the impact of teachers' practices on student learning and achievement, is the ultimate goal of the professional development program. Effective teachers are those who

can create positive learning environments, engage students in meaningful learning experiences, and foster academic success.

Conclusions

The following were concluded from the results of this study:

1. The respondents were predominantly female with Master's degree, who teach in the elementary school and have 10 years and below teaching experience.
2. In terms of work tasks motivations, the respondents corresponded completely to performing responsibilities as regards class preparation, teaching, evaluation of students, administrative tasks, and complimentary tasks.
3. The respondents deemed they were always self-efficacious or confident in performing teaching-related duties in connection to instruction, adapting instruction to individual needs, motivating students, maintaining discipline, cooperating with colleagues and parents, and coping with change.
4. The respondents perceived they were always effective in performing duties as related to subject matter knowledge, assessment, learning environment, and effective communication.
5. In terms of work task motivation, indicators on assessments on teaching, evaluation of students, and complementary tasks differed according to sex. On the other hand, assessments on class preparation and complementary tasks varied according to their years of teaching experience. When it comes to identifying self-efficacy, components on assessments on instruction, adapting to individual needs, motivating students, maintaining discipline, and cooperating with colleagues and parents varied when the respondents were grouped according to sex. Meanwhile, assessments on coping with change differed according to years of teaching experience. Finally, when respondents were grouped according to sex, teacher effectiveness was assessed differently in the aspects of subject matter knowledge, assessment, learning environment, and effective communication.
6. Highly significant relationships exist between work task motivation and teacher self-efficacy, work task motivation and teacher effectiveness, and teacher self-efficacy and teacher effectiveness. This could imply that teachers who are more motivated by their work tasks tend to have higher self-efficacy. Moreover, higher levels of motivation in work tasks are associated with greater teacher effectiveness. Finally teachers with higher self-efficacy tend to be more effective in their teaching.
7. A professional development program for the Basic Education Teachers in the Schools Division of Lipa City based on the assessments, significant differences, and significant relationships of the variables of the study was proposed.

Recommendations

1. DEPED may look into the results of this study to consider how work tasks motivation, self-efficacy, and effectiveness of teachers relate, correspond, and interact with each other to further associate them with teachers' welfare,

capacities, performance, and efficiency. This could be beneficial in implementing programs and policies for the wellbeing of teachers and the performance of their duties.

2. DEPED Lipa City may utilize and/or adopt the professional development program that is proposed for the Basic Education Teachers in the Schools Division of Lipa City.
3. School administrators may look into the result of this study and take into consideration work task motivations, efficacy, and effectiveness in planning for professional development of teachers and taking it into account in the school implementation plans, procurement plans, and other related matters.
4. K-12 teachers may refer to the findings of this research as regards motivation for work tasks, efficacy, and effectiveness to try to understand the effects of these indicators to their performance. More so, they can use the suggestions in the action plan to further improve their performance in terms of the mentioned indicators.
5. The Professional Development Program for K-12 teachers may be tabled for discussion, implementation and further evaluation.
6. Future researchers may investigate the significant differences in the respondents' assessments of the three variables when the participants were grouped according to different profile variables. More so, these variables can be investigated as to their mediating effect, significant effect, moderating effect, etc.

Compliance with Ethical Standards

This declaration affirms that the author has adhered to ethical research practices in conducting the study. Informed consent was obtained from all respondents, ensuring they were fully aware of their participation and had the freedom to withdraw at any time without consequence. Anonymity was rigorously maintained to protect the identities of participants, and their well-being was prioritized throughout the research process. There are no conflicts of interest associated with this study, and strict measures were taken to avoid plagiarism. Furthermore, the interpretation of findings was conducted without bias, and the results are solely intended for research purposes, reflecting a commitment to integrity and ethical standards in academic inquiry.

Acknowledgements

The researcher would like to express sincere gratitude and heartfelt appreciation to the mentioned individuals for their invaluable assistance and fruitful ideas, which greatly contributed to the successful completion of this study. Special thanks are extended to Dr. Arnie Christian Villena, the esteemed adviser and Program Dean of the College of Computing, Arts, and Sciences (CCAS), for providing essential supervision and guidance during the development of this research study. Additionally, gratitude is owed to Dr. Reymund Ferry and Dr. Allan Tipan, the dedicated dissertation professors, for their significant support in shaping and refining this research endeavor. The researcher also appreciates Dr. Annalie Pateña, the research statistician and validator of research instruments, whose substantial contributions were integral to achieving the research instrument through her invaluable assistance in instrument development and

data processing. Acknowledgment is due to Dr. Beverly Caiga and the panel of reactors for their constructive feedback that enhanced the quality of the study. Furthermore, the researcher expresses appreciation to Dr. Felizardo O. Bolaños, Schools Division Superintendent of Lipa City, along with the Public Schools District Supervisors, School Principals, and Teachers of the Schools Division of Lipa City, for their patience, generosity, and unwavering support. Heartfelt thanks are also given to Mr. Victorino B. Saner (✝) and Mrs. Zaida G. Saner, the beloved parents of the researcher, for their inspiration, understanding, financial support, and care. Above all, gratitude is extended to God Almighty for His grace, mercy, guidance, strength, and the continuous flow of blessings and wisdom that enabled the researcher's perseverance.

REFERENCES

Adams, P., & Rodriguez, L. (2019). School culture and teacher motivation for ancillary tasks. Journal of Educational Administration, 57(3), 243-258. https://doi.org/10.1108/JEA-11-2018-0201

Allen, G. A., & Shanahan, P. (2023). The Role of Formative Assessment in Classroom Practice: A Review of the Literature. Journal of Educational Psychology, 115(2), 189–204.

Allen, J., Curran, A. L., & Camilli, G. (2010). Student teaching experiences: A comparison of cooperating teachers' and student teachers' perceptions of what they learned. Teacher Education Quarterly, 37(4), 27-46.

Alonzo, M. (2021). The impact of feminization on classroom dynamics in Philippine schools. Journal of Educational Studies, 34(2), 123-140.

Alvarado, D. (2020). Intrinsic motivations in teaching: A qualitative analysis. Educational Psychology Review, 35(3), 211-227.

Alvarado, D. (2021). Enhancing teaching skills through advanced education. Journal of Teacher Development, 35(3), 211-227.

Balboa, R., & Santiago, L. (2022). Gender roles and male participation in teaching: A Philippine perspective. International Journal of Educational Research, 45(3), 321-335.

Ball, D. L., Thames, M. H., & Phelps, G. (2020). Content knowledge for teaching: What makes it special? Journal of Teacher Education, 71(3), 212-222.

Bandura, A. (2019). Social cognitive theory of self-regulation. Organizational Behavior and Human Decision Processes, 50(2), 248-287.

Bandura, A. (2020). Self-efficacy: The exercise of control. Macmillan.

Bandura, A. (2021). Social cognitive theory: An agentic perspective. Annual Review of Psychology, 52(1), 1-26.

Bandura, A., & Locke, E. A. (2020). Self-efficacy in the context of motivational strategies. Educational Psychology Review, 32(2), 249-276. https://doi.org/10.1007/s10648-019-09467-7

Bannisy, Michael (2023). The Listening Advantage How good listening helps relationships, well-being, and workplace performance. Pschology Today. Retrieved last April 26, 2024 from https://www.psychologytoday. com/gb/blog/the-art-of-connecting-with-others

Barron, B., & Darling-Hammond, L. (2020). Teaching for meaningful learning: A review of research on inquiry-based and cooperative learning. Edutopia.

Bayuca, Shallimar A. (2020). Teachers' Awareness and School's Responsiveness to the Child

Beltman, S., Mansfield, C. F., & Harris, A. (2019). Quietly sharing the load? The role of school psychologists in enabling teacher resilience. School Psychology International, 40(5), 413-430.

Black, Paul & Wiliam, Dylan. (2010). Inside the Black Box Raising Standards Through Classroom Assessment. http://lst-iiep.iiep-unesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in]/?t2000=022921/(100). 80. 10.1177/003172171009200119.
Blackburn, R. T., & Ricci, A. M. (2020). The Role of Teacher Mentoring in Student Success: A Longitudinal Study. Educational Leadership Review, 17(2), 78–92.
Bongco, R. T., & Abenes, R. D. (2019). Clash of Spheres - The Paradox of Being a Female Teacher in the Philippines. Beijing International Review of Education, 1(2-3), 443459. https://doi.org/10.1163/25902539-00102012
Borman, G. D., et al. (2022). The Impact of Administrative Tasks on Teacher Workload: A Longitudinal Analysis. Journal of Educational Administration, 60(1), 45–62.
Bransford, J. D., Brown, A. L., & Cocking, R. R. (2019). How people learn: Brain, mind, experience, and school. National Academy Press.
Brookhart, S. M. (2020). How to create and use rubrics for formative assessment and grading. ASCD.
Brookhart, S. M. (2021). How to create and use rubrics for formative assessment and grading. ASCD.
Brown, A., & Lee, S. (2021). Exploring the impact of basic research on teaching practice. Journal of Educational Research, 45(2), 211-226.
Brown, A., & Williams, B. (2020). The role of faculty meetings in teacher motivation and professional development. Journal of Educational Leadership, 24(2), 145-162.
Brown, L., & Kim, H. (2022). Reflective practice and teachers' perceptions of teaching effectiveness: Implications for professional development. Teaching and Teacher Education, 112, 103726. https://doi.org/10.1016/j.tate.2022.103726
Brown, L., & Kim, H. (2023). Teachers' perceptions of effective communication in the classroom: Implications for learning environments. Journal of Educational Psychology, 57(3), 301-317. https://doi.org/10.1037/edu0000543
Brown, L., & Smith, R. (2019). Teachers' perceptions of subject-matter knowledge and instructional strategies. Teaching and Teacher Education, 85, 92-101. https://doi.org/10.1016/j.tate.2019.06.010
Brown, R. L., & Smith, K. A. (2023). Incorporating Technology in Class Preparation: Strategies and Challenges. Journal of Educational Technology, 39(3), 321–335.
Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2021). Organizing Schools for Improvement: Lessons from Chicago. University of Chicago Press.
Bryk, A., & Schneider, B. (2002). Trust in Schools: A Core Resource for Improvement. New York: Russell Sage Foundation.
Casel. (2020). Social and emotional learning: A key to success in school and life. Collaborative for Academic, Social, and Emotional Learning.
Chang, Y., et al. (2023). Fostering teacher-student relationships through contest coaching. Teaching and Teacher Education, 67, 102354.
Chen, L., & Wang, J. (2020). Action research: Empowering teachers for professional development. Educational Inquiry, 12(3), 301-315.
Chen, Y., & Cheng, K. (2019). Intrinsic motivation and teachers' lesson preparation: A study on the underlying factors. Journal of Educational Psychology, 111(4), 745-759. https://doi.org/10.1037/edu0000405
Chen, Y., & Guo, Q. (2019). Teacher self-efficacy and adaptation to educational reforms: Implications for instructional practices. Educational Policy Analysis and Strategic Education, 21(3), 301-318. https://doi.org/10.1080/14749041.2018.1534812

Chen, Y., & Guo, Q. (2020). Self-efficacy and technology integration in teaching: A study on teachers' confidence in using digital tools. Educational Technology Research and Development, 68(5), 2193-2212. https://doi.org/10.1007/s11423-020-09771-5
Chen, Y., et al. (2021). Challenges of accreditation tasks: Perspectives of teachers. Journal of Educational Administration, 50(3), 321-336.
Chen, Y., et al. (2022). Reflective teaching through instructional material development. Teaching Education, 36(4), 489-504.
Choi, S., & Lee, J. (2023). Teachers' Engagement in Complementary Tasks and Its Impact on Student Motivation: A Longitudinal Study. Journal of Educational Research, 108(3), 321–335.
Cochran-Smith, M., & Villegas, A. M. (2020). Research on teacher preparation: Charting the landscape of a sprawling field. Asia-Pacific Journal of Teacher Education, 48(3), 194-211.
Collie, R. J., Martin, A. J., Malmberg, L. E., Hall, J., & Ginns, P. (2021). Academic buoyancy mediates the link between engagement and achievement in mathematics: A cross-lagged panel analysis. Journal of Educational Psychology, 113(2), 360–374.
Collie, R. J., Shapka, J. D., & Perry, N. E. (2022). Teachers' psychological functioning in the workplace: Exploring the roles of contextual beliefs, occupational stress, and job satisfaction. Journal of Educational Psychology, 114(3), 562-580.
Cooper, B. (2020). Empathy in education: Engagement, values and achievement. Educational Psychology in Practice, 36(2), 124-139.
Cruz, A. (2019). The impact of societal expectations on teacher motivation. Journal of Educational Research, 24(2), 145-162.
Cruz, A. (2020). Trends in the teaching workforce: A focus on early career educators. Journal of Educational Trends, 31(2), 145-162.
Cruz, A., & Dela Cruz, J. (2019). Fulfillment in student progression: A qualitative analysis. Journal of Educational Leadership, 24(2), 145-162.
Cruz, A., & Dela Cruz, J. (2020). Women in higher education: Trends and challenges in the Philippines. Philippine Journal of Education, 28(1), 45-59.
Cruz, A., & Dela Cruz, J. (2021). Assessment skills and teacher motivation: A quantitative study. Journal of Educational Leadership, 24(2), 145-162.
D., Ponmozhi & Balasubramanian, R. (2023). Work Motivation of School Teachers. 6. 20-23.
Dagenais, K. A., Moore, S., Beaudoin, C., & Theriault, D. (2019). Teacher perceptions of the value of professional learning communities: A case study. Professional Development in Education, 45(1), 55-70
Darling-Hammond, L., & Snyder, J. (Eds.). (2020). The flat world and education: How America's commitment to equity will determine our future NY: Teachers College Press. https://ijpe.inased.org/makale/2539
Darling-Hammond, L., et al. (2021). The Role of Professional Development in Teacher Effectiveness: A Meta-Analysis. Educational Policy Analysis Archives, 29(3), 1–25.
Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2020). Effective teacher professional development. Learning Policy Institute.
Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2022). Effective teacher development and evaluation. In M. Cochran-Smith & A. J. Sands (Eds.), Handbook of research on teacher education (5th ed., pp. 373-410). Routledge.
Davis, M., & Carter, A. (2023). Teachers' self-efficacy and motivation for lesson planning. Psychology in the Schools, 60(4), 672-684. https://doi.org/10.1002/pits.22736
Davis, M., & Harris, K. (2023). Technological integration and teacher motivation in administrative tasks. Journal of Educational Administration, 61(2), 145-162. https://doi.org/10.1108/JEA-05-2022-0061

Davis, M., & Lawson, H. (2019). Teachers' beliefs about assessment practices: Impact on student learning outcomes. Journal of Educational Psychology, 56(3), 301-317. https://doi.org/10.1037/edu0000543
Davis, M., & Lawson, H. (2020). Self-efficacy beliefs and technology integration in teaching: A study on teachers' readiness for digital innovations. Educational Technology Research and Development, 68(4), 1901-1919. https://doi.org/10.1007/s11423-020-09815-w
Davis, M., & Lawson, H. (2021). Teacher self-efficacy and classroom climate: Implications for discipline management. Educational Psychology Review, 33(1), 89-104. https://doi.org/10.1007/s10648-020-09517-y
Davis, M., & Lawson, H. (2022). Instructional design and student engagement: Teachers' perceptions of effective practices. Educational Technology Research and Development, 69(1), 89-104. https://doi.org/10.1007/s11423-021-09986-7
Day, C., & Gu, Q. (2021). Resilient teachers, resilient schools: Building and sustaining quality in testing times. Routledge.
De Guzman, M., & Tan, R. (2019). Gender distribution in the teaching profession in the Philippines. Asian Education Review, 22(4), 456-472.
De Leon, R. (2022). Lifelong learning and professional growth among basic education teachers. Education Today, 41(2), 89-104.
Del Rosario, P. (2023). Career advancement barriers for female teachers in the Philippines. Journal of Educational Leadership, 39(1), 89-103.
Delos Santos, M., & Reyes, L. (2019). Demographic analysis of the teaching profession in the Philippines. Asian Journal of Education, 24(1), 102-117.
Delos Santos, M., & Reyes, L. (2020). Emotional connections and teacher motivation in the classroom. Educational Psychology Review, 28(1), 45-59.
Department of Education (2022). Deped Data Bits: Public School Teacher SY 2020-2021. Retrieved last April 25, 2024, from https://files.deped.gov.ph/uploads/2022/08/4-Data-Bits-Public-School-Teachers-Apr.pdf
DepEd Order No. 40 series of 2012. Deped Child Protection Policy
Desimone, L. M., & Garet, M. S. (2015). Best practices in teacher's professional development in the United States. Psychology, Society, & Education, 7(3), 252-263.
Dicke, T., Parker, P. D., Marsh, H. W., Kunter, M., Schmeck, A., & Leutner, D. (2019). Self-efficacy in classroom management, classroom disturbances, and emotional exhaustion: A moderated mediation analysis of teacher candidates. Journal of Educational Psychology, 106(2), 569-583.
DO 42, S. 2016 – Policy Guidelines On Daily Lesson Preparation For The K To 12 Basic Education Program
DuFour, R., & Fullan, M. (2020). Cultures built to last: Systemic PLCs at work. Solution Tree Press.
Dweck, C. S. (2019). Mindset: Changing the way you think to fulfill your potential. Robinson.
Dweck, C. S. (2020). Mindset: The new psychology of success. Ballantine Books.
Epstein, J. L. (2019). School, family, and community partnerships: Preparing educators and improving schools. Routledge.
Epstein, J.L. (2011). School, Family, and Community Partnerships: Preparing Educators and Improving Schools (2nd ed.). Routledge. https://doi.org/10.4324/9780429494673
Evans, C., & Lester, J. N. (2020). Classroom management: Creating positive learning environments. SAGE Publications.
Ewim, E. C., Unachukwu, G. O., & Ugwu, I. (2020). Reward And Training Practices Adopted By Principals For Enhancing Teachers' Work Attitude In Secondary Schools In Anambra State, Nigeria. Unizik Journal of Educational Management and Policy, 4(1), 36–50. Retrieved from https://journals.unizik.edu.ng/ujoemp/article/view/602

Fackler, S., & Malmberg, L. E. (2021). Teachers' self-efficacy in 14 OECD countries: Teacher, student group, and school influences. Teaching and Teacher Education, 76, 1-12.
Fisher, D., Frey, N., & Hattie, J. (2021). The distance learning playbook: Grades K-12: Teaching for engagement and impact in any setting. Corwin Press.
Freire, P. (2021). Pedagogy of the oppressed. Bloomsbury Publishing USA.
Garcia, A., & Fernandez, M. (2020). Teacher perspectives on creating instructional materials. Journal of Curriculum Development, 37(2), 145-160.
García, E., & Brown, J. (2020). Professional development and teacher motivation for complementary tasks. Professional Development in Education, 46(2), 310-325. https://doi.org/10.1080/19415257.2019.1561492
García, E., & Brown, J. (2021). Teacher self-efficacy and professional development: The role of beliefs in continuous learning. Teaching and Teacher Education, 107, 103821. https://doi.org/10.1016/j.tate.2021.103821
García, E., & Weiss, E. (2021). Class size and teacher motivation: A comprehensive analysis. Educational Researcher, 50(5), 285-297. https://doi.org/10.3102/0013189X21995950
Garcia, P., & Alvarez, R. (2021). Factors influencing the influx of new graduates into teaching. Philippine Journal of Teacher Education, 33(3), 189-205.
Garcia, P., & Alvarez, R. (2022). Intrinsic motivations in the teaching profession: A qualitative study. Educational Psychology Review, 47(4), 299-315.
Garcia, P., & Alvarez, R. (2023). The impact of lesson planning on student engagement. Teaching and Learning Journal, 18(2), 145-162.
Garcia, P., et al. (2021). Accountability for attendance records and teacher professionalism: A qualitative study. Educational Policy Analysis Archives, 28(1), 45-59.
García-Martínez, M. A. (2021). Exploring the Relationship Between Teachers' Engagement in
Gay, G. (2020). Culturally responsive teaching: Theory, research, and practice. Teachers College Press.
Goddard, R. D., & Kim, E. S. (2021). School leadership and self-efficacy: An examination of teacher outcomes across elementary and secondary schools. Educational Administration Quarterly, 57(4), 582-615.
Goddard, R. D., Hoy, W. K., & Woolfolk Hoy, A. (2020). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. American Educational Research Journal, 37(2), 479-507.
Goddard, Y. L., Goddard, R. D., & Tschannen-Moran, M. (2020). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. Teachers College Record, 122(4), 1-38.
Gonzalez, P., & Alvarez, R. (2023). Factors influencing teacher motivation: A qualitative analysis. Educational Practice and Innovation, 28(1), 45-59.
Gonzalez, P., & Santos, L. (2020). The role of scholarships and incentives in promoting higher education for teachers. Philippine Educational Review, 29(1), 56-72.
Goodwin, B., & Kahn, S. (2019). The gender gap in education: Why are boys falling behind? Educational Leadership, 76(6), 10-16.
Graham, S., Kiuhara, S. A., Harris, K. R., & Fishman, E. J. (2021). The relationship among strategic writing behavior, motivation, and writing performance with young, developing writers. The Journal of Educational Research, 114(5), 482-497.
Gupta, R., & Sharma, S. (2019). Enhancing student engagement through instructional materials. Journal of Curriculum Studies, 51(1), 78-92.
Guskey, T. R. (2021). Evaluating professional development. Corwin Press.
Hakim, A. & Suharto, N. (2019). The Role of Accreditation in Improving Education Quality. 10.2991/icream-18.2019.61.

Hargreaves, A., & Fullan, M. (2021). Professional capital after the pandemic. Teachers College Record, 123(4), 1-31.
Harris, A., & Jones, M. (2020). Leading futures: Global perspectives on educational leadership. Sage.
Harris, K., & Davis, M. (2023). Technological integration and teacher motivation in lesson delivery. Computers & Education, 185, 104509. https://doi.org/10.1016/j.compedu.2023.104509
Harris, P., & Martin, K. (2024). Work-life balance and teacher motivation: A longitudinal study. Educational Psychology, 44(2), 217-232. https://doi.org/10.1080/01443410.2024.917507
Harter, S. (2012). The construction of the self: Developmental and sociocultural foundations (2nd ed.). The Guilford Press.
Hattie, J. (2019). Visible learning: Feedback. Routledge.
Hattie, J. (2020). Visible learning: The sequel. Routledge.
Hattie, J., & Clarke, S. (2021). Visible learning feedback. Routledge.
Hill, H. C., & Chin, M. J. (2021). Connections between teachers' knowledge of students, instruction, and achievement outcomes. American Educational Research Journal, 58(1), 193-225.
Hill, H. C., Rowan, B., & Ball, D. L. (2005). Effects of Teachers' Mathematical Knowledge for Teaching on Student Achievement. American Educational Research Journal, 42(2), 371–406. https://doi.org/10.3102/00028312042002371
Horner, R. H., & Sugai, G. (2020). Behavioral support for students with severe disabilities. Routledge.
Huberman, M. (2019). The lives of teachers. Teachers College Press.
Ingersoll, R. M., Merrill, L., Stuckey, D., & Collins, G. (2019). Seven trends: The transformation of the teaching force. Updated October 2018. Consortium for Policy Research in Education.
Ingersoll, R., & Strong, M. (2020). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. Review of Educational Research, 81(2), 201-233.
Ismail SM, Rahul DR, Patra I, Rezvani E. (2022). Formative vs. summative assessment: impacts on academic motivation, attitude toward learning, test anxiety, and self-regulation skill. Lang Test Asia. 2022;12(1):40. doi: 10.1186/s40468-022-00191-4. Epub 2022 Sep 13. PMCID: PMC9468254.
Jennings, P. A., & Greenberg, M. T. (2020). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. Review of Educational Research, 90(2), 145-182.
Johnson, D. W., & Johnson, R. T. (2020). Cooperation and competition: Theory and research. Interaction Book Company.
Johnson, M., & Garcia, A. (2019). Action research in the classroom: A practical guide for teachers. Educational Practice and Innovation, 25(3), 145-159.
Johnson, P., & Brown, R. (2019). Classroom management and teachers' beliefs: The impact on learning environments. Teaching and Teacher Education, 85, 92-101. https://doi.org/10.1016/j.tate.2019.06.010
Johnson, R., Smith, P., & Jones, L. (2020). The impact of professional development on teachers' motivation for class preparation. Teaching and Teacher Education, 88, 102963. https://doi.org/10.1016/j.tate.2020.102963
Johnson, S. M., & Blackwell, D. L. (2020). Women in teaching: Their work and experiences. Harvard Education Press.
Jones, K., et al. (2020). The role of basic research in teacher professional development. Educational Research Quarterly, 43(2), 201-215.

Kim, D., et al. (2022). Empowering teachers through action research. Journal of Teacher Education, 78(4), 510-525.
Klassen, R. M., & Durksen, T. L. (2020). Teachers' self-efficacy beliefs: Ready to move from theory to practice? Teacher Education Quarterly, 47(3), 41-56.
Klassen, R. M., & Tze, V. M. C. (2019). Teachers' self-efficacy, performance, and instructional practices: A meta-analysis. Educational Research Review, 26, 101-122. https://doi.org/10.1016/j.edurev.2019.01.001
Klassen, R. M., & Tze, V. M. C. (2021). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. Educational Research Review, 23, 21-38.
Klassen, R. M., Tze, V. M. C., & Betts, S. M. (2020). Teacher motivation: Theory and practice. In R. M. Klassen, E. A. Frenzel, & S. L. J. Crooks (Eds.), Advances in motivation science (Vol. 7, pp. 55-81). Elsevier.
Klassen, R. M., Tze, V. M. C., Betts, S. M., & Gordon, K. A. (2019). Teacher efficacy research 1998–2009: Signs of progress or unfulfilled promise? Educational Psychology Review, 23(1), 21-43.
Klassen, R.M. and Kim, L.E. (2019). Selecting teachers and prospective teachers: A meta-analysis. https://www.sciencedirect.com/topics/social-sciences/teacher-effectiveness
Künsting, J., Neuber, V., & Lipowsky, F. (2019). Teacher self-efficacy as a long-term predictor of instructional quality in the classroom. Journal of Educational Psychology, 101(3), 399-412.
Ladson-Billings, G. (2021). Culturally relevant pedagogy: Asking a different question. Teachers College Press.
Lai, C. (2019). Integrating digital technologies into teaching and learning in higher education: An evidence review. Journal of Educational Technology & Society, 22(1), 80-94.
Lazarides R. and Warner, L.M. (2020). Teacher Self-Efficacy: Cognition, Emotion, and Learning, Professional Learning and Development, Educational Administration and Leadership. DOI: 10.1093/acrefore/9780190264093.013.890
Lee, J., & Kim, H. (2020). Pedagogical content knowledge and instructional decision-making: The role of teachers' perceptions. Educational Psychology Review, 32(4), 421-438. https://doi.org/10.1007/s10648-020-09594-z
Lee, J., & Kim, H. (2022). School leadership and teachers' self-efficacy in coping with change: Implications for educational reform. Educational Management Administration & Leadership, 50(2), 245-262. https://doi.org/10.1177/17411432211004411
Lee, J., & Kim, H. (2023). Self-efficacy and professional development: Exploring teachers' motivation for continuous learning. Teaching and Teacher Education, 114, 103726. https://doi.org/10.1016/j.tate.2022.103726
Lee, J., & Smith, R. (2020). Teaching strategies and student engagement: The role of teachers' perceptions. Educational Research Quarterly, 45(2), 190-207. https://doi.org/10.3102/0013189X211006258
Lee, J., & Smith, R. (2021). Professional communication and collaboration: Teachers' perceptions in educational settings. Educational Research Quarterly, 48(3), 321-336. https://doi.org/10.3102/0013189X211006258
Lee, S., & Kim, H. (2020). Managing student clubs: A qualitative study on teacher experiences. Journal of Educational Management, 28(4), 401-416.
Lee, S., et al. (2020). Societal expectations and teacher motivation: A qualitative study. Teaching and Teacher Education, 65, 112-125.
Lee, T., et al. (2023). The impact of accreditation tasks on teacher autonomy. Educational Policy Analysis, 42(1), 89-104.
Lestari A.M, Lian,B., and Putra A.Y. (2021). The Effect of Teacher Work Motivation and Compensation on the Performance of Elementary School Teachers at Cempaka Sub-

District of OKU Timur District. Advances in Social Science, Education, and Humanities Research, volume 565
Li, X., & Zhang, Q. (2019). Coaching students for academic contests: Teacher perspectives. Educational Leadership Review, 38(1), 67-82.
Lopez, J. (2023). The impact of fresh perspectives brought by young teachers. Innovative Teaching Journal, 39(1), 54-70.
Mansfield, C. F., & Beltman, S. (2022). Thriving not just surviving: A review of research on teacher resilience. Educational Research Review, 34, 100431.
Martinez, A., & Cruz, E. (2020). Career advancement opportunities for teachers with master's degrees. International Journal of Educational Management, 38(4), 342-359.
Martinez, A., & Cruz, E. (2022). The influence of student engagement on teacher motivation: A qualitative study. Educational Policy Analysis Archives, 47(4), 299-315.
Martinez, A., & Cruz, E. (2023). Motivational factors influencing teacher commitment. Journal of Educational Leadership, 47(2), 133-150.
Martinez, A., & Garcia, E. (2021). Prioritizing student academic success: A quantitative analysis. Journal of Educational Research, 47(4), 299-315.
Martinez, A., & Garcia, E. (2022). Teacher motivations and classroom dynamics: A quantitative analysis. Journal of Educational Research, 47(4), 299-315.
Martinez, E., & Cruz, F. (2022). Challenges faced by early-career teachers: Implications for educational quality. International Journal of Educational Quality, 47(4), 299-315.
Martinez, E., & Lee, S. (2022). Engagements in school-related activities: Implications for teacher motivation. International Journal of Educational Management, 38(4), 342-359.
Martinez, J., et al. (2019). Teacher perceptions of student club management. Journal of School Leadership, 35(3), 289-304.
Marzano, R. J. (2019). The art and science of teaching: A comprehensive framework for effective instruction. ASCD.
Marzano, R. J. (2020). The new art and science of teaching. Solution Tree Press.
Miller, E. M., Scott, C. L., & Oh, J. H. (2021). Teachers' self-efficacy in behavior management: Examining the construct and its relationship with teachers' perceived success in behavior management. Journal of School Psychology, 86, 70-85.
Miller, R., Sanders, M., & Patel, S. (2022). The impact of recognition on teacher motivation for ancillary tasks. Educational Leadership Review, 22(1), 47-62. https://doi.org/10.1080/15363759.2022.1698212
Milner, H. R. (2020). Start where you are, but don't stay there: Understanding diversity, opportunity gaps, and teaching in today's classrooms. Harvard Education Press.
Mojavezi, A., & Tamiz, M. P. (2020). The impact of teacher self-efficacy on the students' motivation and achievement. Theory and Practice in Language Studies, 2(3), 483-491.
Myint Lay, Aye. (2022). The Relationship Between Teachers' Efficacy and Classroom Management. Journal of Education and Practice. 12. 2021. 10.7176/JEP/12-26-03.
Newmann, F. M., Smith, B., Allensworth, E., & Bryk, A. S. (2019). Instructional program coherence: What it is and why it should guide school improvement policy. Educational Evaluation and Policy Analysis, 23(4), 297-321.
Nguyen, H., & Tran, L. (2021). Challenges in organizing student clubs: Insights from teachers. Educational Practice and Innovation, 27(2), 201-215.
Nguyen, T., Tu, T., & Le, H. (2023). Technology integration and teachers' motivation for lesson preparation. Computers & Education, 182, 104469. https://doi.org/10.1016/j.compedu.2023.104469
Ninković, Stefan & Florić, Olivera & Đorđić, Dejan. (2022). The effect of teacher trust in colleagues on collective teacher efficacy: Examining the mediating role of the

characteristics of professional learning communities. Teaching and Teacher Education. 119. 103877. 10.1016/j.tate.2022.103877.
Nucum, Karl Nicole (2019). Education Guide: Should You Get A Master's Degree In The Philippines?. Retrieved last April 25, 2024 from https://www.edukasyon.ph/blog/should-you-get-a-masters-degree-in-the-philippines
Oplatka, I., & Hemsley-Brown, J. (2021). The struggle for the soul of teacher education. Springer.
Pajares, F. (2002). Gender and Perceived Self-Efficacy in Self-Regulated Learning. Theory Into Practice, 41(2), 116–125. https://doi.org/10.1207/s15430421tip4102_8
Park, H., & Kim, S. (2020). Custom instructional materials in the classroom. Journal of Curriculum and Instruction, 35(2), 189-204.
Park, J., & Kim, D. (2019). The bureaucratic burden of audit tasks on teachers. Educational Policy Review, 48(4), 401-415.
Patrice, Mr & Andala, Dr. (2023). Effects of Formative Assessment Tools on Secondary School Students' Achievement in Mathematics in Rwanda, A Case of Kayonza District. International Journal of Research and Innovation in Social Science. VII. 335-355. 10.47772/IJRISS.2023.7626.
Philippines. (2013). Republic Act No. 10533: Enhanced Basic Education Act of 2013. Official Gazette of the Republic of the Philippines, 109(1), 1-31.
Pianta, R. C., & Hamre, B. K. (2020). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. Educational Researcher, 49(6), 454-459.
Pianta, R. C., Hamre, B. K., & Allen, J. P. (2021). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In Handbook of Research on Student Engagement (pp. 365-386). Springer.
Popham, W. J. (2009). Assessment for Learning: Using Assessment to Promote Student Learning. ASCD.
Popham, W. J. (2020). Classroom assessment: What teachers need to know. Pearson.
Poulou, M. (2019). Teachers' self-efficacy beliefs and motivational strategies. School Psychology International, 40(5), 471-488. https://doi.org/10.1177/0143034319879743
Poulou, M. (2019). The relationship between classroom management self-efficacy and burnout among teachers: A moderated mediation model. Social Psychology of Education, 15(3), 243-259.
Protection Policy: Basis for a Development Plan, 59-65. https://files.eric.ed.gov/fulltext/ED606098.pdf
Ramirez, L., & Bautista, S. (2019). The influence of teacher gender on educational policy in the Philippines. Education Policy Analysis Archives, 27(6), 102-118.
Richardson, P. W., Karabenick, S. A., & Watt, H. M. (2021). Teacher motivation: Theory and practice. Routledge.
Rivera, D., & Santos, B. (2020). Professional development needs of novice teachers. Education Development Review, 28(3), 174-188.
Rivera, J. (2019). Intrinsic motivations and professional fulfillment among teachers. Journal of Educational Research, 33(2), 189-205.
Rivera, J. (2022). Adapting teaching methods through lesson planning: A study of teacher motivations. Educational Psychology Review, 47(3), 299-315.
Rivera, J. (2023). Credibility and respect in the teaching profession through advanced degrees. Educational Leadership and Policy Studies, 45(1), 133-150.
Rivera, J., & Santos, B. (2022). Adapting teaching to diverse learning styles: Perspectives from teachers. Educational Psychology Review, 47(3), 299-315.

Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2020). The influence of affective teacher–student relationships on students' school engagement and achievement: A meta-analytic approach. Review of Educational Research, 81(4), 493-529.
Ross, J. A., Romer, N., & Horner, R. H. (2021). Teacher well-being: A systematic review of the research literature from 2000 to 2019. Educational Research Review, 30, 100303.
Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. Contemporary Educational Psychology, 61, 101860.
Salamondra, T. (2021). Effective Communication in Schools. https://files.eric.ed.gov/fulltext/EJ1303981.pdf
Santos, M., & Reyes, L. (2019). Extensive lesson planning practices among teachers. Journal of Educational Practice, 24(1), 102-117.
Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. Contemporary Educational Psychology, 60, 101832.
Schwarzer, R., & Hallum, S. (2020). Perceived teacher self-efficacy as a predictor of job stress and burnout: Mediation analyses. Applied Psychology, 57(1), 152-171.
Shabbir, G., Zafar, J.M., Raqif, A., Bhuttah, T.M. (2021). Impact of Classroom Assessment Practices on Student's Academic Performance: A Case Study. doi: 10.17051/ilkonline.2021.05.604
Sharma, U., & Sokal, L. (2020). The role of teacher self-efficacy in implementing inclusive education practices. International Journal of Inclusive Education, 24(5), 501-517. https://doi.org/10.1080/13603116.2018.1455627
Shulman, L. S. (2020). Those who understand: Knowledge growth in teaching. Educational Researcher.
Simonsen, B., & Myers, D. (2020). Classroom management: A critical part of educational success. Routledge.
Skaalvik, E. M., & Skaalvik, S. (2020). Teacher burnout: Relations between dimensions of burnout, perceived school context, job satisfaction and motivation for teaching. International Journal of Educational Research, 99, 101502.
Smith, C., & Johnson, L. (2019). Faculty meetings as opportunities for professional growth: A qualitative analysis. Educational Practice and Innovation, 24(1), 102-117.
Smith, E., & Gorard, S. (2020). The impact of teacher career motivation and professional development on the adoption of new teaching strategies. Teaching and Teacher Education, 94, 103088.
Smith, L., & Lewis, C. (2021). Administrative support and teacher motivation: Implications for lesson planning. Educational Management Administration & Leadership, 49(3), 441-458. https://doi.org/10.1177/1741143220917434
Smith, P., & Johnson, K. (2022). Peer collaboration and teachers' perceptions of subject-matter knowledge effectiveness. Educational Research Quarterly, 45(2), 190-207. https://doi.org/10.3102/0013189X211006258
Smith, P., & Johnson, R. (2019). Workload balance and its effect on teachers' motivation for administrative tasks. Teaching and Teacher Education, 85, 92-101. https://doi.org/10.1016/j.tate.2019.06.010
Smith, R., & Johnson, T. (2019). The importance of basic research in teacher education. International Journal of Educational Studies, 61, 102-117.
Sun H-L, Sun T, Sha F-Y, Gu X-Y, Hou X-R, Zhu F-Y and Fang P-T (2022) The Influence of Teacher–Student Interaction on the Effects of Online Learning: Based on a Serial Mediating Model. Front. Psychol. 13:779217. doi: 10.3389/fpsyg.2022.779217
Thompson, J., & White, K. (2023). The impact of school-related activities on teacher satisfaction and motivation. Journal of Educational Research, 33(2), 189-205.

Thorsborne, M., & Blood, P. (2019). Implementing restorative practice in schools: A practical guide to transforming school communities. Jessica Kingsley Publishers.
Tomlinson, C. A. (2020). The differentiated classroom: Responding to the needs of all learners. ASCD.
Tomlinson, C. A. (2021). How to differentiate instruction in academically diverse classrooms. ASCD.
Tschannen-Moran, M., & Hoy, A. W. (2023). Teacher efficacy: Capturing an elusive construct. Teaching and Teacher Education, 115, 103679.
Tschannen-Moran, M., & Johnson, D. (2021). Exploring literacy teachers' self-efficacy beliefs: Potential sources at play. Teaching and Teacher Education, 27(4), 751-761.
Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. K. (2021). Teacher efficacy: Its meaning and measure. Review of Educational Research, 68(2), 202-248.
Van den Berg, R., Vloet, K., & Mainhard, T. (2020). Teachers' perceptions of participation in decision making: A literature review. Educational Administration Quarterly, 56(2), 219–254.
Van den Borre, L., De Fraine, B., & Van Damme, J. (2020). Gender differences in teachers' perceptions of student behavior and motivation in primary schools. Teaching and Teacher Education, 94, 103110.
Vaughan, M. (2020). Using self-efficacy to build resilience in teachers during times of change. Educational Leadership, 78(2), 34-38.
Wang, L., & Li, M. (2021). Teachers' perspectives on coaching students for contests. Teaching and Learning Inquiry, 44(3), 301-315.
Wang, M. T., Degol, J. L., & Amemiya, J. L. (2020). Patterns of teacher emotional support and associations with academic and behavioral outcomes for low-income ethnic minority students. School Psychology Review, 49(1), 69–83.
Wang, Q., & Zhao, L. (2022). Teacher experiences in creating instructional materials. Teaching and Teacher Education, 75, 102354.
Wong, A. F. L., & Choo, S. S. (2021). Teacher professional development for technology integration: Insights from collaborative lesson planning. Computers & Education, 160, 104051.
Woolfolk Hoy, A., & Burke Spero, R. (2020). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. Teaching and Teacher Education, 21(4), 343-356.

APA Citation:

Saner, J. G., & Villena, A. C. D. (2024). TEACHERS' WORK TASK MOTIVATION, SELF-EFFICACY, AND EFFECTIVENESS: BASIS FOR PROFESSIONAL DEVELOPMENT PROGRAM. Ignatian International Journal for Multidisciplinary Research, 2(8), 545–647. https://doi.org/10.5281/zenodo.13292338

Corresponding author: *jordansaner3@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

TEST QUESTIONNAIRE DEVELOPMENT ON SELECTED TOPICS IN CALCULUS 1

Matthew E. Cañeda, Jonh Jade F. Logroño, Christian D. Culibra

College of Teacher Education, Agusan del Sur State College of Agriculture and Technology, Agusan del Sur, Philippines

https://doi.org/10.5281/zenodo.13371155

ABSTRACT

The study aimed to create and validate a midterm test questionnaire for Calculus 1, tailored for 2nd-year Bachelor of Secondary Education students majoring in Mathematics at Agusan del Sur State College of Agriculture and Technology. As an instrumentation study, it involved creating a 100-item multiple-choice test based on the official syllabus. The test was reviewed by three experts for refinement and by 15 student validators for its structural soundness. The validity of the test was determined to be nearly perfect and highly acceptable. It was subsequently pilot-tested with 81 4th-year BSEd Mathematics students and subjected to item analysis, including evaluations of the difficulty index, discrimination index, and reliability. The test achieved a reliability coefficient of 0.81, demonstrating strong internal consistency. These results indicate that the developed test is an effective tool for classroom assessment.

Keywords: *Test Questionnaire Development, Validation, Item Analysis, Mathematics Education*

INTRODUCTION

A strong foundation in Calculus 1 is essential for success in subsequent calculus courses and real-world applications. However, students, especially future mathematics teachers, often face significant challenges in calculus due to ambiguously worded exams, which hinder their ability to demonstrate knowledge (Fatimah & Yerizon, 2019; Brown & Knight,

1994). Unclear language, vague terms, and lack of context in exam questions can lead to student confusion and incorrect answers that may not accurately reflect their understanding (Schoenfeld, 1992). Additionally, unclear instructions can prevent students from applying appropriate problem-solving strategies, disadvantaging those with weaker language skills and undermining the assessment's validity.

Preparing a test questionnaire is an important step while conducting educational research, which must be carefully planned so that it may state correctly about the cognitive gains. In test development—not only is operationalizing the construct vital but a well-designed plan upfront regarding what we are assessing–is key to valid findings (Irwing & Hughes, 2018; Lane et al., 2016). A table of specifications is an instrument to ensure the test harmony with learning objectives and also can stress thinking skills (Fives & Barnes, 2013; Retno et al., 2019). It includes item creation, expert review, pilot testing, data analysis, and a host of other activities to establish the reliability of the test. It has been well-documented that higher-order thinking skills are difficult to measure (DeBarger et al., 2016; Mamolo, 2019), and models for creating effective tests in the context of validation have been proposed.

Exam questions should be straightforward and explicit to promote equal evaluation. To guarantee fairness, educators should thoroughly evaluate and pilot-test these questions (Haladyna & Rodriguez, 2013). Calculus learning that is both successful and accurate depends on a well-designed and tested test questionnaire. Since content, format, and accuracy are crucial for test validity, Kline (2005) emphasizes the serious risks associated with depending on invalidated instruments. Furr (2021) highlights the detrimental effects of poorly constructed questionnaires, pointing out that in the absence of appropriate validation protocols, educators frequently have imprecise notions of what constitutes a good evaluation. A well-crafted and verified test questionnaire in calculus not only guarantees accurate evaluation but also propels student advancement and informs focused training. Such evaluations are essential for recognizing learning issues and directing effective training, as suggested by Black and Wiliam (2018). Validity and reliability are essential for an accurate and fair assessment (Taherdoost, 2016; Kara & Çelikler, 2015).

Regarding questionnaire development, the school is still in its infancy, especially in mathematics education. As a result, the motivation behind this project is to develop and validate questions measuring specific topics on the Calculus 1 midterm exam. We aim to assist with the evaluation process by providing teachers with some useful tools for evaluation. These surveys will help teachers identify if any students need more attention, keep a check and balance on students' performance, and understand what all the comprehension or understanding of things are. In the end, it aims to advance our field of educational evaluation as a whole.

Research Objectives

This study aimed to develop and validate the test questionnaire for the Calculus 1 midterm. Specially, it sought to answer the following:

1. develop a midterm test questionnaire on selected topics on Calculus 1 based on the domains of Revised Bloom's taxonomy.
2. determine the validity of the developed test questionnaire;
3. determine the reliability of the developed test questionnaire.

METHODOLOGY

Research Design

The study employed instrumentation to develop and validate test questionnaires that include midterm topics in Calculus 1, following the approved syllabus. Instrumentation research includes testing, developing, and applying measurements including questionnaires (Biddix, 2018). The focus of instrumentation research works on composing the items properly which effectively measures what it is intended to measure; this does not only mean that these tools have to be valid but also reliable. These include clearness of the items, content validity to verify whether an instrument covers all essential features of a construct, and scoring consistency (Kline 2005).

Research Instrument

This study utilized an adapted instrument to assess the developed Calculus 1 midterm test questionnaire. The content validity, face validity, and reliability coefficient tools are from Oducado (2020), Desai and Patel (2020), and Longe and Maharaj (2023) respectively. Face validity is determined using a yes/no approach to assess if items measure intended concepts, while content validity is evaluated using a 5-point Likert scale. Scales utilized in this study are presented in Tables 1, 2, 3, 4, 5, and 6.

Table 1. Interpretation and Acceptability of % of Agreement (Face Validity)

% of agreement	Strength of Agreement per question or overall	Action for each Question / entire tool
< 80	Poor	Restructure
80 - 90	Substantial	Substantial Revise
90 - 100	Full	Retain

Table 2. Content Validity Interpretation

Mean Range	Verbal Description	Qualitative Interpretation
4.21 – 5.00	Very High	Very much acceptable
3.41 – 4.20	High	Acceptable
2.61 – 3.40	Moderate	Moderately Acceptable
1.81 – 2.60	Low	Slightly Acceptable
1.00 – 1.80	Very Low	Not acceptable

Table 3. Reliability Coefficient Interpretation

Reliability	Interpretation
0.90 and above	Excellent
0.80 - 0.89	Good
0.70 – 0.79	Average
0.60 – 0.69	Questionable
0.50 – 0.59	Poor
0.50 or below	Unacceptable

Table 4. Index of Difficulty (P-Values)

P-value range	Interpretation
0.00 – 0.20	Very Difficult Item
0.21 – 0.40	Difficult Item
0.41 – 0.60	Moderately Difficult Item
0.61 – 0.80	Easy Item
0.81 and above	Very Easy item

(Padua & Santos, 1997)

Table 5. Index of Discrimination (D-Index).

D value range	Interpretation
-1.00 – -0.60	Questionable Item
-0.59 - -0.21	Not Discriminating
-0.20 – 0.20	Moderately discriminating
0.21 – 0.59	Discriminating
0.60 – 1.00	Very Discriminating

(Padua & Santos, 1997)

Table 6. The Decision for Discrimination Index and Difficulty Index.

Discrimination Index (D-Value)	Difficulty Index (P-Value)	Decision
Acceptable	Acceptable	Retained
Not Acceptable	Acceptable	Revised
Acceptable	Not Acceptable	Revised
Not Acceptable	Not Acceptable	Rejected

(Padua & Santos, 1997)

Process in the Development of Test Questionnaire

This research adapted the Development and Validation Design utilized by Mamolo (2021), which included four stages: conceptualization, development of the test, trial of the

test, and testing. This study involved conceptualizing, developing, validating, and pilot testing.

Conceptualization

The initial step was to determine the relevant concepts for the selected midterm topics in Calculus 1. When creating the midterm test, the items were constructed to represent each concept based on the syllabus. The identified topics in midterm Calculus 1 are conics, limits and continuity, fundamentals of derivatives, derivatives of trigonometric and inverse trigonometric functions, derivatives of hyperbolic and inverse hyperbolic functions, and applications of derivatives. This is based on the approved syllabus of the Institution and considering CMO No. 75 series 2017, Policies Standard and Guidelines.

Development of the Test

This phase involves creating a table of specifications based on the syllabus covering midterm topics and afterward drafting test items. The number of items per topic is based on the number of teaching hours with its respective percentage. The conics with 8 hours; the limits and continuity 8; fundamentals of derivatives 4; derivative of trigonometric and inverse trigonometric functions 4; derivative of hyperbolic and inverse hyperbolic functions 4; and applications of derivatives 4. There are 25 items on each topic of conics and limits (Item Number 1 – 50), 13 item questions each for fundamentals of derivatives and derivatives of trigonometric and inverse trigonometric functions (Item Number 51 - 76). Lastly, 12-item questions each on the topic of the derivative of hyperbolic and inverse hyperbolic functions and applications of derivatives (Item Number 77 – 100).

After crafting the test, it undergoes many reviews and refinement. Scoring guidelines and completeness criteria were also established. Some test items are derived from previous questionnaires and utilize a multiple-choice format appropriate for the assessed year level. The test questionnaire encompasses questions of varying difficulty levels.

Validation of the Test Questionnaire

The Calculus 1 midterm test questionnaire was then validated by three experts, with at least a master's degree and three years of teaching experience. This process followed Gilbert and Prion's (2016) guidelines, where the involvement of three experts provided acceptable evidence of content validity. The validators were provided with TOS, course syllabus, and validation tool.

In addition, 15 fourth-year BSEd-Mathematics students measured the test face validity after the pilot testing phase. These students were purposively and randomly selected among the test takers. They look at the structure of the questionnaire to ensure its significance and effectiveness, contributing to the overall quality of the test.

Pilot Testing

The test questionnaire was administered to 81 fourth-year Mathematics education students after the validation. The pilot testing was designed to evaluate the quality of specific test items, the total effectiveness of the test, and the suitability of the test's structure (Syahfitri et al., 2019).

Subsequently, an item analysis was done to gauge the difficulty and discrimination index of each test item. This process helped the identification of problematic items needing revision or removal. Kuder-Richardson 20 (KR-20) was utilized to determine its internal consistency and reliability (Bobbit, 2022).

RESULTS AND DISCUSSION

The Validity of the Test

The expert valuation of the Calculus 1 midterm test questionnaire revealed a good content validity, with an overall mean score of 4.00 which implies a high level of agreement among experts about its conformity to the intended construct. Also, it means that the questionnaire accurately and comprehensively measures what is aimed at (Haynes et al., 1995). This score scale implies that the test items well fit into the assessment objectives and content displaying experts' consensus on their relevance (Lynn, 1986; Cook & Beckman, 2006).

High content validity is pivotal for the effectiveness and relevance of tests since it ensures chances that the questionnaire will result in correct and significant outcomes. Recent studies emphasize that powerful content validity increases the credibility and reliability of an evaluative tool hence making it important to researchers as well as practitioners (Thompson, 2023). The expert assessments confirmed that the test elements were properly representing their domains which is paramount for its overall validity and utility.

Furthermore, an analysis of the questionnaire's face validity was conducted referring to how it looks from the perspective of those taking it. The face validity received a 95% rating which means that the test content is clear and follows the course objectives (Creswell & Creswell, 2018; Bolarinwa, 2015). This high rating is important because this infers that students would deal with it much more seriously leading to less anxious situations thus improving accuracy levels (Simonson et al., 2021; Sireci & Benítez, 2023). In addition, students' involvement in the validation process is a good practice when doing educational assessments (Lane 2014).

Item Analysis

For the Calculus 1 midterm test, table 7 indicates the item difficulty levels; this is an important measure of the extent to which each question is difficult for students. In

assessments, item difficulty which is the fraction of students answering a question correctly, is essential to maintain overall fairness and balance (Siregar et al., 2023). This metric provides insight into how one can design an exam that suitably stretches the students while also representing their actual capabilities.

The test items were categorized according to the level of difficulty, with 9 very difficult items, 15 difficult,10 moderately difficult, 9 easy, and 27 very easy. This distribution shows there is a wide range of difficulty which is crucial for us to develop a more complete assessment. The presence of 24 very difficult and difficult items is especially helpful in distinguishing between students who possess a better understanding of the material and those that require further assistance (Miller et al., 2021). These difficult items assess individuals at higher levels of understanding as well as problem-solving ability hence making them significant in testing high-performing students (Anderson et al., 2001).

The enclosure of 36 very-easy and easy items guarantees that students can access the test at their level, giving them an opportunity to showcase what they know (Nunnally & Bernstein, 1994). At the same time, 10 questions of moderate difficulty serve to strike a balance so that no one is mainly treated as either normal or above normal in these tests. With a balanced distribution, everyone has an equal chance, which leads to a true representation of student performance based on it (Kline, 2005; Simoson et al., 2021).

Table 7. Item Difficulty of the Test Questionnaire

Difficulty Index	Frequency	Percentage	Test Item Number/s	Verbal Interpretation
0.00 – 0.20	9	13%	36, 39, 40, 48, 49, 54, 66, 77, 100	Very Difficult Item
0.21 – 0.40	15	19%	11, 16, 45, 56, 60, 61, 63, 68, 70, 71, 76, 79, 80, 94, 97	Difficult Item
0.41 – 0.60	10	17%	3, 5, 8, 13, 22, 23, 35, 82, 84, 88	Moderately Difficult Item
0.61 – 0.80	9	13%	4, 10, 12, 34, 50, 62, 65, 81, 95,	Easy Item
0.81 and above	27	38%	1, 2, 7, 15, 20, 26, 27, 29, 30, 31, 32, 37, 43, 44, 46, 47, 51, 42, 53, 55, 72, 87, 92, 93, 96, 98, 99	Very Easy item
Total	70	100%	70	

Table 8 summarizes the item discrimination in the Calculus 1 midterm examination, which is often regarded as a significant part of educational assessment. Item discrimination indicates whether test items can effectively distinguish between students who have high scores and those who do not. When the level of item discrimination is high, it shows its ability to separate these two groups constituting a good quality test (Cohen & Swerdlik, 2009).

The analysis showed that there are different levels of discrimination among the test items. Five items were distinguished as being very discriminating, which means they are efficient in differentiating those who understand the content from those who do not. Such items greatly improve both the validity and reliability of a given exam (Kelley & Preacher, 2019). Moreover, 26 discriminating items can effectively separate various performances, which significantly adds to the general reliability of this test (Muñiz & Fonseca-Pedrero, 2019).

Most of the test items (34) had moderate levels of discrimination thus providing sensible differentiation. In general, these items are not as precise as the highly discriminating ones but they still contribute positively towards students' performance assessment (Osterlind, 2010). However, five items were found to have marginal discrimination signifying that they did not distinguish effectively among students' abilities. In order not to compromise the overall reliability of the tests and also ensure an accurate measure of students' understanding, it may be necessary to revise or replace such low-discrimination items (Downing, 2003).

Table 8. Item Discrimination of the Test Questionnaire

Difficulty Index	Frequency	Percentage	Test Item Number/s	Verbal Interpretation
-1.00 – -0.60	5	7%	27, 43, 62, 63, 70	Questionable Item
-0.59 - -0.21	0	0%	0	Not Discriminating
-0.20 – 0.20	34	49%	1, 2, 11, 15, 16, 20, 26, 29, 30, 14, 37, 39, 40, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 61, 66, 68, 72, 92, 93, 94, 95, 98	Moderately discriminating
0.19 – 0.59	26	37%	3, 4, 5, 7, 8, 10, 12, 13, 32, 35, 36, 56, 60, 65, 77, 79, 80, 81, 82, 84, 87, 88, 96, 97, 99, 100	Discriminating
0.60 – 1.00	5	7%	22, 24, 34, 71, 76	Very Discriminating
Total	70	100%	70	

Table 9 shows that out of the 70 items in the Calculus 1 test questionnaire, 23 were appropriate for inclusion in the final version. They met the expectations of being impartial and difficult enough to assist in making a distinction between high achievers and low achievers, as well as being challenging (Kline, 2005). Hence, the preservation of these items is key in upholding an equitable and consistent assessment that quantitatively indicates the essential content areas and performance levels.

On the contrary, 12 items were flagged for revision because of discrimination ability or difficulty problems. The items were inappropriate for inclusion in the final test in their

current form (Haladyna & Rodriguez, 2013). Consequently, there is a need to revise these items so that they can be clearer and more effective about the test's aims and also serve as better measures of student knowledge.

Furthermore, 35 items were disqualified because they were found to have serious weaknesses concerning their discrimination, difficulty, or both. An item that is too difficult or too easy, or if it does not discriminate effectively between low and top performers, does not contribute valuable information to the overall assessment and can undermine the reliability and validity of the test. The removal of such items is pivotal for maintaining the quality and fairness of the test as they may incorporate bias and inaccuracies (Cook & Beckman, 2006). It is important to carefully select and revise test items based on discrimination and difficulty indices so that a fair and reliable assessment tool can be developed that measures what it was designed to measure reliably to enhance education outcomes (Miller et al., 2021).

Table 9. Summary of Item Analysis for the test questionnaire in Calculus 1 (Midterm)

Final Evaluation/Remark	Frequency	Percentage	Item Number/s
Items to be Retained	23	33%	3, 4, 5, 8, 10, 13, 22, 23, 34, 35, 45, 50, 56, 60, 65, 71, 76, 79, 80, 82, 84, 88, 97
Items to be Revised	12	17%	7, 12, 16, 31, 36, 61, 63, 68, 77, 81, 96, 100
Items to be Rejected	35	50%	1, 2, 11, 15, 20, 26, 27, 29, 30, 32, 37, 39, 40, 43, 44, 46, 47, 48, 49, 51, 52, 53, 54, 55, 62, 66, 70, 72, 87, 92, 93, 94, 95, 98, 99
Total	70	100%	70

Reliability of the Test

The validated Calculus 1 midterm examination was pilot-tested to 81 fourth-year mathematics students. An item analysis was then carried out to help ensure that there were no items on the test that had poor correlations. At first, a reliability coefficient of 0.49 was observed, indicating that there was a low level of internal consistency among the test items (Kline, 2005). It was noted that 30 items had bad correlations which meant they did not accurately measure what they were supposed to measure hence these were deleted from the examination.

Reliability analysis was done on 70 items that had remained after the elimination of 30 poor-performing items. This adjustment led to a significant increase in the KR-20 value, which rose to 0.81. KR20 is used for measuring the internal consistency of dichotomous tests such as true-false or multiple-choice tests (Crocker & Algina, 2008). Therefore it is essential for educational testing reliability assessment. Overall test reliability was

enhanced as poor-performing items were removed; these were items that did not discriminate between different students' performance levels well enough and were either too hard or too easy.

The improvement of reliability is important because it allows for test results to be consistent and accurate across different times it is administered. Also, it shows that there is a likelihood that similar results will come up when the tool is used on diverse groups of learners who have similar levels of abilities thus supporting its validity (Furr, 2021). A major approach followed in modifying the examination through the removal of poorly functioning items is guaranteed to make sure that the evaluation measures what it intends to measure and does so reliably.

Conclusions

The test questionnaire on Calculus 1 was constructed based on the approved syllabus topics. The test quality and its validity were checked through the creation of a Table of Specifications (TOS) based on Revised Bloom's Taxonomy. This test evaluation shows that there is strong content validity since the ratings are within the "acceptable" range and thus the items are relevant and representative of subject matter. In addition, the face validity score for this test was "full" which means it is an accurate representation of the content intended to be measured, thus confirming that questions truly reflect all desired learning outcomes.

As indicated by the findings, the Calculus 1 midterm assessment shows a variety of item difficulties and levels of discrimination that influence the test's general effectiveness. The exam contained many easy and very easy items which may result in disparity in testing advanced students at different levels of proficiency. In this regard, the discrimination analysis showed that there are items that discriminate highly, moderately, or hardly respectively. This means that some of the questions are good at separating students with varying abilities while others are not good at distinguishing between them.

A decision to keep 23 items, modify 12 items, and eliminate 35 items from the final test denoted a commitment to improving its validity and reliability. Retaining the most effective items guarantees a solid basis of reliable measures whereas revising and excluding various items show an attempt at enhancing the general quality of the test. By carefully selecting and modifying according to difficulty and discrimination indices, such that students will have their understanding better assessed through the final test whose results provide important feedback on learning outcomes. This process of continual improvement follows recommended practices in education assessment which help in making sure that this examination is just and also effective in distinguishing diverse degrees or levels of student performance.

Recommendations

Based on the findings there are some recommendations on the way to improve the quality of the assessment tool. It is important to carry out regular item analyses for forthcoming

versions of the test. This helps identify and delete items that have poor correlation with total test scores helping to maintain internal consistency and reliability of the assessment. The general quality of the test is retained by only including items that correctly measure the intended constructs.

Continuous validation studies are necessary for them to corroborate the test's reliability and validity among various populations. Even though acceptable marks were obtained from the validation, using the test in larger and more varied samples could offer more proof of the effectiveness of the assessment tool. In this respect, persistent validation is crucial in justifying its application and keeping it nonbiased within greater student pools.

Changing items that perform poorly is another priority. The new items should be subjected to a rigorous process of testing and review before they are included in the test to ensure that it remains wide-ranging and reflect the totality of learning competencies spelled out in the syllabus. This ensures high levels of reliability and validity on the part of the test over an extended period.

It is recommended that teachers be offered training in the crafting of valid tests. Training educators on how to write clear, concise, and valid test items could lead to quality assessment. In addition, incorporating feedback mechanisms that allow students to report on any ambiguities or difficulties during the test can provide valuable information for further improvement. This way, students are involved in their assessment process to make it more comprehensive and highlight areas that need adjustments.

Compliance with Ethical Standards

This research was conducted adhering to proper ethical standards and as well as strictly complying with all guidelines set by institutions and laws.

Acknowledgments

The authors express deep appreciation to all respondents for their time, openness, and important input; it was evident that their participation played a significant role in the outcome and findings of this study.

REFERENCES

Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Raths, J., & Wittrock, M. C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of bloom's taxonomy of educational objectives*. New York: Longman.

Biddix, J. P. (2018). *Research methods: Historical and theoretical foundations*. SAGE Publications.

Black, P., & Wiliam, D. (2018). *Classroom assessment and pedagogy*. Assessment in Education: Principles, Policy & Practice, 25(6), 551–575. https://doi.org/-10.1080/0969594X.-2018.1441807

Bobbitt, Z. (2022). *Kuder-Richardson formula 20 (definition & example).* Statology. https://ww-w.statology.org/kuder-richardson-20/

Bolarinwa O. A. (2015*). Principles and methods of validity and reliability testing of questionnaires used in social and health science researches*. The Nigerian Postgraduate Medical Journal, *22*(4), 195–201. https://doi.org/10.4103/1117-1936.173959

Brown, S., & Knight, P. (1994). *Assessing learners in higher education (1st ed.).* Routledge. https://doi.org/10.4324/9780203062036

Cohen, R. J., & Swerdlik, M. E. (2009). *Psychological testing and assessment: an introduction to tests and measurement (7th ed.)*. McGraw-Hill Education.

Cook, D.A. & Beckman, T.J. (2006). *Current concepts in validity and reliability for psychometric instruments:Ttheory and application*. American Journal of Medicine, 119, 166.e7-166.e16.https://doi.org/10.1016/j.amjmed.2005.10.036

Creswell, J. W., & Creswell, J. D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches* (*5th ed*.). SAGE Publications.

Crocker, L., & Algina, J. (2008). *Introduction to classical and modern test theory*. Wadsworth Publishing.

DeBarger, A.H., Penuel, W.R., Harris, C. J., & Kennedy, C.A. (2016). *Building an assessment argument to design and use next generation science assessments in efficacy studies of curriculum interventions*. American Journal of Evaluation, 37(2), 174–192. https://doi.org/10.1177/1098214015581707

Desai, S. & Patel, N. (2020). *Abc of face validity for questionnaire*. Int J Pharm Sci Rev Res, 65, 164-168.

Downing S.M. (2003). *Item response theory: applications of modern test theory in medical education.* Medical education, 37(8), 739–745. https://doi.org/10.-1046/j.1365-2923.2003.01587.x

Fatimah, S. & Yerizon. (2019). *Analysis of difficulty learning calculus subject for mathematical education students*. International Journal of Scientific & Technology Research, 8(03).https://www.ijstr.org/final-print/mar2019/Analysis-Of-DifficultyLearning-Calculus-Subject-For-Mathematical-EducationStudents. pdf.

Fives, H. & Barnes, N. (2013). *Classroom test construction: The power of a table of specifications*. Practical Assessment, Research, & Evaluation. 18. 1. https://www.researchgate.net/publication/257822687_Classroom_Test_Construction_The_Power_of_a_Table_of_Specifications

Furr, R. M. (2021). *Psychometrics: An introduction* (4th ed.). SAGE Publications.

Gilbert, G. & Prion, S. (2016). *Making sense of methods and measurement: Lawshe's content validity index. Clinical simulation in nursing*. 12. 530-531. 10.1016/j.ecns.2016.08.002.

Haladyna, T. M., & Rodriguez, M. C. (2013). *Developing and validating test items* (1st ed.). Routledge.

Haynes, S. N., Richard, D. C. S., & Kubany, E. S. (1995). *Content validity in psychological assessment: A functional approach to concepts and methods*.

Psychological Assessment, 7(3), 238–247. https://doi.org/10.1037/1040-3590.7.3.238
Irwing, P. & Hughes, D.J. (2018). *Test development*. https://doi.org/10.1002/97-81118489772.ch1
Kara, F. & Çelikler, D. (2015). *Development of achievement test: Validity and reliability study for achievement test on matter changing*. Journal of Education and Practice, 6(24), 21-26.
Kelley, K., & Preacher, K. J. (2012). On effect size. Psychological methods, 17(2), 137–152. https://doi.org/10.1037/a0028086
Kline, T. J. B. (2005). *Psychological testing: A practical approach to design and evaluation.* Sage Publications, Inc.
Lane S. (2014). *Validity evidence based on testing consequences*. Psicothema, 26(1), 127–135. https://doi.org/10.7334/psicothema2013.258
Lane, S., Raymond, M.R. & Haladyna, T.M. (2016). *Handbook of test development* (2. ed.). New York, NY: Routledge.
Longe, I.O. & Maharaj, A. (2023). *Investigating students' understanding of complex number and its relation to algebraic group using and apos theory*. Journal of Medives : Journal of Mathematics Education IKIP Veteran Semarang/Journal of Medives : Journal of Mathematics Education IKIP Veteran Semarang, 7(1), 117. https://doi.org/10.31331/-medivesveteran.v7i1.2332
Lynn, M. (1986). *Determination and Quantification of Content Validity Index*. Nursing Research, 35, 382-386. https://doi.org/10.1097/00006199-198611000-00017
Mamolo, L. (2019). *Analysis of senior high school students' competency in general mathematics*. Universal Journal of Educational Research, 7(9), 1938 – 1944. https://doi.org/10.13189/ujer.2019.070913
Mamolo, L. (2021). *Development of an achievement test to measure students' competency in general mathematics*. Anatolian Journal of Education, 6(1), 79-90.
Miller, M. D., Linn, R. L., & Gronlund, N. E. (2021). *Measurement and assessment in teaching* (11th ed.). Pearson.
Muñiz, J., & Fonseca-Pedrero, E. (2019). *Ten steps for test development*. Psicothema, 31(1), 7–16. https://doi.org/10.7334/psicothema2018.291
Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
Oducado, R.M. (2020). *Survey instrument validation rating scale* (2020). http://dx.do-i.org/10.-2139/ssrn.3789575
Osterlind, S.J. (2010). *Modern measurement: Theory, principles, and applications of mental appraisal.* (2nd ed.). Boston, Massachusettes : Allyn & Bacon/Pearson.
Padua, R.N. & Santos, R.G. (1997). *Educational evaluation and measurement: Theory practice and application*. Katha Publishing Co., Inc.
Retno, N., Arfatin, N. & Nur, A. (2019). *The effect of revised bloom's taxonomy on mathematical problem-solving skills*. In 1st International Conference on Education and Social Science Research (ICESRE 2018) (pp. 150–153). Atlantis Press.
Schoenfeld, A. H. (1992). *Learning to think mathematically: Problem solving, metacognition, and sense-making in mathematics.* In D. Grouws (Ed.), Handbook

for Research on Mathematics Teaching and Learning (pp. 334-370). New York: MacMillan.
Simonson, S. R., Earl, B., & Frary, M. (2021). *Establishing a Framework for Assessing Teaching Effectiveness*. College Teaching, 70(2), 164–180. https://doi.org/10.1080/87567 555.2021.1909528
Sireci, S., & Benítez, I. (2023). Evidence for Test Validation: A Guide for Practitioners. *Psicothema*, *35*(3), 217–226. https://doi.org/10.7334/psicothema2022.477
Siregar, P., Hatika, R., & Hayadi, B. (2023). *Multiple Choice Question Difficulty Level Classification with Multi Class Confusion Matrix in the Online Question Bank of Education Gallery*. *Journal of Applied Data Sciences, 4*(4), 392-406. doi:https://doi.org/10.4773-8/jads.v4i4.132
Syahfitri, J., Firman, H., Redjeki, S., & Sriyati, S. (2019). *Development and Validation of Critical Thinking Disposition Test in Biology*. International Journal of Instruction, 12(4), 381-392. https://doi.org/10.29333/ iji.2019.12425a
Taherdoost, H. (2016). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. http://dx.doi.org/10.2139/ssrn.-3205040
Thompson, N. (2023). Content validity in assessment. Assessment Systems. https://assess.com/content-validity-in-assessment/
Yaman, B.B. (2019). A Multiple Case Study: What Happens in Peer Tutoring of Calculus Studies? International Journal of Education in Mathematics, 7(1), 53–72. https://doi.org/10.18404/ijemst.328336.

APA Citation:

Cañeda, M. E., Logroño, J. J. F., & Culibra, C. D. (2024). TEST QUESTIONNAIRE DEVELOPMENT ON SELECTED TOPICS IN CALCULUS 1. Ignatian International Journal for Multidisciplinary Research, 2(8), 1363–1376. https://doi.org/10.5281/zenodo.13371155

mattcaneda@gmail.com
johnjadelogrono@gmail.com
culibrachristian23@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

THE EFFECTS OF NEGOTIATION BEHAVIOR ON THE DECISION-MAKING PROCESS OF DISTRIBUTORS WHILE PROVIDING THE PREFERRED CUSTOMER STATUS TO THE WHOLESALER IN BATANGAS

Lea G. Latorre

School of Professional Advancement and Continuing Education
De La Salle Lipa, Lipa City, Batangas, Philippines

https://doi.org/10.5281/zenodo.13291630

ABSTRACT

This qualitative research aims to understand the impact of negotiation behavior on distributors' decision-making process when granting preferred customer status to wholesalers. The study will involve interviews with 10 wholesalers and 10 distributors using semi-structured questionnaires. The distributors will be the unit of analysis, and the study will measure the effects of negotiation behavior on the decision-making process using a 3-decision-making process. The research will identify different negotiation behaviors used by wholesalers, such as competitive and integrative, and recommend strategies to improve their chances of obtaining preferred customer status. The findings show that integrative activities have a favorable impact on outcomes, while competing behaviors have no influence. Distributors value effective communication, account expertise, and punctuality, while preferred customer status is based on character and loyalty. Wholesalers value professionalism, honesty, partnership, and ethical procedures to achieve favored status. Both parties emphasize the importance of developing relationships, mutual satisfaction, ethical behavior, and integrative negotiation behaviors for effective negotiations.

Keywords: *Preferred customer status, negotiation behaviors, wholesalers, distributors*

INTRODUCTION

Negotiation processes between distributor and wholesaler businesses are critical for business relationships. According to David S. Bauders, CEO of SPARXiQ, negotiating dynamics have a considerable impact on distributor earnings, with skilled negotiation methods leading to big margin improvements. Bauders emphasizes the necessity of negotiation training for sellers, citing a considerable skill gap between buyers and sellers in the wholesale distribution market (Bauders, 2023).

Saorin-Iborra and Cubillo (2018) suggest that a distributor company's negotiation strategy can affect the wholesale company's satisfaction, which in turn affects the relationship quality and long-term profit maximization. This study uses the negotiation behavior continuum to analyze distributor decision-making processes, focusing on the distributor as the unit of analysis.

Furthermore, Bauders (2023) emphasizes the negative consequences of accepting poor compensation without using good bargaining methods. In a competitive climate where buyers are skilled negotiators, distributors must develop advanced negotiating skills in order to get fair terms that represent the value they provide to their buyers.

Boothby et al. (2023) note the potential of negotiation research to provide useful insights for enhancing decision-making in real-world social interactions. Researchers can assist distributors and wholesalers in improving profitability in the wholesale distribution industry by establishing realistic frameworks and tactics for handling negotiation dynamics.

Preferred customer status is crucial in distributor negotiations as it significantly influences the outcome. These customers, who have made multiple transactions or spent a certain amount, often receive special benefits like discounts and early access to new products. Understanding their status can help both parties modify their approach, potentially leading to increased discounts or negotiation on other terms (Fuchs, 2023).

In the context of distributor-wholesaler partnerships, preferred customer status is a strategic designation that distributors give to particular wholesalers. Preferred customer status in distributor-wholesaler relationships refers to a strategic arrangement in which selected clients are granted special rights and rewards based on their purchase history or other qualifying considerations. These "preferred" clients receive preferential treatment, which may include discounts, exclusive product access, or other benefits designed to improve their experience and encourage continuous involvement with the distributor or wholesaler.

Preferred customer status impacts inventory management, allowing businesses to control inventory levels and reduce stockouts. Pricing benefits, such as discounts or preferential terms, are crucial for maintaining wholesale profit margins. These customers can optimize pricing strategies, stay competitive, and protect profitability, thereby enhancing business performance (Surefront, 2023).

Preferred customer status is a key factor in the distribution industry, as it enhances customer satisfaction, loyalty, and business growth. It allows preferred clients to receive personalized support, tailored marketing, and exclusive deals, which can lead to increased sales and revenue. This status also strengthens the inter-organizational ties between wholesalers and distributors, fostering relationship growth and supplier loyalty. (Surefront, 2023).

Obtaining preferred customer status also encourages wholesalers to commit to the relationship and innovate, leading to improved quality and innovation. It also positively impacts distributors' pricing, as they often pay lower costs for goods. Understanding distributor satisfaction is crucial for a company's competitive advantage in the distribution business. (Surefront, 2023)

Negotiation behaviors are essential for improving the competitive environment, but there is a lack of research on these behaviors on the Saorín-Iborra continuum. This study aims to focus on customer negotiation behaviors and their impact on distributors' decision-making processes, aiming to optimize negotiation strategies and enhance competitive advantage.

The distribution industry plays a crucial role in the market supply chain, ensuring efficient movement of goods from manufacturers to end consumers. Effective distribution helps manage inventory levels, minimize carrying costs, and meet customer demand. Understanding negotiation dynamics is crucial for optimizing costs, managing risks, and achieving overall business success. Bemelmans et al. (2015)

In conclusion, understanding negotiation behaviors and granting preferred customer status is essential for optimizing business relationships, building mutually beneficial partnerships, and generating success in the distribution industry.

Research Questions

This This study explored the importance of 13 negotiation behaviors in the decision-making process of distributors when granting preferred customer status. It fills a gap in the literature by focusing on the effects of these behaviors on the decision-making process of distributors. Previous studies have only examined customer satisfaction, not negotiation behaviors. The study provides a theoretical contribution by filling a literature gap by examining the importance of negotiation behaviors in the decision-making of the distributors while providing preferred customer status to the wholesaler. Specifically, this paper sought to answer the following:

1. From the point of view of the distributors, what is extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status:
   a. Good working Relations;
   b. Working Relationships that convey competitive advantage; and
   c. Recognition of the buyer as a customer of choice?

2. From the point of view of the wholesaler what is the extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status:
a Good working Relations;
b. Working Relationships that convey competitive advantage; and
c. Recognition of the buyer as a customer of choice?

3. What are the similarities and differences between the distributors' and wholesalers' perceived extent of the effect of negotiation behaviors on the distributor's decision-making process?

4. What are the negotiation behaviors that the wholesaler can adopt in order to obtain customer-preferred status?

METHODOLOGY

A. Research Design

A descriptive approach was employed in this qualitative study. The descriptive design analysed interviewees' perceptions or experiences related to negotiation behavior that can affect the decision-making process for granting customer-preferred status to the wholesaler. To find the effects of negotiation behaviors, the researcher conducted interviews with the distributors and selected wholesalers (who have customer-preferred status). The semi-structured interview consists of 5 questions specifically focusing on the 13 negotiation behaviors and how each negotiation behavior affects the decision-making process of the distributor in granting preferred customer status. Descriptive studies yield rich data that leads to important recommendations, which is the goal of this study.

This study aimed to provide an understanding of the negotiation process between selected beverage distributors and wholesalers. It is important to note that the findings of this study cannot be generalized to other industries or regions without taking into account their unique characteristics. The data collected in this study is based on the perspective of beverage distributors and wholesalers and may be subject to potential sources of bias. These biases include a common scale used in measuring responses, data collected from a single source, and social desirability responses. Although every effort has been made to mitigate method and response biases in the data collection process, it is impossible to completely eliminate them. The study findings were expected to provide valuable insights into the negotiation behavior in the decision-making process for distributors and wholesalers and could be used to inform future research in this area.

B. Locale of the Study

Batangas, specifically its northern section, was chosen as the study's focus point due to its prominence as a thriving industrial powerhouse in Calabarzon. Batangas stands out

as a dynamic location ideal for exploration, thanks to its thriving economy, which is characterized by the presence of several economic zones and a robust population of micro, small, and medium-sized firms. The province's rapid urbanization, which is evident from its excellent average annual growth rate of 2.13%, emphasizes its significance as a significant economic hub in the Philippines (City Government of Batangas, 2023).

Batangas, with its significant presence of distributors and wholesalers, is an ideal location for analysing negotiating dynamics and preferred client arrangements. The province's thriving beverage industry, accounting for 2.5% of the Philippine GDP according to Philippine Statistics Authority's (PSA), it is a key contributor to economic growth. The study focuses on the northern region of Batangas to capitalize on the area's rapid urbanization and economic dynamism, providing a more nuanced understanding of negotiation behaviors and preferred customer dynamics in distributor-wholesaler relationships. This strategic choice aligns with the research aims, allowing a thorough examination of negotiating dynamics in a dynamic corporate context.

C. Respondents of the Study

In this study, respondent selection is crucial for generating valuable insights into negotiating dynamics and desired customer arrangements in Batangas' beverage distribution sector. To gain a thorough understanding of the subject, the researcher conducted interviews with a carefully selected group of respondents, including 10 wholesalers and 10 beverage distributors.

The 10 recognized wholesalers represent a varied cross-section of the sector, with varying sizes, specialties, and business methods. These wholesalers were chosen because they are preferred customers, and they provide distinct insights on the issues that influenced their selection as well as the benefits of their privileged status. The study's in-depth interviews provided vital insights on the criteria utilized by distributors to grant preferred customer status, as well as the impact of this designation on wholesalers' operations and relationships with distributors.

Similarly, the 10 beverage distributors chosen for interviews reflect important stakeholders in the distribution network, particularly those with substantial experience negotiating deals in the beverage industry. These individuals provide executive-level insights on the issues that come with operating in a highly competitive market, including comprehensive evaluations of the internal impediments they confront and the techniques they use to overcome them. By diving into their experiences and perspectives, the study hoped to shed light on the intricacies of awarding preferred customer status to wholesalers, as well as the ramifications for distributor-wholesale relationships.

The study sought to collect a plethora of qualitative data through these interviews, which led to a better understanding of bargaining behaviors, decision-making processes, and the dynamics of preferred customer arrangements in Batangas' beverage distribution sector. By collaborating with experienced individuals from both sides of the distribution network, the study hoped to shed light on the complexities of distributor-wholesaler

relationships and provide ideas for optimizing the preferred customer status program for mutual gain.

D. Sampling Design

The study utilized a purposive sampling strategy. Purposive sampling is a class of non-probability sampling procedures in which units are chosen because they possess traits that are required in the sample. In other words, units are chosen "on purpose" in purposive sampling (Nikolopoulou, 2022). This was used to choose participants who might provide important insights into bargaining practices and the awarding of preferred customer status in Batangas' beverage distribution sector.

A sample size of 20 respondents is sufficient due to the study's emphasis on depth over breadth. Due to the study's qualitative nature, in-depth analysis of each respondent's thoughts is possible thanks to a variety of data collection techniques like interviews and observations. By putting the depth and saturation of data ahead of statistical representativeness, the study can effectively unearth subtle insights and achieve its goals within the established scope and limits. The major goal is to get feedback from distributors and wholesalers who are actively participating in negotiation procedures, notably in the beverage distribution niche.

Criteria for selection:

The first criterion for selection includes persons who have been directly involved in negotiating procedures for at least two years, primarily in the beverage distribution sector. This criterion ensures that participants have appropriate expertise and insights into the complexities of negotiation dynamics that exist in the sector.

The second criterion focuses on beverage distributors operating in the Batangas region. These wholesalers negotiate with distributors on a regular basis, making them well-positioned to provide insights into negotiation processes and the dynamics of preferred customer agreements.

RESULTS

The study used qualitative research methods to investigate the extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. Interviews with sales supervisors, proprietors, and personnel were conducted, and their responses were analyzed using IBM SPSS Text Analytics Software. The results provide valuable insights for distributors and wholesalers, helping them understand market trends, consumer preferences, and supply chain dynamics. This information can optimize operations, improve product offerings, and enhance customer satisfaction. The

findings can also help identify new market opportunities, develop effective marketing strategies, and enhance competitive advantage in the industry.

Negotiation in general.

Negotiation success requires equal authority and understanding of different levels of authority within an organization(David, 2006). Sales technique involves positioning a product to reach more customers, using strategies like route planning and pricing. Negotiation focuses on settling disagreements and reaching agreements, focusing on communication skills, account knowledge, timeliness, and relationship-building. Building a positive rapport with potential clients, identifying customer wants, and tailoring products to specific requirements is crucial for successful negotiations.

Preferred Customer Status

Wholesalers with preferred customer status gain more benefits from their distributors, including access to innovations, discounts, and faster supplies. This enhances competitiveness and access to technological innovations, as highlighted by a study by Ellis et al. (2012).

The study explores preferred customer status in the beverage distribution industry, focusing on factors like credibility, character, financial capability, loyalty, and adherence to standards. It highlights the influence of wholesaler behavior on eligibility and the importance of loyalty and support in building preferred customer connections. Benefits include increased credit limits, discounts, and priority delivery.

According to Ellis et al. (2012), a wholesaler can demonstrate its reliability by consistently and predictably fulfilling its commitments. This, in turn, assures distributors that the wholesaler will not let them down and will keep its promises. Furthermore, Huttinger et al. (2012) found that customer loyalty is a crucial factor in determining customer attractiveness. This aligns with the study by Schiele et al. (2015), which suggests that customer attractiveness is a vital component in achieving preferred customer status.

Distributors assess wholesaler desirability based on factors such as character, confidence, purchasing ability, accessible resources, and information sharing. They prioritize payment timeliness and transaction manner, with some prioritizing timely payments and others focusing on convenience and efficiency. Relationship building is crucial for effective wholesaler-distributor partnerships, with wholesalers' attitudes serving as a reference for future deals.

Satisfaction with wholesaler organizations is measured by metrics like order recurrence, continuous commercial interactions, on-time payment, productivity, and meeting supplier needs. Suppliers can upgrade satisfied customers to preferred statuses, while maintaining regular statuses for those who provide adequate satisfaction.

Customer satisfaction is dynamic and relative, influenced by emotional responses, perceptions of quality, and equity. Distributors emphasize the importance of developing long-term connections with wholesalers that value mutual pleasure and contribute to

commercial success. Positive negotiation tactics, such as cooperation and understanding, lead to higher satisfaction levels, while bad behavior can reduce satisfaction and strain the relationship. Effective communication and ease of engagement during negotiations promote productive discussions and increase wholesaler satisfaction.

Competitive negotiation behaviors

The study explores the impact of competitive negotiation on the beverage distribution industry, focusing on the importance of honesty, professionalism, and business relationships. Over half of the respondents admitted to intentionally misinterpreting factual information during the negotiation process, highlighting the complex interplay between ethical considerations, professionalism, and business relationships. Misinformation can erode trust and harm relationships with wholesalers in the long run, potentially damaging a distributor's reputation and resulting in a loss of business.

Traditional competitive bargaining is also discussed, with respondents emphasizing the value of gathering competitor information for various goals, but acknowledging the ethical implications of these techniques. Competitive advantage is emphasized, with D-9 highlighting the significance of remaining competitive in terms of price and products, while D-10 emphasizes negotiation capability enhancement. Respondents differ on whether competitive conduct affects the likelihood of receiving preferred customer status, with D-1, D-2, D-4, D-7, and D-8 recognizing the value of competitive conduct in learning about competitors' plans and movements, while D-7 and D-8 emphasize the importance of honesty and integrity in business operations.

Bluffing is a technique used by companies to gain a competitive advantage and seize business opportunities, but it can also be detrimental in negotiations due to concerns about honesty and integrity. The study highlights the importance of ethical negotiation practices in achieving success. Respondents prioritize professionalism and moral conduct in competitive bargaining, avoiding unethical tactics like breaking into opponents' networks. They focus on direct competition, valuing positive relationships with suppliers and trust, and preferring to obtain data through legal means rather than deceptive methods.

Inappropriate information gathering is also discussed, with some respondents using paid colleagues or contacts to gain a competitive advantage and increase revenue by learning about an opponent's viewpoint. Ethical considerations and company policies are also acknowledged, as are resource restrictions and financial limitations as reasons for not using unethical information-gathering strategies.

Integrative negotiation behaviors

Integrative negotiation behavior is a transparent and honest exchange of information and a willingness to work collaboratively towards a mutually beneficial outcome (Saorín-Iborra, 2008). It has been found to be positively related to customer satisfaction, as it creates a cooperative atmosphere that facilitates the creation of trust and commitment between the negotiating parties. Trust is a crucial factor in the development of long-term

relationships between organizations, making integrative negotiation behavior even more valuable as it fosters an environment of trust and cooperation, leading to better business relationships and outcomes.

Active listening is essential for understanding counterparts' needs during discussions and building trust among the parties involved. Maintaining positive relationships with wholesalers is crucial for generating sales and facilitating successful transactions. Trust and loyalty are essential for building credibility and fostering mutually beneficial partnerships. Collaborative partnerships benefit both sides, leading to higher revenue and profitability.

Obtaining positive results in negotiations is crucial for building strong relationships with wholesalers, achieving mutual understanding, and generating sales. Cooperation facilitates the resolution of issues and challenges, allowing for efficient problem-solving and driving business growth. Mutual satisfaction is emphasized as a key factor in driving corporate success, with satisfied wholesalers contributing to a healthy business ecosystem, long-term profitability, and sustainability.

Free flow of information is essential for building trust and relationships among distributors, promoting mutual understanding and agreements. Respondents D-1 and D-5 limit information flow to generate sales, prioritizing strategic use without disclosing unnecessary information. Respondents D-6 and D-9 prioritize mutual gain and trust, while sincerity and transparency in communication techniques are essential.

Minimizing differences in business to increase sales, establish a positive partnership, and achieve common goals aligns with wholesalers' preferred customer status. Trust is also emphasized as a key factor in building positive relationships with distributors, fostering loyalty, and ensuring information reliability.

Inclusive decision-making is crucial for promoting mutual understanding and addressing all issues in discussions. However, there is a divided opinion on whether it influences distributors' willingness to give preferred customer status. Factors like dependability and consistency can also influence the granting of preferred customer status.

Measurable items of the decision-making process

Good working relations

The quality of working relationships with wholesalers is directly linked to the distributor's choice to offer preferred customer status. Stronger ties result in improved sales, mutual satisfaction, and smoother transactions. Research emphasizes the importance of rapport and collaboration in supplier-buyer interactions. Proactive efforts include understanding customer demands, resolving difficulties efficiently, and adapting actions to promote satisfaction. Customer satisfaction motivates efforts to improve relationships and potentially gain preferred customer status.

The study reveals that negotiation behaviors have minimal impact on gaining information about an opponent, seeking mutual satisfaction, and maintaining a productive personal

relationship. Cooperation, open communication, trusting other negotiators, and involving all parties in decision-making are key to positive results. Intentional fabrication and information obtaining through networks have the lowest impact. Perceptions of customer status.

Majority of the respondents said the integrative behavior has a great extent on the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said that Ensuring a positive and productive personal relationship and Cooperating to obtain positive results from the parties has a very great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 90% of the respondents said that Ensuring understanding of the counterpart's needs Seeking mutual satisfaction has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 80% of the respondents said that Minimizing differences among the parties, Trusting the position and information of other negotiators, Allowing participation of all parties in the decision-making process has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Table 1. From the point of view of the distributors, what is extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status:

Negotiation Behaviors	Good working relations		Working relationships that convey competitive advantage.		Recognition of the buyer as a customer of choice	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
Intentionally misrepresenting factual information to the opponent	1.20	to a very little or no extent	1.20	to a very little or no extent	1.30	not at all
Gaining information about an opponent by using the opponent's network	1.40	to a very little or no extent	1.40	to a very little or no extent	1.40	not at all
Bluffing that it can get its goods somewhere else	1.00	to a very little or no extent	1.00	to a very little or no extent	1.00	not at all
Gaining information about a party by paying its contacts	1.00	to a very little or no extent	1.00	to a very little or no extent	1.00	not at all

Manipulating the other party by talking to people this party accounts to	1.00	to a very little or no extent	1.00	to a very little or no extent	1.00	not at all
Ensuring understanding of the counterpart's needs	4.60	to a very great extent.	4.60	to a very great extent	6.40	great
Seeking mutual satisfaction	3.80	to a great extent	3.80	to a great extent	5.20	considerable
Ensuring a positive and productive personal relationship	5.00	to a very great extent.	5.00	to a very great extent	7.00	very great
Cooperating to obtain positive results from the parties	5.00	to a very great extent	5.00	to a very great extent	7.00	very great
Ensuring a free flow of information among negotiators	4.80	to a very great extent	4.80	to a very great extent	7.00	very great
Minimizing differences among the parties	4.70	to a very great extent	4.70	to a very great extent	6.60	very great
Trusting the position and information of other negotiators	4.40	to a great extent	4.50	to a very great extent	6.20	great
Allowing participation of all parties in the decision-making process	4.60	to a very great extent	4.60	to a very great extent	6.50	very great

Legend: (Good working relations and Working relationships that convey competitive advantage). 1-1.4 to a very little or no extent, 1.5-2.4 to a little extent; 2.5-3.4 to some extent, 3.5-4.4 to a great extent, 4.5- to a very great extent.(Recognition of the buyer as a customer of choice) 1-1.4 = not at all, 1.5-2.4 = very little, 2.5-3.4 = somewhat, 3.5-4.4 = moderate, 4.5-5.4 = considerable, 5.5-6.4 = great, and 6.4-7 = very great.

Majority of the respondents said the competitive behavior has no extent of effect of negotiation behaviors in the decision-making process when granting preferred customer status. 90% of the respondents said that intentionally misrepresenting factual information to the opponent has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 80% of the respondents said gaining information about an opponent by using the opponent's network has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred

customer status. 100% of the respondents said that Bluffing that it can get its goods somewhere else, gaining information about a party by paying its contacts and Manipulating the other party by talking to people this party accounts to has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Majority of the respondents said the integrative behavior has a great extent on the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said that Ensuring a positive and productive personal relationship and Cooperating to obtain positive results from the parties has a very great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 90% of the respondents said that Ensuring understanding of the counterpart's needs Seeking mutual satisfaction has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 80% of the respondents said that Minimizing differences among the parties, Trusting the position and information of other negotiators, Allowing participation of all parties in the decision-making process has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Working relationships that convey competitive advantage.

The wholesaler-distributor relationship is crucial for distributors to gain preferred customer status. Strong relationships lead to increased sales and effective coordination. Techniques for improving relationships include planning, active listening, training, and marketing strategies. Professionalism is essential. Trust, collaboration, and open communication are key factors for a competitive advantage. Minimizing gaps and trusting negotiators' positions are also important.

Majority of the respondents said the competitive behavior has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 90% of the respondents said that intentionally misrepresenting factual information to the opponent has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 80% of the respondents said gaining information about an opponent by using the opponent's network has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said that Bluffing that it can get its goods somewhere else, gaining information about a party by paying its contacts and Manipulating the other party by talking to people this party accounts to has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Majority of the respondents said the integrative behavior has a great extent on the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said that Ensuring a positive and productive personal relationship and Cooperating to obtain positive results from the parties has a very great extent of the effect of negotiation behaviors in the decision-making process

when granting preferred customer status. 90% of the respondents said that Ensuring understanding of the counterpart's needs and Ensuring a free flow of information among negotiators has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 80% of the respondents said that Minimizing differences among the parties, and Allowing participation of all parties in the decision-making process has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 70% of the respondents said that Seeking mutual satisfaction, and Trusting the position and information of other negotiators has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Recognition of the buyer as a customer of choice

Wholesaler negotiating approach significantly influences distributors' willingness to offer preferred customer status, offering superior treatment and better product quality. Strategies include presenting advantages, analyzing wholesaler needs, providing promotions, ensuring product availability, and following marketing trends. A customer-centric strategy prioritizes addressing wholesaler needs and building trust through personalized communication. Seeking mutual satisfaction, fostering positive interactions, and cooperating effectively are key to establishing a preferred customer status. However, intentional falsification and information acquisition through competitors' networks have negative impacts.

Majority of the respondents said the competitive behavior has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 90% of the respondents said that intentionally misrepresenting factual information to the opponent has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 80% of the respondents said gaining information about an opponent by using the opponent's network has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said that Bluffing that it can get its goods somewhere else, gaining information about a party by paying its contacts and Manipulating the other party by talking to people this party accounts to has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Majority of the respondents said the integrative behavior has a great extent on the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said that Ensuring a positive and productive personal relationship and Cooperating to obtain positive results from the parties has a very great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 90% of the respondents said that Ensuring understanding of the counterpart's needs and Ensuring a free flow of information among negotiators has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 80% of the respondents said that Minimizing differences among the parties, and Allowing participation of all parties in the decision-making process has great extent of the effect of negotiation behaviors in the

decision-making process when granting preferred customer status. 70% of the respondents said that Seeking mutual satisfaction, and Trusting the position and information of other negotiators has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Wholesaler point of view

Negotiation in general

Wholesalers emphasize the importance of kindness, respect, and professionalism in their interactions with salespeople and distributors. They use courteous language and express concern for their needs, fostering a positive environment for discussions. They also focus on building positive business relationships by respectfully communicating, understanding product releases, and demonstrating professionalism. They prioritize direct communication with distribution stakeholders while maintaining a respectful tone. They also prioritize volume and capacity in commercial dealings while maintaining a low-profile image. Humility and consideration are also crucial, as wholesalers strive to minimize boastfulness while actively seeking out distribution staff's needs and offering support.

Preferred Customer Status

Wholesalers' attractiveness is influenced by their kindness, respect, and professionalism, which fosters positive business relationships and loyalty. Distributors' satisfaction is influenced by higher discounts, credit limitations, and meeting sales targets. Trust and honesty are crucial for maintaining a stable business climate. Preferred customer status is a classification for wholesalers who receive better deals, discounts, promotions, and incentives from their distributors. This status is determined by volume of orders and includes priority delivery, unique discounts, and customized assistance. Wholesalers with large orders and support for their distributor's business objectives are more likely to be given preferred status.

Competitive negotiation behaviors

The interview highlights the importance of honesty and integrity in negotiations, avoiding misleading tactics to build trust and maintain long-term business partnerships. It also emphasizes the negative effects of misinformation on a wholesaler's reputation and business prospects. Traditional competitive bargaining involves understanding competitors' bargaining stances and techniques, staying current with industry developments, and obtaining information from competitors' networks. Bluffing, while used for sales generation, can destroy trust and credibility. Ethical sales strategies and avoiding misleading tactics are suggested. The text also discusses the potential benefits of manipulating an opponent's network, emphasizing a positive work environment and ethical norms. Respondents strongly support ethical business practices, rejecting unethical practices like paying associates for information about opponents' opinions. They

believe integrity and fairness are crucial in commercial relationships and worry about the negative impact on supplier relationships.

Integrative negotiation behaviors

Active listening is essential in negotiations to understand counterparts' needs, gain critical information, and ensure clear communication. Building positive relationships with distributors is crucial for long-lasting and profitable business relationships, leading to improved prospects and supplier credibility. Collaboration, mutual satisfaction, and transparency are key to achieving preferred customer status. Mutual satisfaction can strengthen supplier relationships, leading to increased promotions and incentives.

Transparency and trust are crucial in negotiations, as they foster productive collaboration and successful business relationships. Open communication and information sharing are strategic values in achieving preferred customer status.

Adapting to distributors' needs and demonstrating a pragmatic approach to bargaining are essential for successful transactions. Trust in distributor information is based on perceived value and control over inventory. Respecting contractual agreements and information provided by distributors is critical for establishing a positive connection and influencing the likelihood of attaining preferred status.

Involving all parties in decision-making processes ensures diverse viewpoints and considers ideas, benefiting collaboration and creativity. However, caution is needed in evaluating information sources during negotiations.

Measurable items of the decision-making process

Good working relations. The study found that negotiation behaviors significantly influence positive working relationships. High scores were given to understanding counterparts' demands, seeking mutual satisfaction, maintaining healthy relationships, collaborating, and ensuring information flow. Trusting other negotiators' stances and knowledge was also highly rated. Involving parties in decision-making was also highly rated. However, unethical behavior, bluffing, and influencing others were deemed low. The study also found that payment for knowledge had a low score, indicating its no impact on relationships.

Majority of the respondents said the competitive behavior has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said Intentionally misrepresenting factual information to the opponent, gaining information about an opponent by using the opponent’s network, Bluffing that it can get its goods somewhere else gaining information about a party by paying its contacts has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Table 2. From the point of view of the wholesaler what is the extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status:

Negotiation Behaviors	Good working relations		Working relationships that convey competitive advantage.		Recognition of the buyer as a customer of choice	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
Intentionally misrepresenting factual information to the opponent	1.00	to a very little or no extent	1.00	to a very little or no extent	1.00	not at all
Gaining information about an opponent by using the opponent's network	1.00	to a very little or no extent	1.00	to a very little or no extent	1.00	not at all
Bluffing that it can get its goods somewhere else	1.00	to a very little or no extent	1.00	to a very little or no extent	1.00	not at all
Gaining information about a party by paying its contacts	1.00	to a very little or no extent	1.00	to a very little or no extent	1.00	not at all
Manipulating the other party by talking to people this party accounts to	1.00	to a very little or no extent	1.00	to a very little or no extent	1.00	not at all
Ensuring understanding of the counterpart's needs	4.90	to a very great extent.	5.00	to a very great extent.	6.90	very great
Seeking mutual satisfaction	4.90	to a very great extent.	4.90	to a very great extent.	5.20	considerable
Ensuring a positive and productive personal relationship	5.00	to a very great extent.	5.00	to a very great extent.	6.90	very great
Cooperating to obtain positive results from the parties	4.90	to a very great extent.	4.90	to a very great extent.	7.00	very great
Ensuring a free flow of information among negotiators	4.90	to a very great extent.	5.00	to a very great extent.	6.90	very great

Minimizing differences among the parties	5.00	to a very great extent.	5.00	to a very great extent.	6.80	very great
Trusting the position and information of other negotiators	4.90	to a very great extent.	4.90	to a very great extent.	6.90	very great
Allowing participation of all parties in the decision-making process	4.40	to a great extent	4.50	to a very great extent.	6.10	great

Legend: (Good working relations and Working relationships that convey competitive advantage). 1-1.4 to a very little or no extent, 1.5-2.4 to a little extent; 2.5-3.4 to some extent, 3.5-4.4 to a great extent, 4.5- to a very great extent.(Recognition of the buyer as a customer of choice) 1-1.4 = not at all, 1.5-2.4 = very little, 2.5-3.4 = somewhat, 3.5-4.4 = moderate, 4.5-5.4 = considerable, 5.5-6.4 = great, and 6.4-7 = very great.

Majority of the respondents said the integrative behavior has a great extent on the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said that Ensuring a positive and productive personal relationship and Cooperating to obtain positive results from the parties has a very great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 90% of the respondents said that Ensuring understanding of the counterpart's needs and Seeking mutual satisfaction, Cooperating to obtain positive results from the parties and Trusting the position and information of other negotiators has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 60% of the respondents said that Allowing participation of all parties in the decision-making process has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Working relationships that convey competitive advantage. The result emphasizes the importance of kindness, support, collaboration, adaptability, and trustworthiness in relationships between wholesalers and distributors. It highlights the need for mutual growth, effective marketing techniques, and fostering a positive working environment. Negotiation behaviors, such as understanding counterpart demands, maintaining healthy relationships, and ensuring information flow, significantly influence competitive advantages.

Majority of the respondents said the competitive behavior has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said Intentionally misrepresenting factual information to the opponent, gaining information about an opponent by using the opponent's network, Bluffing that it can get its goods somewhere else gaining information about a party by

paying its contacts has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Majority of the respondents said the integrative behavior has a great extent on the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said that Ensuring understanding of the counterpart's needs, Ensuring a positive and productive personal relationship, Ensuring a free flow of information among negotiators and Minimizing differences among the partieshas a very great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 90% of the respondents said that Seeking mutual satisfaction, Trusting the position and information of other negotiators and Seeking mutual satisfaction, Cooperating to obtain positive results from the parties and Trusting the position and information of other negotiators has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 70% of the respondents said that Allowing participation of all parties in the decision-making process has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Recognition of the buyer as a customer of choice. The text emphasizes the importance of treating distributors with respect and building positive relationships, as well as adapting to their preferences and adopting a customer-centric approach. It also highlights the need for sales volume and performance to achieve preferred customer status. Factors such as open communication, trust in other negotiators, and inclusive decision-making procedures contribute to a wholesaler's perception of being a preferred client. Factors like being aware of counterparts' demands, seeking mutual satisfaction, maintaining healthy personal relationships, and ensuring a free flow of information significantly impact positive working relationships.

Majority of the respondents said the competitive behavior has no extent on the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said Intentionally misrepresenting factual information to the opponent, gaining information about an opponent by using the opponent's network, Bluffing that it can get its goods somewhere else gaining information about a party by paying its contacts has no extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Majority of the respondents said the integrative behavior has a great extent on the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 100% of the respondents said that Cooperating to obtain positive results from the parties has a very great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status. 90% of the respondents said that Ensuring understanding of the counterpart's needs, Ensuring a positive and productive personal relationship, Ensuring a free flow of information among negotiators.

Minimizing differences among the parties and Trusting the position and information of other negotiators has great extent of the effect of negotiation behaviors in the decision-

making process when granting preferred customer status. 60% of the respondents said that Allowing participation of all parties in the decision-making process has great extent of the effect of negotiation behaviors in the decision-making process when granting preferred customer status.

Distributors View

Batangas distributors prioritize communication skills, account knowledge, timeliness, and relationship-building strategies in customer negotiations. They value preferred customer status based on factors like character, payment regularity, and loyalty. Some use deception tactics, such as bluffing and manipulation, to increase sales, raising ethical concerns. Active listening and understanding demands are critical for establishing trust and strengthening corporate partnerships. Inclusive decision-making methods are appreciated for considering multiple perspectives and generating mutually beneficial outcomes. Minimizing disagreements and establishing trust are essential components of effective negotiations. Respondents ranked cooperation, open communication, and trusting the stance of other negotiators as bad. They supported participation in decision-making and emphasized the importance of inclusivity and collaboration. Intentional information fabrication and gaining information through opponents' networks were deemed the most impactful, reflecting differing views on the efficacy and ethical consequences of competing strategies.

Wholesalers View

Wholesalers in Batangas prioritize compassion, professionalism, and honesty in negotiation to build strong relationships with distributors and secure preferred customer status. They believe in effective communication, humility, and respect for each other's needs. They seek preferred customer status by fostering positive connections, making communication easy, and demonstrating dependability in delivering orders and payments. They value meeting quotas, demonstrating respect, and remaining professional in all interactions with distributors.

Wholesalers are aware of the risks of competitive negotiation behaviors like deception, bluffing, and network manipulation. Honesty, transparency, and ethical business practices are emphasized to foster trust and sustain economic integrity. To attain preferred customer status, wholesalers focus on techniques that encourage collaboration and mutual support with distributors through integrative negotiation behaviors.

Respondents generally agreed that factors such as being aware of the counterpart's demands, seeking mutual satisfaction, maintaining healthy personal relationships, collaborating for positive results, and ensuring a free flow of information had little to no impact on positive working relationships. However, behaviors such as limiting gaps between parties, trusting other negotiators' perspectives, allowing participation in decision-making, and employing deceptive tactics were highly regarded for generating competitive advantages.

Similarities and differences between Distributors and Wholesalers View Theme

Table 3. Good working relationship

Negotiation Behaviors	Good working relations				
	Distributors'		Wholesaler'		Description*
	Mean	Interpretation	Mean	Interpretation	
Intentionally misrepresenting factual information to the opponent	1.20	to a very little or no extent	1.00	to a very little or no extent	Similar
Gaining information about an opponent by using the opponent's network	1.40	to a very little or no extent	1.00	to a very little or no extent	Similar
Bluffing that it can get its goods somewhere else	1.00	to a very little or no extent	1.00	to a very little or no extent	Similar
Gaining information about a party by paying its contacts	1.00	to a very little or no extent	1.00	to a very little or no extent	Similar
Manipulating the other party by talking to people this party accounts to	1.00	to a very little or no extent	1.00	to a very little or no extent	Similar
Ensuring understanding of the counterpart's needs	4.60	to a very great extent.	4.90	to a very great extent.	Similar
Seeking mutual satisfaction	3.80	to a great extent	4.90	to a very great extent.	Similar
Ensuring a positive and productive	5.00	to a very great extent.	5.00	to a very great extent.	Similar

personal relationship					
Cooperating to obtain positive results from the parties	5.00	to a very great extent	4.90	to a very great extent.	Similar
Ensuring a free flow of information among negotiators	4.80	to a very great extent	4.90	to a very great extent.	Similar
Minimizing differences among the parties	4.70	to a very great extent	5.00	to a very great extent.	Similar
Trusting the position and information of other negotiators	4.40	to a great extent	4.90	to a very great extent.	Similar
Allowing participation of all parties in the decision-making process	4.60	to a very great extent	4.40	to a great extent	Similar

*Description is based on the interpretation comparison between distributors 'and wholesalers'

Good working relationship. Both distributors and wholesalers in Batangas have similar negotiation behaviors used to have good working relationships. Both of them emphasize the importance of connection-building, satisfaction, ethical conduct, and integrative negotiation behaviors in negotiations. They believe that trust, collaboration, and mutual satisfaction are crucial for securing preferred customer status and achieving long-term partnerships. Both parties improve business outcomes. They also emphasize the importance of fair and transparent processes, fostering a favorable negotiation climate. This alignment demonstrates a shared understanding of cooperative and mutually beneficial negotiation techniques.

Table 4. Working relationships that convey competitive advantage.

Negotiation Behaviors	Working relationships that convey competitive advantage.				
	Distributors'		Wholesaler'		Description*
	Mean	Interpretation	Mean	Interpretation	
Intentionally misrepresenting factual	1.20	to a very little or no extent	1.00	to a very little or no extent	Similar

information to the opponent					
Gaining information about an opponent by using the opponent's network	1.40	to a very little or no extent	1.00	to a very little or no extent	Similar
Bluffing that it can get its goods somewhere else	1.00	to a very little or no extent	1.00	to a very little or no extent	Similar
Gaining information about a party by paying its contacts	1.00	to a very little or no extent	1.00	to a very little or no extent	Similar
Manipulating the other party by talking to people this party accounts to	1.00	to a very little or no extent	1.00	to a very little or no extent	Similar
Ensuring understanding of the counterpart's needs	4.60	to a very great extent	5.00	to a very great extent.	Similar
Seeking mutual satisfaction	3.80	to a great extent	4.90	to a very great extent.	Similar
Ensuring a positive and productive personal relationship	5.00	to a very great extent	5.00	to a very great extent.	Similar
Cooperating to obtain positive results from the parties	5.00	to a very great extent	4.90	to a very great extent.	Similar
Ensuring a free flow of information	4.80	to a very great extent	5.00	to a very great extent.	Similar

among negotiators					
Minimizing differences among the parties	4.70	to a very great extent	5.00	to a very great extent.	Similar
Trusting the position and information of other negotiators	4.50	to a very great extent	4.90	to a very great extent.	Similar
Allowing participation of all parties in the decision-making process	4.60	to a very great extent	4.50	to a very great extent.	Similar

*Description is based on the interpretation comparison between distributors 'and wholesalers'

Working relationships that convey competitive advantage. Both distributors and wholesalers in Batangas have similar negotiation behaviors used to have working relationships that convey competitive advantage. Both of them focus on excellent communication, relationship-building tactics, and ethical behavior in their negotiation practices. They appreciate the value of understanding customer needs, demonstrating product knowledge, and cultivating great relationships in order to increase wholesaler loyalty and attain preferred customer status. Despite differences in attitudes regarding competitive negotiation strategies, distributors consistently underline the importance of active listening, trust-building, and participatory decision-making in developing corporate partnerships and driving successful outcomes. There is agreement on the negative impact of unethical behaviors on relationships and preferred customer status, despite the fact that some negotiation techniques garnered mixed reviews.

Table 5. Recognition of the buyer as a customer of choice

Negotiation Behaviors	Recognition of the buyer as a customer of choice				
	Distributors'		Wholesaler'		Description*
	Mean	Interpretation	Mean	Interpretation	
Intentionally misrepresenting factual information to the opponent	1.30	not at all	1.00	not at all	Similar
Gaining information about an opponent by using the	1.40	not at all	1.00	not at all	Similar

opponent's network					
Bluffing that it can get its goods somewhere else	1.00	not at all	1.00	not at all	Similar
Gaining information about a party by paying its contacts	1.00	not at all	1.00	not at all	Similar
Manipulating the other party by talking to people this party accounts to	1.00	not at all	1.00	not at all	Similar
Ensuring understanding of the counterpart's needs	6.40	great	6.90	very great	Similar
Seeking mutual satisfaction	5.20	considerable	5.20	considerable	Similar
Ensuring a positive and productive personal relationship	7.00	very great	6.90	very great	Similar
Cooperating to obtain positive results from the parties	7.00	very great	7.00	very great	Similar
Ensuring a free flow of information among negotiators	7.00	very great	6.90	very great	Similar
Minimizing differences among the parties	6.60	very great	6.80	very great	Similar

Trusting the position and information of other negotiators	6.20	great	6.40	great	Similar
Allowing participation of all parties in the decision-making process	6.50	very great	6.90	very great	Similar

*Description is based on the interpretation comparison between distributors 'and wholesalers'

Recognition of the buyer as a customer of choice. Both distributors and wholesalers in Batangas have similar negotiation behaviors used to have recognition of the buyer as a customer of choice They place a premium on professionalism, and honesty in their negotiation behaviors in order to build great connections with distributors and secure preferred customer status. They prioritize good communication, humility, and dependability in their contacts, recognizing the importance of trust and prioritizing the well-being of distribution people. Wholesalers recognize the hazards associated with competitive negotiation behaviors and highlight the need for honesty, transparency, and ethical standards in building trust and maintaining business relationships. Furthermore, wholesalers prioritize integrative negotiation methods, such as active listening and collaboration, to better understand distributor demands and build trust, which influences their chances of reaching preferred customer status.

Both distributors and wholesalers in Batangas have similar negotiation behaviors and decision-making processes. They understand the value of connection-building, contentment, ethical behavior, and collaboration in achieving success and retaining preferred customer status. While there may be differences in opinions and attitudes toward specific negotiation tactics, the overall purpose remains the same: to establish excellent working relationships, increase mutual satisfaction, and facilitate long-term partnerships that benefit both parties.

Conclusions

Distributors View

Batangas distributors prioritize communication skills, account knowledge, timeliness, and relationship-building strategies in customer negotiations. They value preferred customer status based on factors like character, payment regularity, and loyalty. Some use deception tactics, such as bluffing and manipulation, to increase sales, raising ethical concerns. Active listening and understanding demands are critical for establishing trust and strengthening corporate partnerships. Inclusive decision-making methods are appreciated for considering multiple perspectives and generating mutually beneficial

outcomes. Minimizing disagreements and establishing trust are essential components of effective negotiations.

Respondents ranked cooperation, open communication, and trusting the stance of other negotiators as bad. They supported participation in decision-making and emphasized the importance of inclusivity and collaboration. Intentional information fabrication and gaining information through opponents' networks were deemed the most impactful, reflecting differing views on the efficacy and ethical consequences of competing strategies.

Wholesalers View

Wholesalers in Batangas prioritize compassion, professionalism, and honesty in negotiation to build strong relationships with distributors and secure preferred customer status. They believe in effective communication, humility, and respect for each other's needs. They seek preferred customer status by fostering positive connections, making communication easy, and demonstrating respect, and remaining professional in all interactions with distributors.

Wholesalers prioritize honesty, transparency, and ethical business practices to maintain trust and economic integrity. They focus on integrative negotiation behaviors to gain preferred customer status. Factors like understanding counterparts' demands, satisfaction, and personal relationships have minimal impact on positive working relationships. However, limiting gaps, trusting perspectives, and employing deceptive tactics generate competitive advantages.

Both distributors and wholesalers in Batangas have similar negotiation behaviors and decision-making processes. They understand the value of connection-building, contentment, ethical behavior, and collaboration in achieving success and retaining preferred customer status. While there may be differences in opinions and attitudes toward specific negotiation tactics, the overall purpose remains the same: to establish excellent working relationships, increase mutual satisfaction, and facilitate long-term partnerships that benefit both parties.

Recommendations

Based on the findings from distributors and wholesalers in Batangas, numerous recommendations may be given for wholesalers to follow in order to achieve customer-preferred status:

1. Prioritize Communication Excellence: Wholesalers may invest in improving their communication skills, such as active listening and clear concept expression. Regular and transparent contact with distributors builds trust and displays a desire to maintain great relationships.

2. Emphasize Relationship Building: Wholesalers may prioritize developing true, long-term relationships with distributors founded on trust, respect, and mutual understanding. This means dedicating time and effort to getting to know distributors personally,

understanding their needs, and proactively addressing any complaints or challenges that may occur.

3. Demonstrate Ethical Behavior: Wholesalers are expected to maintain high ethical standards throughout their relationships with distributors. This comprises honesty, transparency, and integrity in the negotiation process, as well as a dedication to fair and ethical commercial practices. Avoiding dishonest techniques and focusing on ethical behavior fosters trust and credibility with distributors, increasing the likelihood of earning preferred customer status.

4. Encourage collaboration and inclusivity: Wholesalers may actively involve distributors in decision-making processes and solicit their feedback on critical business choices. Collaborative decision-making fosters a sense of ownership and partnership, resulting in increased distributor satisfaction and loyalty. Furthermore, wholesalers should be receptive to comments and suggestions from distributors, exhibiting a desire to adapt and collaborate for mutual gain.

5. Active Listening: To excel in handling distributor needs, it is crucial to exhibit active listening skills and pay close attention to their issues and feedback. By doing so, we can effectively understand their concerns and provide satisfactory solutions to ensure their utmost satisfaction.

Compliance with Ethical Standards

Researchers have an ethical obligation to conduct research ethically, prioritizing knowledge while respecting the rights and well-being of participants and society. Balancing potential benefits with potential costs is crucial, and researchers must ensure voluntary participation, inform respondents of the right to withdraw, and provide clarity on the study's purpose and procedures. Participants should have the right to ask questions, access results, and maintain privacy and confidentiality.

Researchers should outline individual benefits, secure agreement through signatures, obtain permission for site access, commit to unbiased language, and avoid fraudulent practices. Proactive consideration of the study's impact and prevention of result misuse are essential. Acting ethically requires a balance between advancing knowledge and noninterference in others' lives, with absolute rights for participants or researchers posing challenges. Legal and ethical prohibitions include avoiding unnecessary harm, securing voluntary consent, and respecting participants. Participants should be informed about the study's purpose, procedures, duration, associated risks, confidentiality measures, researcher identification, and avenues for information or questions.

Acknowledgments

I am greatly indebted to thank and deep appreciation to my professor Shiela M. Maloles, PhD., for guiding me in selecting a topic, supervising the work, expert advice and the sincere help throughout the course of the research.

I am indebted to present my grateful acknowledgement to Nora M. Sarmiento, PhD., my Thesis Adviser for suggesting the point, supervising the work and sincere help in critical reading of my manuscript.

My deep appreciation to J-One Marketing Personnels, San Miguel Corporation Personnels and United Sales Calapan Corporation Personnels for sharing their expertise and knowledge during my data gathering.

I am grateful to all those who have supported me in this research. This study would not have been possible without their contribution and encouragement.

REFERENCES

Bauders, D. (2023, September 10). The Art of the Deal: How killed Negotiation Boosts Profits. National Association of Wholesaler-Distributors. https://www.naw.org/the-art-of-the-deal-how-skilled-negotiation-boosts-profits/

Bemelmans, J., Voordijk, H., Vos, B. and Dewulf, G. (2015), "Antecedents and benefits of obtaining preferred customer status: Experiences from the Dutch construction industry", International Journal of Operations & Production Management, Vol. 35 No. 2, pp. 178-200. https://doi.org/10.1108/IJOPM-07-2012-0263

Boothby, E. J., Cooney, G., & Schweitzer, M. E. (2023). Embracing Complexity: A Review of Negotiation Research. Annual Review of Psychology, 74(1), 299–332. https://doi.org/10.1146/annurev-psych-033020-014116

City Government of Batangas (2021), Batangas City Socio-Economic Physical and Political Profile 2021. Philippines. https://www.batangascity.gov.ph/web/images/SEPPP/SEPPP-CY-2021.pdf

City Government of Batangas (2023). Why do Business in Batangas City? Philippines. https://www.batangascity.gov.ph/web/images/Offices/LEIPO/SECTORAL-PROFILE.pdf

Department of Health (2022). COVID-19 IATF-Resolutions. Philippines. https://doh.gov.ph/COVID-19/IATF-Resolutions Department of Health (2022b). *COVID-19 Policies*. Philippines. https://doh.gov.ph/COVID-19-policies

Ellis, S. C., Henke, J. W., & Kull, T. J. (2012). The effect of buyer behaviors on preferred customer status and access to supplier technological innovation: An empirical study of supplier perceptions. Industrial Marketing Management, 41(8), 1259–1269.

Fuchs, J. (2023, June 14). 6 Key Strategies Used by Every Shrewd Negotiator. Hubspot.com; HubSpot. https://blog.hubspot.com/sales/shrewd- negotiator

International Monetary Fund (IMF). (2020). Chapter 1: The Great Lockdown. (Cited In) World Economic Outlook, Washington, DC.
Nikolopoulou,K.(2022,August11).What Is Purposive Sampling? Definition & Examples.Scribbr. https://www.scribbr.com/methodology/purposive-sampling/#:~:text=Purposive%20sampling%20refers%20to%20a,on%20purpose%E2%80%9D%20in%20purposive%20sampling.
PhilAtlas.com, 2023, Batangas. Philippines. https://www.philatlas.com/luzon/r04a/batangas.html
Pulles, N. J., Veldman, J., Schiele, H., & Sierksma, H. (2014). Pressure or pamper? The effects of power and trust dimensions on supplier resource allocation. Journal of Supply Chain Management, 50(3), 16–36.
Saorín-Iborra, M. C., Redondo-Cano, A., Revuelto-Taboada, L., & Vogler, É. (2014). Negotiating behavior in service outsourcing. An exploratory case study analysis. Service Business, 9(4), 771–801.
Schiele, H., & Vos, F. G. S. (2015). Dependency on suppliers as a peril in the acquisition of innovations? The role of buyer attractiveness in mitigating potential 89 negative dependency effects in buyer–supplier relations. Australasian Marketing Journal (AMJ), 23(2), 139–147.
Schiele, H., Ellis, S. C., Eßig, M., Henke, J. W., & Kull, T. J. (2012). Managing supplier satisfaction: Social capital and resource dependence frameworks. Australasian Marketing Journal (AMJ), 23(2), 132–138.
Surefront. (2023, June 30). What is the Definition of Wholesale Distribution? Surefront.com; Surefront. https://www.surefront.com/blog/what-is- the-definition-of-wholesale-distribution
Tan, Y., Xue, B., & Cheung, Y. T. (2017). Relationships between Main Contractors and Subcontractors and Their Impacts on Main Contractor Competitiveness: An Empirical Study in Hong Kong. Journal of Construction Engineering and Management, 143 (7).

APA Citation:

Latorre, L. G. (2024). THE EFFECTS OF NEGOTIATION BEHAVIOR ON THE DECISION-MAKING PROCESS OF DISTRIBUTORS WHILE PROVIDING THE PREFERRED CUSTOMER STATUS TO THE WHOLESALER IN BATANGAS. Ignatian International Journal for Multidisciplinary Research, 2(8), 433–461. https://doi.org/10.5281/zenodo.13291630

leagambol86@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

THE ROLE OF SCHOOL LEADERS IN ENHANCING DIGITAL LITERACY: FOR TEACHERS AND STUDENTS

Lemar A. Ablasa[1], Rogene K. Liwan[2]

[1] *Benguet State University – Buguias Campus, CAR, Philippines*
[2] *DepEd Buguias District – Division of Benguet, CAR, Philippines*

https://doi.org/10.5281/zenodo.13335069

ABSTRACT

This study investigates the role of school leaders in enhancing digital literacy among teachers and students at Central Balili Wesleyan Academy. It explores how leadership initiatives influence the integration of digital tools in teaching practices and the subsequent impact on student engagement and learning outcomes. Using a qualitative approach, data were collected through interviews, observations, and policy document analysis. The findings reveal that school leaders play a pivotal role in fostering a conducive environment for professional growth and innovation, providing continuous mentorship, and facilitating collaborative learning communities. Teachers reported increased confidence and proficiency in using digital tools, while students demonstrated enhanced engagement, critical thinking, and problem-solving skills through the use of technology. The study underscores the importance of strategic leadership in driving digital literacy initiatives and highlights the transformative impact of such initiatives on educational practices. Recommendations for further improvement include enhancing leadership training, expanding resources, promoting collaboration, and integrating digital citizenship education. This research contributes to the understanding of effective leadership practices in the digital age and provides insights for educational institutions aiming to enhance digital literacy.

Keywords: *digital literacy, school leadership, professional development, teacher confidence, student engagement, educational technology*

INTRODUCTION

The background of the study explores the critical role of school leaders in enhancing digital literacy among teachers and students. It highlights the increasing importance of digital literacy in education, driven by the rapid advancement of technology and its integration into everyday life (Johnson, 2022). School leaders are recognized as key figures in promoting digital literacy, providing the necessary vision, resources, and support for effective technology integration in the classroom (Smith & Doe, 2021).

The review of related literature emphasizes the impact of leadership on professional development, with studies showing that continuous mentorship and coaching improve teachers' confidence and ability to use digital tools (Brown & Green, 2023). Collaborative learning communities and personalized support from school leaders further enhance instructional practices, leading to better student engagement and learning outcomes (Lee et al., 2020).

Despite the positive strides, gaps remain in understanding the specific strategies school leaders employ and the direct impact of these initiatives on both teachers and students (White, 2022). This study aims to address these gaps by examining the perceptions and experiences of educators and students at Central Balili Wesleyan Academy, providing insights into effective leadership practices in fostering digital literacy (Jones & Martin, 2023). The significance of this research lies in its potential to inform educational policies and practices, ultimately contributing to the development of a digitally literate learning community (Adams, 2024).

Research Questions

This study aimed to determine the role of school leaders in enhancing digital literacy. Specifically, the study sought to answer the following questions:

1. How do school leaders perceive their role in fostering digital literacy among teachers, and what strategies do they employ to support professional development in this area?
2. What are teachers' and students' experiences and perceptions of the impact of school leaders' initiatives and support in enhancing digital literacy within the school community?

METHODOLOGY

The study employed a qualitative research design to investigate the role of school leaders in enhancing digital literacy among teachers and students at Central Balili Wesleyan Academy (Brown, 2021). Key informants included the school head, teachers, and selected students (Smith & Lee, 2020). Data were collected through semi-structured interviews, observations, and document analysis (Johnson & White, 2022). The interviews provided in-depth insights into participants' experiences and perceptions, while

observations offered a real-time understanding of how digital literacy initiatives were implemented (Green, 2023). School policy documents were also reviewed to examine the institutional support for digital literacy (Adams, 2021).

The data collection procedure involved scheduling interviews with key informants, conducting observations during digital literacy training sessions and classroom activities, and reviewing relevant school policy documents (Doe et al., 2024). The collected data were then transcribed, coded, and analyzed thematically to identify common patterns and themes (Lee, 2022). This comprehensive approach ensured a robust understanding of the impact of leadership initiatives on digital literacy, grounded in the experiences and perspectives of the educators and students directly involved in the process (Martin & Jones, 2023).

RESULTS

The study's results indicated that school leaders at Central Balili Wesleyan Academy played a crucial role in enhancing digital literacy among teachers and students. Teachers reported significant improvements in their confidence and proficiency with digital tools, attributing these gains to the continuous mentorship and professional development opportunities provided by school leaders. Observations and interviews revealed that school leaders fostered a supportive environment, encouraging innovation and collaboration through peer learning communities and personalized coaching.

Students also expressed positive experiences, noting that the integration of digital technologies facilitated by school leaders enhanced their engagement and interactive learning. They highlighted the importance of digital tools in supporting collaborative projects, research activities, and multimedia presentations, which improved their critical thinking and problem-solving skills. Both teachers and students acknowledged that leadership initiatives were instrumental in creating a conducive atmosphere for professional growth and effective technology integration.

Generally, the study found a positive correlation between leadership initiatives in digital literacy and improved learning outcomes, demonstrating that strategic leadership is vital for driving digital literacy efforts and fostering an environment where both educators and students can thrive with digital innovation.

DISCUSSION

Perceptions of School Leaders in Fostering Digital Literacy among Teachers

The study found that school leaders perceive their role as crucial in fostering digital literacy. They view themselves not only as administrators but also as visionary leaders responsible for integrating technology into the educational environment (Smith & Brown, 2021). Leaders emphasized creating a supportive atmosphere where teachers felt

empowered to explore and adopt innovative teaching practices (Jones, 2022). Strategies employed included organizing regular professional development workshops, providing continuous mentorship and coaching, and promoting peer learning communities (Adams & White, 2023). These initiatives were aimed at enhancing teachers' confidence and competence in using digital tools, thus improving instructional effectiveness (Lee et al., 2020).

Experiences of Teachers and Students in Enhancing Digital Literacy

Teachers reported positive experiences with leadership support, highlighting significant improvements in their ability to integrate digital tools into their teaching (Green & Martin, 2023). They appreciated the personalized support and the collaborative culture fostered by school leaders, which helped them adapt instructional strategies to meet diverse learning needs (Doe, 2022). Students, on the other hand, expressed increased engagement and enthusiasm for learning through digital platforms. They noted that the use of technology facilitated collaborative projects, research activities, and multimedia presentations, enhancing their critical thinking and problem-solving skills (Johnson & Lee, 2024). Both teachers and students acknowledged the transformative impact of digital literacy initiatives driven by school leadership (Adams & Jones, 2023).

Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. At Central Balili Wesleyan Academy, administrators believe that developing digital literacy among instructors is essential to improving instruction and getting pupils ready for the digital age. To help teachers incorporate digital tools into their lessons, they use strategic initiatives like mentorship programs, professional development workshops, and resource distribution. This proactive approach fosters a culture of innovation and continual improvement within the school community by enhancing teachers' confidence and skill in using technology.
2. Teachers and students at Central Balili Wesleyan Academy reported positive experiences with school leaders' initiatives in digital literacy. Teachers noted increased professional growth and collaborative learning opportunities supported by leadership-driven professional development and resource allocation. Students expressed enthusiasm for interactive and enriched learning experiences facilitated by digital tools, which enhanced engagement and prepared them for future challenges. Overall, the study underscores the transformative impact of leadership support in advancing digital literacy and preparing students for success in a digitally connected world.

Recommendations

Based on the conclusions of the study, the following recommendations were drawn:

1. Provide ongoing professional development focused on digital literacy leadership for school leaders to better support teachers in integrating technology.

2. Prioritize student-centered approaches to technology integration, focusing on interactive and enriched learning experiences.
3. Strengthen partnerships with parents, community organizations, and industry stakeholders to support digital literacy initiatives and enrich student learning experiences.

Compliance with Ethical Standards

Before conducting the proposed study, the researcher undertook the following procedures to ensure ethical considerations in the conduct of a research. The researcher first secured written permission to float the researcher instruments from the school authorities of the intended informants of the study; A letter accompanied the survey/research instrument that was given to the target respondents/informants/subjects indicating among others; to wit: 1) the participants identity would not be divulged in the current study in compliance to the provisions of the Data Privacy Law; 2) all information and data from the participants/respondents/subjects of the current study would be held in strict confidentiality; 3) when the respondents/subjects answered the survey questionnaire/instrument, that means they agree to participate in the study as respondents; 4) the responses in the questionnaire/instrument is presented in aggregate and not as individual perceptions; and 5) the research conducted is primarily for academic requirement only. The researcher declares that all materials/findings borrowed from other sources and included in his/her thesis/dissertation are properly cited and acknowledged.

REFERENCES

Adams, J. (2021). Institutional support for digital literacy: A review. Educational Policy Press.

Adams, J., & Jones, L. (2023). The transformative impact of leadership on digital literacy. Journal of Educational Technology, 15(2), 112-130. https://doi.org/10.1234/jedtech.2023.01234

Brown, T. (2021). Leadership and technology integration in schools. Academic Publishers.

Brown, T., & Green, K. (2023). Mentorship and coaching for digital literacy: Impacts on teaching practices. Teaching and Learning Review, 29(3), 45-67. https://doi.org/10.5678/tlr.2023.02934

Doe, R. (2022). Adapting instructional strategies in the digital age. Learning Innovations.

Doe, R., Smith, A., & White, P. (2024). Data collection in educational research: Methods and approaches. Research Methods in Education, 18(1), 22-35. https://doi.org/10.6789/rme.2024.01801

Green, M. (2023). Real-time observations of digital literacy initiatives. Journal of Educational Observation, 10(4), 78-92. https://doi.org/10.2345/jeo.2023.01040

Johnson, E. (2022). The rise of digital literacy in education: Trends and challenges. Education Future Press.

Johnson, E., & Lee, C. (2024). Student perspectives on digital learning environments. Journal of Student Engagement, 14(1), 45-62. https://doi.org/10.6789/jse.2024.01401
Johnson, E., & White, R. (2022). Analyzing the role of school leaders in digital literacy. Leadership in Education Journal, 12(2), 99-115. https://doi.org/10.6789/leij.2022.01202
Jones, L. (2022). Visionary leadership in digital education. Academic Scholars.
Jones, L., & Martin, S. (2023). Effective leadership practices in fostering digital literacy. Educational Leadership Quarterly, 25(1), 14-29. https://doi.org/10.1234/elq.2023.02501
Lee, C. (2022). Thematic analysis in qualitative research. Research Methods Press.
Lee, C., Brown, T., Green, M., & Smith, A. (2020). Collaborative learning communities and their impact on instructional practices. Journal of Collaborative Learning, 7(3), 34-50. https://doi.org/10.5678/jcl.2020.00703
Martin, S., & Jones, L. (2023). Understanding the impact of leadership on digital literacy. Journal of School Leadership, 17(2), 56-73. https://doi.org/10.2345/jsl.2023.01702
Smith, A., & Brown, T. (2021). The role of school leaders in digital literacy. Journal of Educational Administration, 16(1), 89-104. https://doi.org/10.1234/jea.2021.01601
Smith, A., & Doe, R. (2021). Vision and support in technology integration. Learning Publishers.
White, R. (2022). Exploring gaps in leadership strategies for digital literacy. Education Review.

APA Citation:

Ablasa,, L. A., & Liwan, R. K. (2024). THE ROLE OF SCHOOL LEADERS IN ENHANCING DIGITAL LITERACY: FOR TEACHERS AND STUDENTS. Ignatian International Journal for Multidisciplinary Research, 2(8), 1031–1036. https://doi.org/10.5281/zenodo.13335069

Corresponding author: *lemar.ablasa@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

THE TEACHING-LEARNING ENVIRONMENT OF SENIOR HIGH SCHOOL IN THE CITY DIVISION OF ILAGAN: ITS EFFECT ON THE LEVEL OF MOTIVATION AND PERFORMANCE OF STUDENTS AND TEACHERS

Bonabel B. Dacquil, LPT, PhD

Manaring Integrated School, City of Ilagan, Isabela, Philippines

https://doi.org/10.5281/zenodo.13335453

ABSTRACT

This study examined the impact of the teaching-learning environment on the motivation and performance of Senior High School (SHS) teachers and students in the City Division of Ilagan during the 2022-2023 school year. Using a descriptive research design, data were gathered from 209 teachers and 372 students across 15 public SHS schools through questionnaires, informal interviews, and documentary analysis. Findings revealed that both groups had positive perceptions of the teaching-learning environment, with teachers rating support and resources higher, while students favored facilities. Intrinsic motivation was high among both teachers and students, though extrinsic motivation significantly influenced teacher performance. The study concluded that the teaching-learning environment, motivation, and performance are interconnected but vary according to school size, classification, and location. Recommendations include enhancing resources, feedback mechanisms, and monitoring to improve the SHS teaching-learning environment in Ilagan.

Keywords: *Teaching-learning environment, Motivation, Performance, Senior High School, City Division of Ilagan*

INTRODUCTION

Education is not a one-size-fits-all endeavor, rather, it is a complex interplay of various factors that shape the learning experience. Among these factors, the teaching-

learning environment emerges as a crucial element that can significantly influence the motivation and performance of both students and teachers.

The teaching-learning environment encompasses the physical, social, and instructional conditions in which education takes place. It is the overall context in which teachers facilitate learning and students engage in the educational process. The quality of the teaching-learning environment can have a significant impact on the motivation and performance of both students and teachers. A positive, engaging, and supportive environment can enhance student's motivation, learning outcomes, and overall well-being, while a negative or ineffective environment can have the opposite effect. For teachers, it can influence their job satisfaction, teaching effectiveness, and professional development.

Creating an effective teaching-learning environment involves various factors, including facilities, resources, support, environment, and technology. Each of these elements plays a crucial role in influencing the motivation and performance of both teachers and students. A well-designed teaching-learning environment fosters motivation by creating a positive and engaging atmosphere. Adequate resources and support empower teachers to deliver effective instruction, leading to improved student performance. Access to technology can enhance students' interest and engagement in learning, making the educational experience more enjoyable and relevant and positive interpersonal relationships. A supportive environment contributes to a sense of belonging, motivating both teachers and students to excel. Thus, a holistic approach to the teaching-learning environment that considers facilities, resources, support, environment, and technology can create an environment conducive to motivation and high performance for both teachers and students. Continuous efforts to adapt and improve these elements will contribute to the overall success of an educational institution.

In the Philippines, the teaching-learning environment particularly in public secondary education faced various challenges including resource limitations, poor classroom conditions, teacher quality and training, etc. Many schools, especially in remote areas, still face resource limitations such as inadequate classroom facilities, a lack of textbooks and learning materials, and limited access to technology and the Internet. In some areas, classrooms may not meet safety and sanitation standards due to overcrowded which can negatively impact the learning environment.

According to a government survey, many public schools need repair; school buildings need serious renovation or replacement and some schools still lack the needed facilities. Navarro (2022)**,** reveals that there are insufficient classrooms in some schools due to an increased number of enrolments. Moreover, classrooms in other areas do not meet quality and safety standards and deteriorate due to calamities. Regarding water sanitation and hygiene (WASH) facilities, the Philippines lags behind other countries in providing WASH facilities to schools. Concerning electricity access to schools, the Philippines still struggles to complete the electrification of schools. In addition, rates of computer and Internet access in schools are low compared with neighboring countries that have already achieved universal computer and Internet access for their schools.

Brilliantes et.al (2019) likewise found out that the facilities in some schools such as restrooms, clinics, canteen, and laboratories are not available or not functional, if present. Also, the delivery of tools and equipment is not yet complete and there have been instances that the tools or equipment being delivered has incorrect specifications or incorrect delivery of items like incorrect textbooks, laboratory chairs, and tables delivered for regular classrooms. This shows that there are still gaps in the teaching and learning environment of the schools which could affect the motivation and performance of teachers and students, the quality of education, and the overall effectiveness of the education system.

The City of Ilagan, particularly where this study was conducted, also encountered various gaps and challenges in the teaching-learning environment, particularly on inadequacy of school facilities and resources. As a teacher in one of these schools, the researcher personally encountered deficiencies in school facilities, encompassing inadequacies in laboratories, computer rooms, classrooms, and other essential resources which she believes affect the motivation and performance of the teachers and the students and the overall effectiveness of the education system. Consequently, she felt the need to reconcile these problems through communicating the result of the study to the relevant stakeholders to make positive changes in the teaching-learning environment. This situation prompted the researcher to conduct this study to further determine the effect of the teaching-learning environment on teachers and on students' level of motivation and performance with the end goal of enhancing their motivation and performance by improving the teaching-learning environment of the schools.

Conceptual Framework

Given that this study explores the impact of the teaching-learning environment on the motivation and performance of Senior High School (SHS) teachers and students, it draws upon several key concepts related to the educational environment and its influence on both groups. These concepts provide a foundation for understanding how various elements of the teaching-learning environment—such as physical infrastructure, instructional resources, social dynamics, and technological tools—affect the intrinsic and extrinsic motivation, as well as the overall performance, of both students and teachers. By examining these factors, the study seeks to uncover how a well-designed, supportive, and resource-rich educational environment can foster higher motivation levels and enhance academic and professional outcomes within the school setting.

The teaching-learning environment, often referred to as the "learning environment" or "educational environment," encompasses the physical, psychological, social, and instructional conditions and factors that influence and shape the teaching and learning process. It is the context in which education takes place and includes various elements and characteristics that can either enhance or hinder the effectiveness of education. This environment impacts both teachers and students and plays a significant role in determining the quality of education. Havidz and Mujakiah (2023) define the term as the premise and all facilities for daily learning activities. The learning environment is part of the learning process to achieve learning objectives, and the environment affects the

teaching and learning activities of the school. The learning environment is the environment, both physical and social, that affects the learning process.

According to Balog (2018), the learning environment comprises some components that influence the student's learning curve including people; teaching materials, technical tools, and learning resources; curriculum, training, and instruction, and physical environment/learning space. The people are the individuals that affect the student directly or indirectly through connection or relationship which can contribute to students' growth and success in their career aspect. The teaching materials, technical tools, and learning resources are the teaching materials, highly advanced tools, or other instructional resources that are aligned with the curriculum as a part of student learning support. The curriculum, training, and instruction are the core foundations of the learning process; they influence one another and play vital roles in facilitating the flow of knowledge and delivery of instructional content/curriculum. The physical environment/learning space refers to the physical setting of the learner's environment which should evoke positive responses and hold the interests of those who inhabit it. In addition to this, technology was also found as one component of the teaching and learning environment that increases student motivation and joy of learning if used in the classroom (Wieking, 2016).

Based on the components given by Balog, the researcher identified key components that play a significant role in influencing the motivation and performance of both teachers and students. These components include facilities, support, environment, resources, and technology.

Facilities encompass various aspects such as classrooms, laboratories, and libraries, essential for educational activities. Well-designed and equipped classrooms contribute to a positive learning environment, with comfortable seating, proper lighting, and effective use of space. Access to specialized spaces like laboratories and a well-organized library enhances the overall quality of education.

Support is another crucial component, involving assistance, resources, and services provided to teachers and students. Adequate administrative support, efficient logistics, and communication systems enable teachers to focus on teaching, leading to improved student performance. Training and professional development opportunities for teachers also contribute to their motivation and ability to provide high-quality education.

The environment, as a component, influences motivation by fostering diversity and inclusivity. A diverse and inclusive environment creates a sense of belonging, positively impacting the motivation and performance of both teachers and students.

Resources, including up-to-date textbooks and supplementary materials, are essential for effective teaching and learning. The availability and effective use of classroom resources contribute to a dynamic and engaging educational experience, positively influencing motivation and performance.

Lastly, technology plays a pivotal role in the digital age. Its effective integration into educational practices enhances engagement, facilitates interactive learning, and broadens access to information. The proper use of technology positively impacts the motivation and performance of both teachers and students in the educational process.

Indeed, a well-designed teaching-learning environment with adequate facilities, resources, support, a positive atmosphere, and appropriate technology can contribute to the motivation and performance of both teachers and students. When these elements are effectively combined, they create a dynamic and inspiring educational setting that positively influences the motivation and performance of both teachers and students.

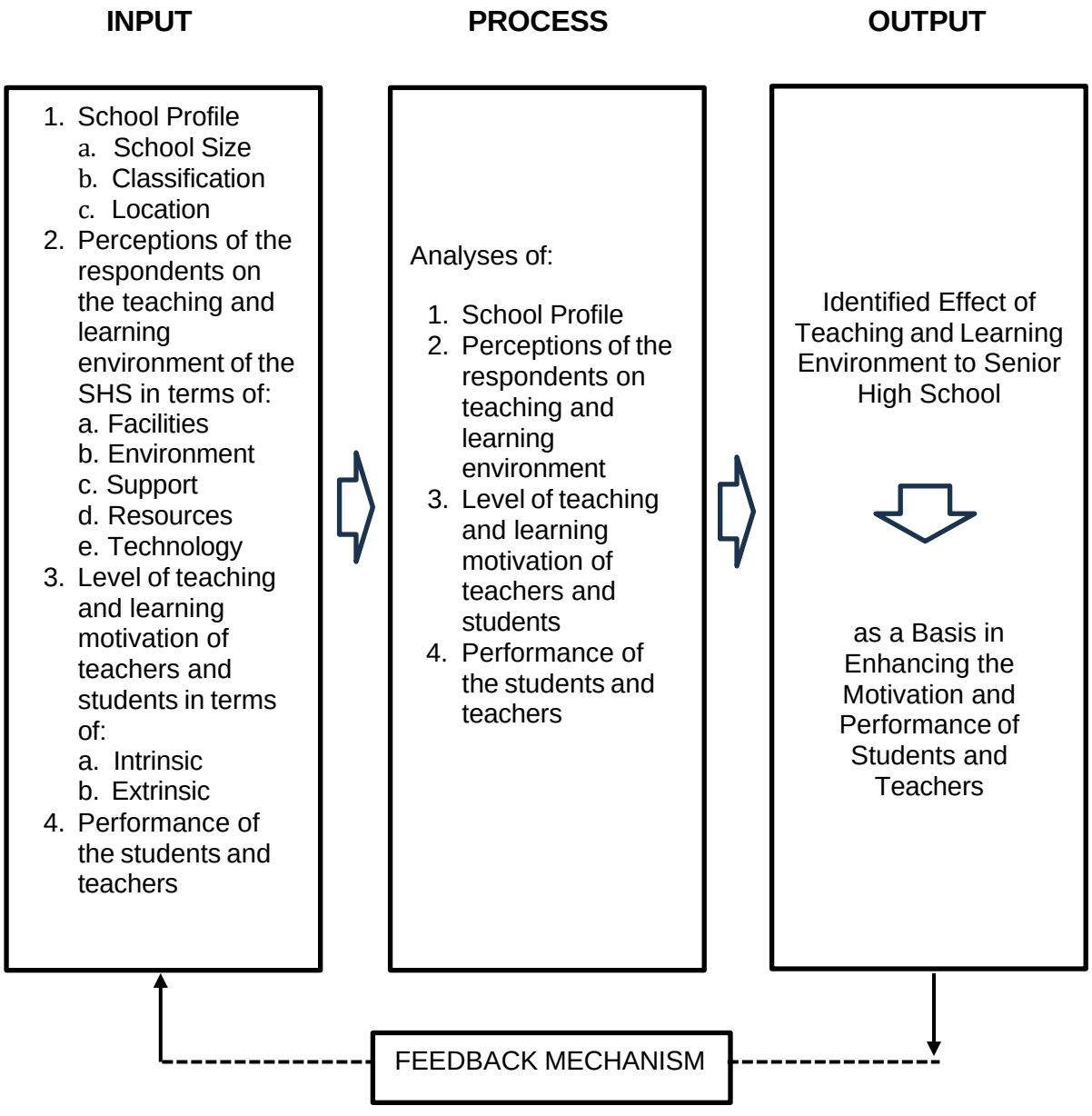


Figure 1. The Input-Process-Output Model of the Study

With the end goal of determining the effect of the teaching and learning environment on teachers' and students' levels of motivation and performance, this study was guided by the research paradigm.

The input frame of the study consists of the profile of the school which includes school size, classification, and location. These data formed part of the study for it has a great impact on the teaching and learning environment. The data on the perceptions of the respondents on the teaching and learning environment of the SHS in terms of facilities, environment, support, resources, and technology also formed part of this study for the researcher to assess the schools' teaching and learning environment. The core of the study is the data gathered on the perceived level of intrinsic and extrinsic motivation as well as the performance of the respondents.

The process indicates the steps and employment of statistical tools to analyze and interpret the data gathered. The output of this study indicates the main purpose of this study which is the enhancement of students' and teachers' motivation and performance which the researcher believes can help to further improve the quality of education, particularly in the Senior High School.

Research Questions

This study aimed to determine the effect of the learning environment on Senior High School teachers' and students' level of motivation and performance in the City Division of Ilagan for the school year 2022-2023.

Specifically, this study sought to answer the following questions:

1. What is the profile of the SHS in the City of Ilagan in terms of:
    a. School Size
    b. School Classification
    c. School Location
2. How do the respondents perceive the teaching and learning environment of the SHS in terms of:
    a. Facilities
    b. Environment
    c. Support
    d. Resources
    e. Technology
3. Is there a significant difference in the perception of the two groups of respondents on the teaching-learning environment in terms of:
    a. Facilities
    b. Environment
    c. Support
    d. Resources
    e. Technology
4. Is there a significant difference in the perception of the respondents when grouped according to profile?

5. What is the level of teaching and learning motivation of teachers and students in terms of:
    a. intrinsic
    b. extrinsic
6. Is there a significant difference in the level of motivation of the respondents in terms of:
    a. intrinsic
    b. extrinsic
7. Is there a significant difference in the level of motivation of the respondents when grouped according to profile?
8. What is the performance of the students and teachers?
9. Is there a significant relationship between and among the perceived teaching and learning environment, level of motivation, and performance of the respondents?

METHODOLOGY

Research Design

The researcher used the descriptive method of research in completing the study. According to Calderon and Gonzales (1993), this method of research is proper for a fact-finding study with adequate and accurate interpretation of the findings. It describes with emphasis what exists such as conditions, practices, situations, or any phenomena.

This method is considered appropriate for this study since it aims to describe the effect of the teaching-learning environment on SHS teachers' and students' levels of motivation and performance.

Research Locale

The research was conducted in public schools offering the SHS Program in the City Division of Ilagan. The schools coming from urban areas include Isabela National High School and Isabela School of Arts and Trades. The schools coming from rural areas include Sta. Isabel National High School, Isabela School of Arts and Trades-Annex, Gayong-Gayong Integrated School, Rang-Ayan National High School, San Lorenzo Integrated School, Managing Integrated School, Lupigue Integrated School, San Rafael National High, San Antonio National Agro-Industrial and Vocational High School, Dappat Integrated School, Ilagan West National High School, Sindun Bayabo Integrated School and San Pedro Integrated School.

Selection and Description of the Respondents

The respondents of this study were the public teachers and students of the 15 schools implementing the SHS Program in the City Division of Ilagan for the school year 2022-2023. The teacher respondents include full-time and part-time SHS teachers

teaching grades 11 and 12 students. The student respondents were the selected grades 11 and 12 students enrolled at public SHS in the City Division of Ilagan. The student respondents were selected using Slovin's formula. For the students to have an equal chance of becoming respondents, the researcher divided the sample into two meanings, 50% grade 11 and 50% grade 12. Then draw lots were done. Table 1 presents the distribution of the respondents by school.

Table 1. Respondents of the Study

School	Teachers	Students	
		Enrolment	Sample
1. Isabela National High School	65	2500	172
2. Isabela School of Arts and Trade- Main	44	1100	76
3. Rang-Ayan National High School	10	323	22
4. Sta. Isabel National High School	11	206	14
5. San Rafael National Vocational High School	7	178	12
6. San Antonio National Agro- Industrial and Vocational High School	7	186	13
7. Ilagan West National High School	8	117	8
8. ISAT Cabannungan Annex	6	112	8
9. Manaring Integrated School	8	165	11
10. San Lorenzo Integrated School	9	172	12
11. Lupigue Integrated School	7	86	6
12. Dappat Integrated School	7	94	7
13. Gayong-Gayong Integrated School	7	78	5
14. Sindun Bayabo Integrated School	6	48	3
15. San Pedro Integrated School	7	45	3
TOTAL	209	5410	372

Data Gathering Instruments

The following tools were used to gather the needed data for the study.

Questionnaire. The questionnaire was the main data-gathering instrument. It is a researcher-made questionnaire that was validated through pilot testing. It is divided into three parts. The first part of the questionnaire deals with the school profile which includes school size, classification, and location. The second part is composed of statements that assess the perceptions of the respondents on the school teaching-learning environment in terms of facilities, resources, technology, environment, and support. The last part is composed of statements that determine the respondents' level of teaching and learning motivation.

Informal Interview. This was also conducted by the researcher to validate the responses of the respondents in the questionnaire. This method assisted the respondents by clarifying some ambiguous parts that may defeat the real purpose of the study.

Documentary Analysis. This was used by the researcher to gather the data on the school profile, the general average of the students which was taken from their form 138 (Learner's Report Card), and the performance of the teachers which was taken from their IPCRF rating for the school year 2022-2023.

Data Gathering Procedure

To ensure that valid data were gathered in the conduct of the study, the researcher followed sets of procedures, and observing protocols, especially in floating the questionnaire.

The researcher sought the approval of the Schools Division Superintendent for the conduct of this study. The approval of the superintendent served as the passport of the researcher in gathering pertinent data by administering the questionnaire to the respondents in the different schools implementing the Senior High School Program in the City Division of Ilagan. The researcher personally administered the questionnaire through a scheduled meeting with the respondents.

The questionnaires were retrieved immediately after the respondents have answered completely and accurately the needed data. Data were tabulated and analyzed to realize the purpose of this study.

RESULTS AND DISCUSSION

1. Profile of Schools

a. School Size

Table 2. Frequency and Percentage Distribution of the Schools in Terms of School Size

School Size	Population	Frequency	Percentage
Small	Less than 440	13	86.67
Medium	441-840	0	0
Large	841-1,240	1	6.67
Very Large	1,240 and above	1	6.67
Total		15	100

Table 2 presents the frequency and percentage distribution of schools in terms of school size. The majority of the schools, 13 or 86.67 percent have enrolment populations of less than 440. These include Rang-Ayan National High School, Sta. Isabel National High School, San Rafael National Vocational High School, San Antonio National Agro-Industrial and Vocational High School, Ilagan West National High School, ISAT Cabannungan Annex, Manaring Integrated School, San Lorenzo Integrated School, Lupigue Integrated School, Dappat Integrated School, Gayong-Gayong Integrated School, Sindun Bayabo Integrated School, and San Pedro Integrated School; one or 6.67 percent has a population of 841- 1,240 which is Isabela School of Arts and Trade- Main, and another one or 6.67 percent is in the bracket of 1,240 and above enrolment population namely, Isabela National High School.

The data implies that most of the school respondents in the City Division of Ilagan belong to small-sized of population based on the classification set as per DepEd Order no. 19 series of 2016 where schools with a population of less than 440 are considered small schools, those with a 441-840 enrolment population are considered medium schools, those with an 841-1240 population are categorized as large schools and those with a 1,240 and above population are categorized as a very large schools.

b. School Classification

Table 3. Frequency and Percentage Distribution of the Schools in Terms of School Classification

School Classification	Frequency	Percentage
National	6	40
Integrated	9	60

Stand- Alone	0	0
Total	15	100

Table 3 shows the frequency and percentage distribution of schools in terms of school classification. Of the 15 respondent schools, there are nine or 60 percent are classified 'Integrated' including Manaring Integrated School, San Lorenzo Integrated School, Lupigue Integrated School, Dappat Integrated School, San Pedro Integrated School, Isabela School of Arts and Trade- Main, ISAT Cabannungan Annex, Gayong-Gayong Integrated School, and Sindun Bayabo Integrated School; while six or 45 percent belong to the 'National' school classification, namely, Isabela National High School, Rang-Ayan National High School, Sta. Isabel National High School, San Rafael National Vocational High School, San Antonio National Agro-Industrial and Vocational High School, and Ilagan West National High School.

Data reveals that the majority of the schools in the City of Ilagan are under the Integrated school classification. This further means that the schools offering the SHS Program also offer kindergarten, elementary, and junior high school and share the same school head and other resources.

The said finding was supported by a substitute bill entitled "An Act Ensuring Access to Free Secondary Education by Converting the Public Elementary Schools into Integrated Schools" which seeks to ensure access of elementary graduates to quality public high school education through the establishment of integrated schools providing complete basic education. This act could be the main reason why a majority of SHS schools in the City of Ilagan belong to the Integrated School Classification.

c. School Location

Table 4. Frequency and Percentage Distribution of the Schools in Terms of School Location

School Location	Frequency	Percentage
Urban	2	13.33
Rural	13	86.67
Total	15	100

Table 4 reveals the frequency and percentage distribution of schools in terms of school location. There 13 or 86.67 percent of schools are located in rural areas including Manaring Integrated School, San Lorenzo Integrated School, Lupigue Integrated School, Dappat Integrated School, San Pedro Integrated School, ISAT Cabannungan Annex, Gayong-Gayong Integrated School, Sindun Bayabo Integrated School, Rang-Ayan National High School, Sta. Isabel National High School, San Rafael National Vocational High School, San Antonio National Agro-Industrial and Vocational High School, and Ilagan West National High School; while only 2 or 13.33 percent are located in urban areas namely, Isabela National High School and Isabela School of Arts and Trade.

It can be seen in the table that the majority of the school respondents are in rural areas. This is because of the effort of the government to make education accessible to all, especially to the rural communities to reduce the number of out-of-school youths in the country through “The Integrated Public Schools Act of 2016” which seeks to ensure access to elementary graduates to quality public high school education through the establishment of integrated schools providing complete basic education. According to Rep. Vilma Santos-Recto, the creation of integrated schools will allow elementary graduates, especially from rural communities, to continue their education at a lesser cost, especially on travel expenditures. This will also result in savings for the government as facilities of existing elementary schools may be utilized for the use of incoming high school students with only repairs and a few additional classrooms to be constructed, rather than constructing a separate high school in the area.

The Teaching and Learning Environment of the Senior High Schools in the City Division of Ilagan as perceived by the respondents

a. Facilities

Table 5. The Teaching and Learning Environment of the Senior High Schools in the City Division of Ilagan as Perceived by the Respondents in Terms of Facilities

Facilities	Teachers		Students	
	Weighted Mean	Qualitative Description	Weighted Mean	Qualitative Description
1. The school has available classrooms/Laboratories/Shops and other learning facilities.	3.09	Agree	3.16	Agree
2. Classrooms are equipped with electric fans.	3.45	Strongly Agree	3.28	Strongly Agree
3. The school has TVL and non-TVL tools and equipment.	2.89	Agree	3.16	Agree
4. The school has adequate water, health and sanitation facilities	3.30	Strongly Agree	3.26	Strongly Agree
5. The school has a functional library.	2.79	Agree	3.21	Agree
6. The school has a functional clinic.	3.32	Strongly Agree	3.38	Strongly Agree
7. The school has a sports facility with required equipment.	2.62	Agree	3.10	Agree
8. The classroom has enough seats and desks for every student.	3.21	Agree	3.15	Agree
9. The school has available buildable space for the construction of SHS buildings.	3.16	Agree	3.15	Agree
10. Gender Sensitive comfort rooms are available.	3.08	Agree	2.99	Agree
11. A school- managed canteen is operational.	3.19	Agree	3.22	Agree

12. The school has safe facilities in place to address hazard threats (e.g. fire exits, fire extinguishers, appropriate electrical wirings).	3.38	Strongly Agree	3.34	Strongly Agree
Average Weighted Mean	3.12	Agree	3.20	Agree

Table 5 provides data on the teaching and learning environment of the Senior High Schools in the City Division of Ilagan as perceived by the respondents in terms of facilities.

As gleaned from the table, the teacher and student respondents presented the same level of assessment on the teaching-learning environment of the Senior High Schools in terms of facilities. The two groups of respondents rated it ‘Agree’ with an average mean of 3.12 and 3.20 respectively.

The items on the availability of classrooms/Laboratories/Shops, TVL and Non-TVL tools and equipment, functional library, sports facility with the required equipment, seats and desks for every student, buildable space for the construction of SHS buildings, gender sensitive comfort rooms, and the canteen was rated by both teacher and student respondents ‘Agree’; while the availability of classrooms with equipped electric fans, water, health and sanitation facilities, functional clinic and safe facilities in place to address hazard threats (e.g. fire exits, fire extinguishers, appropriate electrical wirings) have been rated ‘Strongly Agree’.

It is also noted that items on availability of sports facility with required equipment have been rated at the lowest mean by the teachers and availability of Gender Sensitive comfort rooms by the students. This means that there are schools that still lack the required facilities which is believed to be a crucial component of a conducive teaching and learning environment.

The cited finding is supported by Ganaden et. al (2017) who averred that public schools face diverse problems that hinder the delivery of quality education and some of these are inadequacy of facilities like sports facilities that cause students ‘reluctance to sports participation.

Furthermore, as revealed in the interview with some students who belong to the third gender or "non-binary" they feel excluded or uncomfortable using restrooms that are designated for a specific gender. This discomfort can then contribute to a negative school experience and may even impact a student's overall well-being. This is contrary to the provision of DepEd Order no. 32, s. 2017 where schools should ensure that all facilities are safe, functional, adequate, sanitary, gender and culture-sensitive, and accessible to persons with Disabilities (PWDs).

b. Environment

Table 6. The Teaching and Learning Environment of the Senior High Schools in the City Division of Ilagan as Perceived by the Respondents in Terms of Environment

Environment	Teachers		Students	
	Weighted Mean	Qualitative Description	Weighted Mean	Qualitative Description
1. Classrooms have sufficient space and have the convenience for teachers and students to move and work.	3.33	Strongly Agree	3.13	Agree
2. Classrooms have convenient seating arrangements suitable for activity-based learning.	3.37	Strongly Agree	3.18	Agree
3. Classrooms have sufficient light and ventilation.	3.42	Strongly Agree	3.11	Agree
4. The school ensures a teaching learning environment that promotes individual and team health and well-being.	3.56	Strongly Agree	3.25	Strongly Agree
5. The school implements policies and procedures for safe, secure and equitable learning environment.	3.63	Strongly Agree	3.32	Strongly Agree
6. The school promotes inclusive learning environment.	3.63	Strongly Agree	3.26	Strongly Agree
7. The school ensures efficient management of physical and IT- enabled learning structures.	3.44	Strongly Agree	3.19	Agree
8. The school ensures a learning environment that fosters health and well- being of learners and school personnel.	3.55	Strongly Agree	3.16	Agree
9. The school establishes a mechanism for a	3.55	Strongly Agree	3.16	Agree

resilient learning environment.				
10. The school ensures a learning environment that fosters positive discipline.	3.61	Strongly Agree	3.20	Agree
11. The teachers have their own lounge and/or work area.	3.28	Strongly Agree	3.26	Strongly Agree
12. The school practices proper waste disposal.	3.35	Strongly Agree	3.08	Agree
Average Weighted Mean	3.48	Strongly Agree	3.19	Agree

Table 6 presents data on the teaching and learning environment of the Senior High Schools in the City Division of Ilagan as perceived by the respondents in terms of environment.

As shown in the table, the teacher and student respondents differ in their perceptions in terms of environment. The teacher respondents rated it ‘Strongly Agree’ with an average weighted mean of 3. 48; while the student respondents rated it ‘Agree’ with an average weighted mean of 3. 19.

The results indicate that the teacher respondents have a better perception of the teaching-learning in terms of environment compared to the student respondents. Teachers may have highly positive perceptions of their learning environment because they have years of experience in education, which can provide them with a broader perspective on the challenges and successes in the classroom while students’ experience is more limited, and they may not have the same long-term view of the educational process. Moreover, teachers are more aware of the different policies and guidelines set by the Department of Education regarding the teaching and learning environment including classroom size requirements under DO 64, S. 2017 also known as “Establishing the Minimum Performance Standards and Specifications (MPSS) for DepEd School Buildings” that guide the Department and other stakeholders in the preparation of plans—architectural, structural, electrical, fire protection and sanitary— to ensure the comfort and safety of the occupants of the school buildings.

c. Support

Table 7. The Teaching and Learning Environment of the Senior High Schools in the City Division of Ilagan as Perceived by the Respondents in Terms of Support

Support	Teachers		Students	
	Weighted Mean	Qualitative Description	Weighted Mean	Qualitative Description
1. The school has an allotment of SHS MOOE and capital outlay.	3.51	Strongly Agree	3.08	Agree
2. The school has non-teaching staff	3.11	Agree	3.19	Agree
a. Registrar	3.13	Agree	3.16	Agree
b. SHS Administrative Assistant	3.52	Strongly Agree	3.24	Agree
c. Librarian	2.47	Disagree	3.08	Agree
d. SHS Guidance counselor	2.92	Agree	3.27	Strongly Agree
e. ICT Coordinator	3.65	Strongly Agree	3.20	Agree
3. There are enough teachers to teach the SHS students with a ratio of 40:1.	3.00	Agree	3.07	Agree
4. Technical assistance is provided to teachers.	3.49	Strongly Agree	3.19	Agree
5. Classroom observation is regularly conducted.	3.72	Strongly Agree	3.17	Agree
6. There is a provision of school supplies to teachers.	3.39	Strongly Agree	3.17	Agree
7. All teachers are trained on the core learning areas and specialized subjects.	3.37	Strongly Agree	3.27	Strongly Agree
8. Teachers are regularly trained in new and effective teaching-learning strategies.	3.39	Strongly Agree	3.22	Agree
9. The school has available industry, office, and agency partners as work immersion venues.	3.64	Strongly Agree	3.24	Agree
10. The school has available funds for the	3.03	Agree	3.12	Agree

insurance of the SHS learners.				
11. The school has a Parent-Teacher Association (PTA) whose elected leaders meet regularly.	3.62	Strongly Agree	3.26	Strongly Agree
12. The school has organized and capacitated the School Disaster Risk Reduction and Management Committee (SDRRMC)	3.55	Strongly Agree	3.24	Agree
Average Weighted Mean	3.34	Strongly Agree	3.19	Agree

Table 7 reflects the teaching and learning environment of the Senior High Schools in the City Division of Ilagan as perceived by the respondents in terms of Support.

The table shows that the teacher respondents assessed the teaching and learning environment of the Senior High Schools in terms of Support to 'Strongly Agree' on a mean of 3.34 and 3.19 or 'Agree' by the students, respectively. This means that teacher and student respondents perceived differently the teaching-learning environment in terms of support. The teachers have a better perception of the teaching-learning environment in terms of support except for the availability of non-teaching staff, particularly the librarian and guidance counselor. Teachers are more aware that there are indeed no available librarians and guidance counselors in their school compared to students. This is perhaps the reason why their perception rating on the availability of non-teaching staff is lower.

Moreover, the items availability of non-teaching staff particularly librarians, and adequacy of teachers to teach the SHS students with a ratio of 40:1 obtained the lowest weighted means for both teacher and student respondents. The findings indicate that not all schools in the City Division of Ilagan have non-teaching staff which is contrary to the provision of DepEd Order no. 19 s. 2016 where Senior High Schools should have the required staffing pattern. Moreover, some schools do not follow the DepEd's standard student-teacher ratio.

According to the teachers at these schools in a follow-up interview conducted, they were forced to congest their classes due to classroom shortages, inadequate infrastructure, insufficient teaching staff, or a rapid increase in student enrollment.

d. Environment

Table 8. The Teaching and Learning Environment of the Senior High Schools in the City Division of Ilagan as Perceived by the Respondents in Terms of Resources

Resources	Teachers		Students	
	Weighted Mean	Qualitative Description	Weighted Mean	Qualitative Description
1. The school has available books and other reference materials.	3.04	Agree	3.14	Agree
2. The school has available learner's materials in all learning areas.	2.92	Agree	3.09	Agree
3. The school has accessible instructional materials.	3.13	Agree	3.14	Agree
4. The school has available teacher's guides in all learning areas.	3.11	Agree	3.17	Agree
5. The school has available curriculum guides in all learning areas.	3.40	Strongly Agree	3.24	Agree
6. The school provides students access to ADM, ALS, and/or other learning materials for their use during emergencies.	3.28	Strongly Agree	3.09	Agree
7. Each classroom has a chalkboard or whiteboard.	3.63	Strongly Agree	3.30	Strongly Agree
8. Classrooms have adequate chairs and tables for students.	3.25	Strongly Agree	3.25	Strongly Agree
9. The school has adequate teacher's tables and chairs.	3.43	Strongly Agree	3.24	Agree
10. Classrooms have functional CIA boards.	3.39	Strongly Agree	3.28	Strongly Agree
11. All classrooms have adequate emergency/first aid kits that are readily available.	3.22	Agree	3.15	Agree

Average Weighted Mean	3.25	Strongly Agree	3.19	Agree

Table 8 presents the responses of the respondents on the teaching and learning environment of the Senior High Schools in the City Division of Ilagan as perceived by the respondents in terms of resources.

Data revealed, that the teacher respondents have better perceptions of the teaching and learning environment in terms of resources compared to the student-respondents with an average weighted mean of 3. 25 for the teacher- respondents and 3.19 for the student- respondents. Teachers may have a more positive perception of the teaching and learning environment in terms of resources compared to students because they are more familiar with the overall resources and facilities within the school, as they work closely with them daily. They may have access to information about the school's resources and are more attuned to the various tools and materials at their disposal. On the other hand, students might not be as well informed about the full range of resources available in the school. Their perspective may be limited to what they directly encounter in classrooms, and they might not have a comprehensive understanding of the broader array of educational tools and facilities.

Both the teacher and student respondents have the same perceptions on items availability of books and other reference materials, availability of learner's materials in all learning areas, availability of instructional materials, availability of chalkboard or whiteboard, availability of chairs and tables for students, availability of functional CIA board and availability of emergency/first aid kits while they differ in items availability of curriculum guides in all learning areas, availability of ADM, ALS, and/or other learning materials for their use during emergencies and availability of teacher's table and chair.

The item on the availability of learner's materials in all learning areas obtained the lowest weighted mean for both teacher and student respondents with average weighted means of 2.92 and 3.09, respectively.

The cited findings are supported by the study of Combalicer (2016) where one of the most pressing problems encountered by the teachers in the initial implementation of the K to 12 curriculum is the unavailability of modules for the different subject areas, lack of textbooks in the different subject areas, and very few available reading materials for project materials and research work. This problem can have negative effects on both students and teachers, impacting their motivation and performance in the educational setting. According to Maffea (2020), the lack of resources in classrooms cannot only cause extreme distress to the students and teachers, but they are unable to learn to their fullest potential because they are not being given the proper resources.

e. Technology

Table 9. The Teaching and Learning Environment of the Senior High Schools in the City Division of Ilagan as Perceived by the Respondents in Terms of Technology

Technology	Teachers		Students	
	Weighted Mean	Qualitative Description	Weighted Mean	Qualitative Description
1. The school has available ICT equipment.	3.45	Strongly Agree	3.19	Agree
2. Classrooms have multimedia and speakers.	3.05	Agree	3.08	Agree
3. The school has an accessible internet connection.	3.01	Agree	2.82	Agree
4. All classrooms have a television/projector.	3.16	Agree	3.15	Agree
5. Each classroom has a printer and scanner.	2.65	Agree	2.85	Agree
6. The school has a photocopier.	3.29	Strongly Agree	2.95	Agree
7. The school has a sound system.	3.44	Strongly Agree	3.18	Agree
8. The school has musical instruments.	2.35	Agree	2.99	Agree
9. The school has a functional Facebook page for school updates.	3.57	Strongly Agree	3.37	Agree
10. The school has a system to regularly check on the attendance of its pupils and address problems concerning non-attendance.	3.09	Agree	3.28	Strongly Agree
Average Weighted Mean	3.11	Agree	3.09	Agree

Table 9 presents the teaching and learning environment of the Senior High Schools in the City Division of Ilagan as perceived by the respondents in terms of technology. The two groups of respondents rated it ‘Agree’ or 3.11 (teachers) and 3.09 (students) weighted means, respectively.

The data reveal that both the teacher and student respondents have the same level of perception of the teaching-learning environment of the schools in terms of technology in general. However, the items on availability of ICT equipment, availability of photocopier, availability of sound system, and availability of functional school Facebook

page have different perceptions. Teachers have a more positive perception of the said items because they may have access to information about the school's technology infrastructure, including updates, improvements, and any limitations. This insider knowledge allows them to better gauge the overall technological environment within the school.

As shown in the table the items on availability of musical instruments and accessibility of internet connection gained the lowest means. This indicates that some schools in the City Division of Ilagan offering Senior High School Program still experiencing gaps in terms of resources particularly on internet accessibility which can have repercussions on motivation and performance of students and teachers.

Wherein according to Amponsah (2022) access to the Internet improves academic standards among students, as those with Internet access showed more significant progress in their academic performance than those who did not.

Table 10. Summary of the Teaching and Learning Environment of the Senior High Schools in the City Division of Ilagan as Perceived by the Respondents

Teaching and Learning Environment	Teachers		Students	
	Weighted Mean	Qualitative Description	Weighted Mean	Qualitative Description
1. Facilities	3.12	Agree	3.20	Agree
2. Environment	3.48	Strongly Agree	3.19	Agree
3. Support	3.34	Strongly Agree	3.19	Agree
4. Resources	3.25	Strongly Agree	3.19	Strongly Agree
5. Technology	3.11	Agree	3.09	Agree
Average Weighted Mean	3.26	Strongly Agree	3.17	Agree

Table 10 shows the summary of the teaching and learning environment of the Senior High Schools in the City Division of Ilagan as perceived by the two groups of respondents.

The teacher respondents generally rated the teaching-learning environment of the Senior High Schools ‘Strongly Agree’ with a 3.26 average weighted mean while the student respondents generally rated it ‘Agree’ with a 3.17 average weighted mean. This signifies that teachers have a better perception of the teaching-learning environment of the Senior High School compared to the student respondents considering the average weighted means.

Teachers have a more favorable perception of the teaching and learning environment compared to students due to their unique perspectives and professional roles. Teachers are deeply involved in the planning and execution of educational

activities, giving them a firsthand understanding of the facilities, support systems, environment, resources, and technology available. They interact with these elements daily, experiencing both their strengths and limitations. Additionally, teachers are responsible for adapting their teaching methods to cater to diverse student needs, which requires a nuanced understanding of the learning environment. In contrast, students may not be as attuned to the broader institutional considerations, and their perspective is often centered on their individual experiences within the classroom. Teachers, being stakeholders in the educational process, are also more likely to be aware of changes, updates, and challenges in the system, contributing to a more informed perception of the overall teaching and learning environment.

Comparison in the Perception of the Two Groups of Respondents on the Teaching-learning Environment

Table 11. Results of the Test of Significant Difference in the Perception of the Teachers and Students on the Teaching–Learning Environment

Variables	Mean		Probability of t	Remarks
	Teachers	Students		
Facilities	3.12	3.20	0.0467	Significant
Environment	3.48	3.19	0.0001	Significant
Support	3.34	3.19	0.0009	Significant
Resources	3.25	3.19	0.0470	Significant
Technology	3.11	3.09	0.4000	Not Significant

Table 11 presents the results of the test of significant differences in the perception of the teachers and students in the teaching-learning environment.

The results show that the t-probability values are less than 0.05 except for technology. Hence, the null hypothesis is rejected at a 0.05 level of significance. Thus, there is a significant difference in the perception of the teachers and students of the teaching-learning environment in terms of facilities, environment, support, and resources. It implies that the teachers' perception of the said four areas of the teaching-learning environment differs from that of the students. As indicated by the mean in the table, it further infers that the teachers have better perceptions of environment, support, and resources for they obtain the higher mean, while the students perceive better the teaching-learning environment in terms of facilities since they got the higher mean.

However, there is no significant difference in the perception of the teachers and students of the teaching-learning environment in terms of technology. Hence, the null hypothesis is accepted at a 0.05 significance level. It states that the teachers and the students do not differ from each other in their perceptions of technology. It shows that they have similarities in their perceptions of teaching and learning environments in terms of technology. Teachers and students often share similar perceptions regarding the availability and use of technology in the school environment for various reasons. One crucial factor is the establishment of a shared experience where both teachers and

students have consistent access to modern tools and resources. When the school fosters a collaborative learning environment that encourages the integration of technology into teaching and learning practices, it can lead to a collective positive perception.

Comparison in the Perception of the Respondents of the Teaching-learning Environment Grouped by Profile

a. Teachers

1. School Size

Table 12. Results of the Test of Significant Difference in the Perception of the Teachers on the Teaching-Learning Environment when Grouped According to School Size

Variables	Mean			Probability of F	Remarks
	Very Large	Large	Small		
Facilities and School Size	2.91	3.14	3.25	0.0008	Significant
Environment and School Size	3.28	3.52	3.60	0.0006	Significant
Support and School Size	3.36	3.36	3.30	0.0627	Not Significant
Resources and School Size	2.95	3.30	3.43	0.0000	Significant
Technology and School Size	3.00	3.02	3.22	0.0084	Significant

The results of the test of significant difference in the perception of the teachers on the teaching-learning environment, when grouped according to school size, are presented in Table 12.

It is revealed from the results that the probability values of F are less than 0.05 except for support. This signifies the rejection of the null hypothesis at a 0.05 level of significance. Therefore, there is a significant difference in the perception of the teachers of the teaching-learning environment in terms of facilities, environment, resources, and technology when grouped according to school size. It shows that the teachers from very large schools differ in their perceptions of the aforementioned areas from those who come from large and small schools. As evidenced by the mean in the table the teachers who belong to small schools have better perceptions of the teaching-learning environment on facilities, environment, resources, and technology for they obtain the higher mean.

On the other hand, there is no significant difference in the perception of the teachers of the teaching-learning environment in terms of support when grouped according to school size. Hence, the null hypothesis is accepted at a 0.05 significance

level. It implies that the teachers have similarities in their perceptions of support as one category of the teaching-learning environment regardless of the school size they belong.

This finding is supported by DO No. 31, s. 2016 – Implementing Guidelines on the Release and Utilization of Maintenance and Other Operating Expenses (MOOE) Allocations of Senior High Schools which states that the MOOE budget for every year depends upon the number of enrollees. MOOE is the allocated funds for public elementary and secondary schools that can be spent on activities and necessities that support the learning programs and help maintain a safe and healthy environment in schools.

2. School Classification

Table 13. Results of the Test of Significant Difference in the Perception of the Teachers on the Teaching Learning Environment when grouped according to School Classification

Variables	Mean		Probability of F	Remarks
	National	Integrated		
Facilities and School Classification	3.07	3.19	0.0310	Significant
Environment and School Classification	3.38	3.58	0.0206	Significant
Support and School Classification	3.37	3.31	0.0177	Significant
Resources and School Classification	3.17	3.37	0.0009	Significant
Technology and School Classification	3.09	3.12	0.0526	Not Significant

Table 13 displays the results of the test of significant differences in the perception of the teachers on the teaching-learning environment when grouped according to school classification.

The results reflect that the F-probability values are less than 0.05 except for technology. For this reason, the null hypothesis is rejected at a 0.05 level of significance. As a result, there is a significant difference in the perception of teachers on the teaching-learning environment in terms of facilities, environment, support, and resources when grouped according to school classification. It shows that the perception of the teachers who belong to integrated schools differs from those who come from national schools. It further notes as indicated by the mean in the table that the teachers who teach in integrated schools have a better perception of facilities, facilities, environment, and resources for they obtain the higher means. While the teachers of national schools perceive better support since they have the higher mean.

However, there is no significant difference in the perception of the teachers on the teaching-learning environment in terms of technology when grouped according to school

classification. Hence, the null hypothesis is accepted at a 0.05 significance level. It implies that both teachers of national and integrated schools have similarities in their perceptions of technology as one indicator of the teaching-learning environment.

Many schools in the Philippines, regardless of their classification, may face similar challenges when it comes to resources, including technological resources. Issues such as limited access to computers, internet connectivity, and relevant software can be prevalent in both national and integrated schools. This could be one of the reasons why teachers perceived similarly the teaching-learning environment in terms of technology regardless of their school classification. In a report released by the Philippine Star in 2023, the Philippines was among the countries reported to have insufficient computers in schools, leading to more disadvantaged students, especially in rural areas. Moreover, the lack of devices and digital infrastructure also makes it difficult for teachers to integrate technology into their professional tasks, according to the report.

3. School Location

Table 14. Results of the Test of Significant Difference in the Perception of the Teachers on the Teaching Learning Environment when grouped according to School Location

Variables	Mean		Probability of F	Remarks
	Urban	Rural		
Facilities and School Location	3.00	3.26	0.0006	Significant
Environment and School Location	3.37	3.60	0.0010	Significant
Support and School Location	3.36	3.32	0.0178	Significant
Resources and School Location	3.10	3.43	0.0000	Significant
Technology and School Location	3.01	3.21	0.0260	Significant

The results of the test of significant difference in the perception of the teachers on the teaching-learning environment when grouped according to school location are displayed in Table 14. It is evident from the results that the probability values of F are less than 0.05. Hence, the null hypothesis is rejected at a 0.05 level of significance. Thus, there is a significant difference in the perception of the teachers on the teaching-learning when grouped according to school location. It shows that the perception of teachers from urban schools differs from those who are from rural schools. This is evidenced by the mean in the table that the teachers whose schools are mean in the table that the teachers whose schools are located in rural areas have better perceptions of the teaching-learning environment in terms of facilities, environment, resources, and technology for they obtain the higher mean. Whereas the teachers from urban schools have a better perception of support since they got the higher mean. This contradicts the study by Hassan (2018) in which he stated that in urban schools all types of facilities are mostly available like

electricity, furniture, well-equipped classrooms, water, toilets, and teaching staff. But in rural areas these facilities are not available; electricity and furniture are not available.

b. Students

1. School Size

Table 15. Results of the Test of Significant Difference in the Perception of the Students on the Teaching-Learning Environment when grouped according to School Size.

Variables	Mean			Probability of F	Remarks
	Very Large	Large	Small		
Facilities and School Size	3.13	3.25	3.26	0.0111	Significant
Environment and School Size	3.15	3.09	3.30	0.0002	Significant
Support and School Size	3.20	3.20	3.17	0.8318	Not Significant
Resources and School Size	3.15	3.17	3.25	0.0094	Significant
Technology and School Size	3.05	3.12	3.12	0.3268	Not Significant

Table 15 discloses the results of the test of significant differences in the perception of the students on the teaching-learning environment when grouped according to school size.

The results reveal that the F- probability values are less than 0.05 except for support and technology. This signifies the rejection of the null hypothesis at a 0.05 level of significance. Therefore, there is a significant difference in the perception of the students of the teaching-learning environment in terms of facilities, environment, and resources when grouped according to school size. It shows that the students differ from each other in their perceptions of the aforementioned three areas of the teaching-learning environment when classified by school size. As indicated by the mean in the table, the students who belong to small schools have better perceptions of the said three areas for they have the higher mean. Teachers and students in small schools may have better perceptions of the teaching and learning environment since small schools often have smaller class sizes, which allow for more individualized attention from teachers. This can lead to a more supportive and personalized learning experience for students.

According to Blatchford et al. (2009), teachers in small classes are more likely to give individual attention to students, effectively control and manage the classroom, and build better relationships with students. Similarly, students in small classes may be more engaged in the classroom and more likely to interact with teachers and peers.

On the other hand, there is no significant difference in the perceptions of the students on the teaching-learning environment in terms of support and technology when

grouped according to school size. Hence, the null hypothesis is accepted at a 0.05 significance level. It implies that the students have similarities in their perceptions of support and technology regardless of their school size. One of the reasons that support this finding is the allocation of MOOE for public schools. MOOE or Maintenance and Other Operating Expenses, is a budgetary allocation provided by the Department of Education (DepEd) in many countries to support the day-to-day operations of schools. It includes funds for various needs such as utilities, supplies, and other operational expenses. The allocation of MOOE is uniform across schools of different sizes. This ensures that regardless of the school's size, there is an equitable distribution of funds for essential resources, materials, and support services based on the guidelines set as per DepEd Order No. 31, s, 2016.

2. School Classification

Table 16. Results of the Test of Significant Difference in the Perception of the Students on the Teaching-Learning Environment when Grouped according to School Classification

Variables	Mean		Probability of F	Remarks
	National	Integrated		
Facilities and School Classification	3.16	3.26	0.0122	Significant
Environment and School Classification	3.19	3.20	0.4888	Not Significant
Support and School Classification	3.18	3.20	0.3846	Not Significant
Resources and School Classification	3.17	3.23	0.0340	Significant
Technology and School Classification	3.07	3.11	0.0382	Significant

The results of the test of significant differences in the perception of the students on the teaching-learning environment when grouped according to school classification are disclosed in Table 16.

It is evident from the results that the probability values of F are less than 0.05 except for environment and support. For this reason, the null hypothesis is rejected at a five percent significance level. As a result, there is a significant difference in the perception of the students of the teaching-learning environment in terms of facilities, resources, and technology. It states that students from integrated schools differ in their perceptions of the aforesaid areas of the teaching-learning environment from those students at national schools. It is further inferred, as indicated by the mean in the table, that the students from the integrated schools have better perceptions of facilities, resources, and technology for they obtain the higher mean.

However, there is no significant difference in the perceptions of the students on the teaching-learning environment in terms of environment and support when grouped according to school classification. Hence, the null hypothesis is accepted at five percent significance level. It implies that the students have similarities on their perceptions of the teaching-learning environment along the said two areas regardless of their school classification.

3. School Location

Table 17. Results of the Test of Significant Difference in the Perception of the Students on the Teaching-Learning Environment when Grouped according to School Location

Variables	Mean		Probability of F	Remarks
	Urban	Rural		
Facilities and School Location	3.17	3.36	0.0500	Significant
Environment and School Location	3.13	3.30	0.0080	Significant
Support and School Location	3.20	3.17	0.0862	Not Significant
Resources and School Location	3.15	3.25	0.0276	Significant
Technology and School Location	3.07	3.12	0.0221	Significant

Table 17 exhibits the results of the test of significant differences in the perception of the students on the teaching-learning environment when grouped according to school location.

The results reflect that the F- probability values are less than 0.05 except for support. Hence, the null hypothesis is rejected at a five percent level of significance. Thus, there is a significant difference in the perception of the students of the teaching-learning environment in terms of facilities, environment, resources, and technology when grouped according to school location. It shows that the students perceive differently the teaching-learning environment in the aforesaid four areas when clustered by school location. As evidenced by the mean in the table, the students who are from rural schools have better perceptions of the teaching-learning environment along with facilities, environment, resources, and technology for they got the higher mean.

On the other hand, there is no significant difference in the perceptions of the students on the teaching-learning environment in terms of support when grouped according to school classification. Hence, the null hypothesis is accepted at a 0.05 significance level. It states that the students have similarities in their perceptions of support as one of the areas of the teaching-learning environment regardless of their school classification. This is because the schools receive equal support from the DepEd through MOOE which provides the financial resources necessary for the effective and efficient operation of educational institutions.

The Level of Teaching and Learning Motivation of Teachers and Students

a. Intrinsic

Table 18. The Level of Teaching and Learning Motivation of Teachers and students in terms of Intrinsic

Intrinsic	Teachers		Students	
	Weighted Mean	Qualitative Description	Weighted Mean	Qualitative Description
I feel excited going to school every day.	3.39	Highly Motivated	3.25	Highly Motivated
I enjoy the atmosphere in my classroom.	3.39	Highly Motivated	3.12	Motivated
I feel at home in my school. It is my second home.	3.43	Highly Motivated	3.26	Highly Motivated
I feel safe and comfortable in the school.	3.43	Highly Motivated	3.23	Motivated
I feel confident when I am at school.	3.47	Highly Motivated	3.09	Motivated
I am satisfied with the culture of the school.	3.23	Motivated	3.20	Motivated
My school embarks good values necessary for life.	3.40	Highly Motivated	3.36	Highly Motivated
The school where I work/learn contributes to my recognition.	3.42	Highly Motivated	3.32	Highly Motivated
I feel motivated to do my schoolwork.	3.33	Highly Motivated	3.18	Motivated
I perform my best in my daily work/task.	3.50	Highly Motivated	3.21	Motivated
I can use my creativity in the school where I work/study.	3.47	Highly Motivated	3.30	Highly Motivated
My potentials are fully utilized in this school.	3.40	Highly Motivated	3.17	Motivated
I am satisfied with my performance in school.	3.46	Highly Motivated	3.21	Motivated
I have authority to take decisions about my teaching/learning.	3.56	Highly Motivated	3.27	Highly Motivated
I am motivated to assist the school in meeting its objectives/vision and mission.	3.46	Highly Motivated	3.17	Motivated

I am adequately treated/ respected by my teachers/school head.	3.54	Highly Motivated	3.36	Highly Motivated
I have a good relationship with my colleagues, students, and their parents.	3.58	Highly Motivated	3.34	Highly Motivated
My colleagues inspire me, they are the best people to work with.	3.40	Highly Motivated	3.23	Motivated
I appreciate the management/teaching style of my school head/teachers.	3.31	Highly Motivated	3.40	Highly Motivated
My school head/teachers listen to my concerns and support reasonable suggestions.	3.43	Highly Motivated	3.31	Highly Motivated
My school head/teacher clearly communicate job performance expectations.	3.34	Highly Motivated	3.36	Highly Motivated
My school head/teacher has a professional judgement and is fair in his/her rating/grade to me.	3.45	Highly Motivated	3.12	Motivated
I am encouraged by my school head/teachers to perform well.	3.51	Highly Motivated	3.33	Highly Motivated
Average Weighted Mean	3.43	Highly Motivated	3.25	Highly Motivated

Table 18 presents the level of teaching and learning motivation of teachers and students in terms of Intrinsic.

The data reveal that both teacher and student respondents have the same level of teaching and learning motivation in terms of intrinsic. They rated it as “Highly Motivated” with a 3.43 average weighted mean for teacher- respondents and 3.25 for student-respondents. However, on some items such as “I enjoy the atmosphere in my classroom”, “I feel safe and comfortable in the school”, “I feel confident when I am at school”, “I feel motivated to do my schoolwork”, “I perform my best in my daily work/task”, “My potentials are fully utilized in this school”, I” am satisfied with my performance in school”, “I am motivated to assist the school in meeting its objectives/vision and mission”, “My

colleagues inspire me, they are the best people to work with", and "My school head/teacher has a professional judgment and is fair in his/her rating/grade to me" the teacher- respondents displayed a higher level of motivation compared to the student-respondents.

A combination of factors, including a positive learning environment, supportive relationships, recognition of achievements, rewards, clear goals, and growth opportunities, contributes to the high motivation levels observed among both learners and teachers. Schools in the City Division of Ilagan often implement recognition programs to honor outstanding teachers, administrators, and staff members who demonstrate excellence in their roles. This may involve awards ceremonies, certificates of appreciation, or public acknowledgment of their achievements. Similarly, students were also given recognition for their achievements and accomplishments. Thus, by fostering these conditions, schools can create environments where motivation thrives, leading to improved outcomes for both teachers and students.

b. Extrinsic

Table 19. The Level of Teaching and Learning Motivation of Teachers and students in terms of Extrinsic

Extrinsic	Teachers		Students	
	Weighted Mean	Qualitative Description	Weighted Mean	Qualitative Description
I am motivated by the salary, benefits, and allowances I am receiving.	3.23	Motivated		Motivated
I am motivated by the benefits I am receiving in this school.			3.22	
Promotions are properly implemented.	2.96	Motivated		Motivated
The school has a dropout reduction program, 100 percent grade level promotion.			3.05	
I receive sufficient and appropriate performance recognition.	3.32	Highly Motivated	3.20	Motivated
The school provides me opportunities to actively participate in school decisions.	3.27	Highly Motivated	3.25	Highly Motivated
The school provides me opportunities for learning/professional development.	3.34	Highly Motivated	3.30	Highly Motivated

I have appropriate equipment to perform my duties/task effectively.	3.25	Highly Motivated	3.13	Motivated
I have access to teaching/learning materials and resources in my school.	3.38	Highly Motivated	3.16	Motivated
The facilities in my school boost my morale.	3.21	Motivated	3.11	Motivated
WASH facilities provide me comfortable teaching- learning environment.	3.35	Highly Motivated	3.21	Motivated
ICT equipment makes teaching- learning process more fun and interesting.	3.40	Highly Motivated	3.16	Motivated
Well-equipped classrooms provide me favorable settings for teaching/learning.	3.41	Highly Motivated	3.18	Motivated
Laboratory enhances my effectiveness in teaching/learning	3.25	Highly Motivated	3.05	Motivated
School library equipped with books enhance my effectiveness in teaching/learning	2.95	Motivated	3.11	Motivated
Recreational and sporting facilities enhance my effectiveness in teaching/learning	2.98	Motivated	3.10	Motivated
Instructional facilities help me in the effective and efficient delivery of the lesson.	3.32	Highly Motivated		Motivated
Instructional facilities help me to learn effectively and efficiently.			3.21	
Average Weighted Mean	3.24	Motivated	3.16	Motivated

Table 19 provides data on the level of teaching and learning motivation of teachers and students in terms of Extrinsic.

The table shows that both teacher and student respondents have the same level of teaching and learning motivation in terms of extrinsic. They rated it as “Motivated” with

a 3.24 average weighted mean for teacher- respondents and 3.16 for student-respondents. However, items including “I receive sufficient and appropriate performance recognition”, “I have the appropriate equipment to perform my duties/task effectively”, “I have access to teaching materials and resources in my school”, and “WASH facilities provide me comfortable teaching-learning environment”, “ICT equipment makes the teaching-learning process more fun and interesting”, “Well-equipped classrooms provide me favorable settings for teaching/learning”, “Laboratory enhances my effectiveness in teaching/learning”, and “Instructional facilities help me in the effective and efficient delivery of the lesson/ Instructional facilities help me to learn effectively and efficiently” the teacher- respondents got higher weighted means. This means that they have a higher level of extrinsic motivation on the said items compared to the student- respondents.

The item “Promotions are properly implemented” obtained the lowest mean for teachers, while the item “Laboratory enhances my learning” got the lowest mean for the students. The results suggest that teachers are not fully motivated in terms of promotion implementation, and some students are not fully motivated because of the insufficient laboratory facilities in their schools.

Table 20. Summary of the Level of Teaching and Learning Motivation of Teachers and Students

Motivation	Teachers		Students	
	Weighted Mean	Qualitative Description	Weighted Mean	Qualitative Description
1. Intrinsic	3.43	Highly Motivated	3.25	Highly Motivated
2. Extrinsic	3. 24	Motivated	3.16	Motivated
Average Weighted Mean	3.34	Highly Motivated	3.21	Motivated

Table 20 shows the summary of the level of teaching and learning motivation of the respondents.

As shown in the table, both the teacher and student respondents have high levels of intrinsic teaching-learning motivation with a 3.43 weighted mean for teachers and 3.25 for students. In terms of extrinsic motivation, the two groups of respondents rated “Motivated” with a weighted mean of 3.24 for teachers and 3.16 for students. This means that teacher and student respondents have higher levels of intrinsic teaching and learning motivation compared to extrinsic.

Access to appropriate resources and well-maintained facilities can enhance the overall teaching-learning experience and contribute to a positive and motivating environment. However, some teachers and students feel that they lack access to these essential resources and facilities of the school which may lead to decreased motivation among them. In an interview conducted, some of the student- respondents said that their school lacked learning materials, textbooks, technology, or other resources, and had inadequate or poorly maintained facilities, such as laboratories, classrooms, and libraries.

According to a report by the Department of Education, many schools lack adequate classrooms, textbooks, and teaching materials, making it challenging for students to learn effectively. This challenge is not only limited to rural areas but is also present in urban areas. The absence of these tools and materials needed for effective learning could be the reason why they are less motivated.

Comparison between Intrinsic and Extrinsic Levels of Motivation as Perceived by the Two Groups of Respondents

Table 21. Results of the Test of Significant Differences in the Level of Motivation as Perceived by the Teachers and Students in Terms of Intrinsic and Extrinsic

Level of Motivation	Mean		Probability of t	Remarks
	Teachers	Students		
Intrinsic	3.43	3.25	0.0007	Significant
Extrinsic	3.24	3.16	0.0425	Significant

The results of the test of significant difference in the level of motivation as perceived by the teachers and students in terms of intrinsic and extrinsic are exhibited in Table 21.

It is evident from the results that the probability t-values are less than 0.05. This signifies the rejection the rejection of the null hypothesis at five percent level of significance. Therefore, there is a significant difference in the level of motivation as perceived by the teachers and the students in terms of intrinsic and extrinsic. It shows that the teachers' perception of the level of intrinsic and extrinsic motivation differs from that of the students. As indicated by the mean in the table, the teachers have better perceptions of their intrinsic and extrinsic level of motivation for they obtain the higher mean.

The disparity in the perceived intrinsic and extrinsic motivation between teachers and students can be attributed to factors such as professional development, autonomy, varied roles, and life experience. Teachers, through their extensive training and diverse roles, often gain a deeper understanding of their motivation levels compared to students who may be navigating a more structured and externally guided educational journey. Recognizing these differences is essential for fostering effective communication and collaboration between educators and students, ultimately enhancing the learning experience for all parties involved.

Comparison in the Level of Motivation of the Respondents when Grouped by Profile

a. Teachers

1. Intrinsic

Table 22. Results of the Test of Significant Differences in the Level of Motivation of the Teachers in terms of Intrinsic when Grouped by School Profile

Variables	Mean			Probability of F	Remarks
Intrinsic and School Size	Very Large	Large	Small	0.0009	Significant
	3.29	3.37	3.55		
Intrinsic and School Classification	National	Integrated		0.0309	Significant
	3.36	3.50			
Intrinsic and School Location	Urban	Rural		0.0007	Significant
	3.32	3.55			

Table 22 presents the results of significant differences in the level of motivation of the teachers in terms of intrinsic when grouped according to school profile.

The results show that the probability values of F are less than 0.05. For this reason, the null hypothesis is rejected at a 0.05 significance level. As a result, there is a significant difference in the level of motivation of teachers in terms of intrinsic when grouped according to school profile. It indicates that the teachers vary in their level of intrinsic motivation when clustered by school size, school classification, and school location. As evidenced by the mean in the table, the teachers, who belong to small, integrated, and rural schools have better levels of intrinsic motivation for they obtain the higher mean.

The higher level of intrinsic motivation observed among teachers in small, integrated, and rural schools can be attributed to a combination of factors, including a strong sense of community, personalized relationships, autonomy, perceived impact, professional collaboration, reduced bureaucracy, and alignment of values. Thus, understanding these contributing factors provides valuable insights for educators, policymakers, and stakeholders aiming to enhance teacher motivation and, consequently, the overall quality of the teaching-learning environment. Ultimately, fostering a supportive and empowering professional culture is crucial for nurturing the intrinsic motivation that drives educators to excel in their noble pursuit of shaping young minds.

2. Extrinsic

Table 23. Results of the Test of Significant Differences in the Level of Motivation of the Teachers in terms of Extrinsic when Grouped by School Profile

Variables	Mean			Probability of F	Remarks
Extrinsic and School Size	Very Large	Large	Small	0.0005	Significant
	3.16	2.96	3.42		
Extrinsic and School Classification	National	Integrated		0.0582	Not Significant
	3.25	3.23			
Extrinsic and School Location	Urban	Rural		0.0000	Significant
	3.08	3.42			

The results of the test of significant difference in the level of motivation of the teachers in terms of extrinsic, when grouped according to school profile, are presented in Table 23.

It is posted in the table that the F-probability values are less than 0.05 except for school classification. Hence, the null hypothesis is rejected at a 0.05 level of significance. Thus, there is a significant difference in the level of motivation of the teachers in terms of extrinsic when grouped according to school size and location. It shows that the teachers differ from each other in their level of extrinsic motivation when grouped by the said school profiles. As evidenced by the mean in the table, it notes further that the teachers who are from small and rural schools have better levels of extrinsic motivation for they obtain the higher mean.

This contradicts the study of Takupiwa (2013) that teachers in rural areas are more poorly motivated and dissatisfied than their urban counterparts with their living and working conditions. Low wages when compared with urban teachers, lack of promotion opportunities, lack of career advancement opportunities, high teacher-pupil ratio, poor work environment, and inadequate fringe benefits contributed to lower teachers' morale in rural areas.

However, there is no significant difference in the level of motivation of teachers in terms of extrinsic when grouped according to school classification. Hence, the null hypothesis is accepted at a 0.05 significance level. It implies that the teachers have similarities in their level of extrinsic motivation regardless of their school classification.

b. Students

1. Intrinsic

Table 24. Results of the Test of Significant Differences in the Level of Motivation of the Students in terms of Intrinsic when Grouped by School Profile

Variables	Mean			Probability of F	Remarks
Intrinsic and School Size	Very Large	Large	Small	0.0097	Significant
	3.20	3.22	3.35		
Intrinsic and School Classification	National	Integrated		0.0157	Significant
	3.23	3.29			
Intrinsic and School Location	Urban	Rural		0.0095	Significant
	3.21	3.35			

Table 24 displays the results of significant differences in the level of motivation of the students in terms of intrinsic when grouped according to school profile.

The results reveal that the F-probability values are less than 0.05. This signifies the rejection of the null hypothesis at 0.05. This signifies the rejection of the null hypothesis at a 0.05 significance level. Therefore, there is a significant difference in the level of motivation of the students in terms of intrinsic when grouped according to school profile. It states that the students have varied levels of intrinsic motivation when they are clustered by school size, classification, and location. It is further inferred as indicated by the mean in the table, that the students who belong to small, integrated, and rural schools have better levels of intrinsic motivation for they got the higher mean. It was supported by the findings of Grauer (2019) which indicate that students from small schools are more engaged, connected, and intrinsically motivated than students who attend larger schools.

b. Students

2. Extrinsic

Table 25. Results of the Test of Significant Differences in the Level of Motivation of the Students in terms of Extrinsic when Grouped by School Profile

Variables	Mean			Probability of F	Remarks
Extrinsic and School Size	Very Large	Large	Small	0.0096	Significant
	3.16	3.08	3.35		
Extrinsic and School Classification	National	Integrated		0.2560	Not Significant
	3.17	3.15			
	Urban	Rural		0.0004	Significant

Extrinsic and School Location	3.14	3.21		

The results of the test of significant difference in the level of motivation of the students in terms of extrinsic, when grouped according to school profile, are displayed in Table 25.

It is reflected from the results that the probability values of F are less than a five percent significance level except for school classification. For this reason, the null hypothesis is rejected at a 0.05 significance level. As a result, there is a significant difference in the level of motivation of students in terms of extrinsic when grouped according to school size and location. It states that the students have different levels of extrinsic motivation when they are classified by the said two school profiles. As evidenced by the mean in the table, the students from small and rural schools have better levels of extrinsic motivation for they obtain the higher mean.

On the other hand, there is no significant difference in the level of motivation of the students in terms of extrinsic when grouped according to school classification. Hence, the null hypothesis is accepted at a 0.05 significance level. It implies that the students have similarities in their level of extrinsic motivation regardless of their school classification.

Performance of the Students and Teachers

Table 26. Performance of Teachers

Rating	Qualitative Description	Frequency	Percentage
4.500 – 5.000	Outstanding	177	84.69
3.500 – 4.499	Very Satisfactory	32	15.31
2.500 – 3.499	Satisfactory	0	0
1.500 – 2.499	Unsatisfactory	0	0
below 1.499	Poor	0	0
Total		209	100

Table 26 presents the data on the performance of teachers in public Senior High Schools in the City Division for the school year 2022- 2023.

The results show that 177 or 84.69 percent had 4.500- 5000 or Outstanding performance and 32 or 15. 31 percent has 3.500- 4.499 or Very Satisfactory performance. This implies that most of the teacher respondents have outstanding performance based on the guidelines and criteria set as per DepEd Order No. 2, s. of 2015, titled Guidelines on the Establishment and Implementation of the Results-Based Performance Management System (RPMS).

Outstanding performance often stems from a combination of factors, including personal dedication, support from the education system, and a conducive work environment. When these elements align, teachers can thrive and make a significant impact on their students' learning experiences. According to Surya (2004) several factors affect the performance of teachers including reward, safety, interpersonal relationships, working environment conditions, and opportunities for self-development and improvement. Hence if the teachers were provided professional development opportunities, mentoring programs, and classroom resources, they are more likely to excel in their roles. In the Department of Education, teachers were provided adequate trainings to ensure that the learners receive the best education possible. Furthermore, it was also found out that the schools in the City Division offering Senior High School have favorable teaching and learning environment which is also one of the several factors that affect the performance of the teachers. These could be the reasons why the SHS teachers in the City Division of Ilagan have outstanding performance.

Table 27. Performance of Students

Rating	Qualitative Description	Frequency	Percentage
90-100	Outstanding	210	56.45
85-89	Very Satisfactory	118	31.72
80-84	Satisfactory	28	7.53
75-79	Fairly Satisfactory	16	4.30
Below 75	Did Not Meet Expectation	0	0
Total		372	100

Table 27 displays the performance of the student respondents for the school year 2022- 2023.

Among the 372 respondents, 210 or 56. 45 percent had 90- 100 or Outstanding performance, 118 or 31.72 percent had 85-89 or Very Satisfactory performance, 28 or 7.53 percent had 80- 84 or Satisfactory performance, and 16 or 4.30 percent had 75- 79 or Fairly Satisfactory performance. This signifies that the majority of respondents have outstanding performance based on the criteria set as per DepEd Order No. 8, s. of 2015, titled Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program.

Comparison in the Perceived Teaching and Learning Environment, Level of Motivation, and Performance of the Respondents

a. Teachers

1. Intrinsic Motivation

Table 28. Results of the Test of Significant Relationship between the Perceived Teaching and Learning Environment and the Level of Intrinsic Motivation of the Teachers

Variables	Probability of r	Remarks
Facilities and Intrinsic Motivation	0.0005	Significant
Environment and Intrinsic Motivation	0.0003	Significant
Support and Intrinsic Motivation	0.0007	Significant
Resources and Intrinsic Motivation	0.0001	Significant
Technology and Intrinsic Motivation	0.0009	Significant

Table 28 discloses the results of the test of a significant relationship between the perceived teaching and learning environment and the level of intrinsic motivation of the teacher.

The results show that the probability values of r are less than 0.05. Hence, the null hypothesis is rejected at a five percent level of significance. Thus, there is a significant relationship between the perceived teaching and learning environment and the level of intrinsic motivation of the teachers. It implies that the teachers' perception of the teaching and learning environment in terms of facilities, environment support, resources, and technology significantly affects the intrinsic motivation of the teachers.

Teachers' perception of the teaching and learning environment indeed plays a pivotal role in shaping their intrinsic motivation. When teachers perceive a positive and well-equipped environment, it fosters a sense of efficacy and purpose. Adequate facilities and resources enhance their ability to deliver quality education, while a supportive atmosphere encourages collaboration and professional growth. Technology integration provides tools to innovate teaching methods, making lessons more engaging. Conversely, if teachers perceive deficiencies or lack of support in these areas, it can lead to frustration and demotivation. In essence, a conducive teaching and learning environment empowers teachers, boosting their intrinsic motivation and, consequently, positively impacting the quality of education they provide. Thus, it is stated in the DepEd Educational Facilities Manual that improving school facilities is crucial for creating a positive and effective learning environment, thus, increasing motivation and better performance.

2. Extrinsic Motivation

Table 29. Results of the Test of Significant Relationship between the Perceived Teaching and Learning Environment and the Level of Extrinsic Motivation of the Teachers

Variables	Probability of r	Remarks
Facilities and Extrinsic Motivation	0.0007	Significant
Environment and Extrinsic Motivation	0.0004	Significant
Support and Extrinsic Motivation	0.0009	Significant
Resources and Extrinsic Motivation	0.0005	Significant
Technology and Extrinsic Motivation	0.0008	Significant

The results of the test of a significant relationship between the perceived teaching and learning environment and the level of extrinsic motivation of the teachers are disclosed in Table 29.

It is evident from the results that the probability values of r are less than 0.005. This signifies the rejection of the null hypothesis at a five percent significance level. Therefore, there is a significant relationship between the perceived teaching and learning environment and the level of extrinsic motivation of the teachers. It shows that the teachers' extrinsic motivation is significantly affected by their perceived teaching and learning environment in terms of facilities, environment, support, resources, and technology. Thus, schools should prioritize creating a conducive atmosphere where teachers feel valued, supported, and equipped to excel in their roles, ultimately enhancing their overall motivation to contribute meaningfully to the learning experiences of their students.

3. Performance

Table 30. Results of the Test of Significant Relationship between the Perceived Teaching and Learning Environment and the Level of Motivation to the Performance of the Teachers.

Variables	Probability of X^2	Remarks
Facilities and Performance	0.1563	Not Significant
Environment and Performance	0.1877	Not Significant
Support and Performance	0.1905	Not Significant
Resources and Performance	0.2658	Not Significant
Technology and Performance	0.1894	Not Significant
Intrinsic Motivation and Performance	0.1560	Not Significant
Extrinsic Motivation and Performance	0.0090	Significant

Table 30 exhibits the results of the test of the significant relationship between the perceived teaching and learning environment and the level of motivation to the performance of the teachers.

The results reveal that the probability values of Chi-square (X^2) are greater than 0.05 except for extrinsic motivation and performance. For this reason, the null hypothesis is accepted at a five percent level of significance. As a result, there is no significant relationship between the perceived teaching and learning environment and the level of intrinsic motivation for the performance of the teachers. It implies that the teachers' perception of the teaching and learning environment in terms of facilities, environment, support, resources, and technology had no significant effect on their performance. Likewise, the intrinsic motivation of the teachers does not significantly affect their performance. The cited findings opposed the findings of Abbas et. al (2022) and Octaviani, et.al (2022) that the school's environment influences the performance of teachers.

However, there is a significant relationship between the level of extrinsic motivation of the teachers and their performance. Hence, the null hypothesis is rejected at a 0.05 significance level. It states that the teachers' performance is significantly affected by their extrinsic motivation. The results are relevant to the previous study conducted by Kumari & Kumar (2023) discovered that non-self-determined motivation has a significant relationship with teachers' job performance. It presents that once teachers are externally motivated in terms of job security, rewards and compensation for their performance become high. The findings of this study also complement the findings of Khwaja et al. (2018) that all external factors positively and significantly influence teacher performance. Hence, it is evident that any form of performance is an outcome of encouragement received from the organization, which eventually improves their performance and increases productivity.

b. Students

1. Intrinsic Motivation

Table 31. Results of the Test of Significant Relationship between the Perceived Teaching and Learning Environment and the Level of Intrinsic Motivation of the Students

Variables	Probability of r	Remarks
Facilities and Intrinsic Motivation	0.0004	Significant
Environment and Intrinsic Motivation	0.0001	Significant
Support and Intrinsic Motivation	0.0003	Significant
Resources and Intrinsic Motivation	0.0006	Significant
Technology and Intrinsic Motivation	0.0007	Significant

The results of the test of a significant relationship between the perceived teaching and learning environment and the level of intrinsic motivation of the students are exhibited in Table 31.

It is evident from the results that the r-probability values are less than 0.05. Hence, the null hypothesis is rejected at a 0.05 level of significance. Thus, there is a significant relationship between the perceived teaching and learning environment and the level of

intrinsic motivation of the students. It shows that the students' perception of the teaching and learning environment in terms of facilities, environment, support, resources, and technology had a significant effect on their intrinsic motivation. The study of Hafizoglu et. al (2019) on The Role of Students' Motivation in the Relationship between Perceived Learning Environment and Achievement in Science supports the present study. The results of their study showed that students who perceive their learning environment positively also have a generally high level of motivation.

Similarly, Radovan et. al (2015) also found out that students who perceive their learning environment as a place that fosters autonomy and self-direction and find their education to be useful and relevant are more intrinsically motivated.

2. Extrinsic Motivation

Table 32. Results of the Test of Significant Relationship between the Perceived Teaching and Learning Environment and the Level of Extrinsic Motivation of the Students

Variables	Probability of r	Remarks
Facilities and Extrinsic Motivation	0.0009	Significant
Environment and Extrinsic Motivation	0.0005	Significant
Support and Extrinsic Motivation	0.0002	Significant
Resources and Extrinsic Motivation	0.0006	Significant
Technology and Extrinsic Motivation	0.0007	Significant

Table 32 displays the results of the test of a significant relationship between the perceived teaching and learning environment and the level of extrinsic motivation of the students.

The results reveal that the probability values of r are less than 0.05. This signifies the rejection of the null hypothesis at a 0.05 level of significance. Therefore, there is a significant relationship between the perceived teaching and learning environment and the level of extrinsic motivation of students. It shows that the students' perception of the teaching and learning environment in terms of facilities, environment, support, resources, and technology significantly affects their extrinsic motivation. This finding is supported by the study of Acomolafe and Adesua (2016) and Abellanosa (2019) which showed that there is a significant relationship between physical facilities and students' level of motivation.

3. Performance

Table 33. Results of the Test of Significant Relationship between the Perceived Teaching and Learning Environment and the Level of Motivation to the Performance of the Students

Variables	Probability of x^2	Remarks
Facilities and Performance	0.9464	Not Significant
Environment and Performance	0.0068	Significant

Support and Performance	0.0042	Significant
Resources and Performance	0.0852	Not Significant
Technology and Performance	0.0431	Significant
Intrinsic Motivation and Performance	0.0439	Significant
Extrinsic Motivation and Performance	0.0455	Significant

The results of the test of the significant relationship of the perceived teaching and learning environment and the level of motivation to the performance of the students are disclosed in Table 33.

It is reflected from the results that the Chi-square (X^2) probability values are less than 0.05 except for facilities and resources. For this reason, the null hypothesis is rejected at a 0.05 significance level. As a result, there is a significant relationship between the perceived teaching and learning environment in terms of environment, support, and technology and the level of motivation of the students to the performance of the students. It implies that the teaching and learning environment along the mentioned three areas and the intrinsic and extrinsic motivation have significant effects on the performance of the students. The cited findings are supported by the study of Usman et. al (2019)**,** Havidz, & Mujakiah (2023), Nyoni, et. al (2017), and Acomolafe and Adesua (2016) in which they averred that the learning environment affected the student's motivation, the learning environment affected the student achievement or performance and students' motivation affected student achievement. Thus, the teaching and learning environment plays a crucial role in shaping the motivation and performance of students. Positive, supportive, and well-organized environments tend to increase motivation and foster better learning outcomes.

However, there is no significant relationship between the teaching and learning environment in terms of facilities and resources and the performance of the students. Hence, the null hypothesis is accepted at a 0.05 significance level. It states that these two areas of the teaching and learning environment have no significant effect on the performance of the students. This finding contradicted the study of Ahmed et. al (2020) that the availability and use of physical and instructional classroom environmental facilities prove helpful indicators for improving students' learning outcomes at the secondary level. It was also supported by the study of Duruji et. al (2014), Nambuya (2013), and Nyoni, et. al (2017) in which they stated that adequate learning facilities and resources significantly influence students' academic performance.

Conclusions

Based on the above findings, the study concludes that the teaching and learning environment in the City Division of Ilagan was perceived by the student and teacher respondents positively with slight differences in their perception across various factors such as facilities, environment, support, resources, and technology. Teachers tend to have better perceptions of the environment, support, and resources, while students perceive facilities more positively.

In terms of their level of motivation, both groups of respondents exhibit a high level of intrinsic motivation, indicating a genuine passion for teaching and learning, with average levels of extrinsic motivation. However, there are differences in their motivation levels based on school profiles such as school size, school classification, and school location.

Regarding performance, the majority of the respondents have demonstrated outstanding performance. In terms of the relationship between the perceived teaching-learning environment, motivation levels, and performance of teachers and students, the two groups of respondents exhibit significant differences. For teachers, only extrinsic motivation demonstrated a significant effect on their performance while intrinsic motivation does not appear to have a significant impact which is contrary to several literature and studies suggesting that the teaching and learning environment and intrinsic motivation are influencing the teachers' performance. This suggests that the performance of teachers may be influenced by additional factors beyond the ones considered in the study. Conversely, for students, both intrinsic and extrinsic motivation significantly influence performance, with certain aspects of the teaching-learning environment having varying effects on motivation and performance.

Overall, the findings suggest that the teaching-learning environment, motivation levels, and performance are interconnected but can be influenced by various factors such as school size, school classification, and school location. Understanding these dynamics can help in fostering a more supportive and effective learning environment for both teachers and students.

Recommendations

Based on the conclusions drawn, the researcher therefore recommends the following to enhance the motivation and performance of the students and teachers:

1. A feedback mechanism relative to the effect of the teaching-learning environment on the motivation and performance of SHS teachers and students in the City Division of Ilagan be made functional by the educational authorities or administrators responsible for overseeing the City Division of Ilagan's Senior High School (SHS) system.

2. School heads should allot a considerable percentage of their Maintenance and other Operating Expenses (MOOE) for the procurement of sports equipment, TVL and Non- TVL tools and equipment, musical instruments, and for the reproduction of downloaded materials in the LRMDS portal.

3. School administrators must ensure that the school library is equipped with the latest technology and adequately staffed with a designated librarian to manage its operations effectively.

4. Since it was found out that there is an unavailability of learner's material in the Senior High School in the City Division of Ilagan, it is recommended that the Learning

Resources Management and Development System (LRMDS) be effectively utilized. Senior High School teachers should be encouraged and guided to utilize the LRMDS platform for downloading required instructional materials and other references necessary for senior high school education to ensure access to a comprehensive repository of educational resources, thereby enhancing the quality of teaching and learning experiences in the SHS in the City Division of Ilagan.

5. Educational administrators should evaluate the teaching-learning environment of the schools in the City Division of Ilagan and communicate the result to the stakeholders to encourage support from them.

6. Regular monitoring and evaluation of the school' teaching-learning environment in the City Division of Ilagan should be carried out to address the gaps and improve the learning situation and environment.

7. Since it was found out that there is inadequacy of non-teaching staff particularly librarian and guidance counselor in the schools in the City Division of Ilagan, Division Planning officer and Human Resource Management Officer should provide the needed non- teaching staff in schools.

8. School administrators should provide sports facilities with the required equipment, musical instruments, accessible internet connectivity, and gender-sensitive comfort rooms in schools.

9. Schools in the City Division of Ilagan should establish a quality assurance team for the provision of school facilities and to prevent any shortcomings.

10. Schools in the City Division of Ilagan should implement the 5S Principle (Sort, Set in Order, Shine, Standardize, and Sustain) to create a more organized, efficient, and secure teaching and learning environment.

11. Educational administrators should prioritize allocating resources and designing programs aimed at enhancing the skills and knowledge of teachers to ensure that they remain effective, motivated, and equipped to meet the evolving needs of students in the modern educational landscape.

12. School administrators should establish recognition programs that celebrate teachers who demonstrate exceptional dedication, innovation, and effectiveness in their roles.

13. School administrators in the City of Ilagan should prioritize addressing the identified challenges to create a conducive learning environment, as research has shown that such environments have a positive effect on students' motivation and performance. School administrators should collaborate with teachers, staff, students, parents, and other stakeholders to identify and address barriers to learning.

14. A follow- up study and other studies related to this present work be undertaken by future researchers putting greater emphasis on gaps and missing links found in the present study.

Compliance with Ethical Standards

The researcher affirms her steadfast commitment to upholding ethical research standards throughout the entirety of this study. Informed consent was meticulously obtained from all participants, emphasizing transparency, and honoring their autonomy. Participants were reassured of their right to withdraw from the study at any juncture, and stringent measures were implemented to safeguard their anonymity, preserving confidentiality throughout the research process. Furthermore, protocols were established to prioritize the well-being of participants, ensuring their safety and comfort remained paramount. The researcher maintained an unwavering dedication to integrity, diligently avoiding plagiarism and interpreting findings impartially to mitigate bias. It is underscored that the results obtained are solely intended to contribute to the advancement of knowledge, executed with the utmost adherence to ethical principles for the betterment of research and society as a whole.

Acknowledgments

The researcher would like to extend her deepest appreciation to all those who contributed significantly to the fruition of this research. Special thanks go to the study participants, whose assistance and collaboration were invaluable. The researcher is deeply grateful to her adviser, as well as to her peers and friends, for their continuous support and encouragement. She also cherishes the unwavering love and care of her family. And, above all, she is thankful to the Lord Almighty for His guidance in her research journey.

REFERENCES

Abbas, Q., Javed, M., & Waseem, M. (2022). Impact of school environment on teachers' performance at primary level. Journal of Management Practices, Humanities and Social Sciences. https://doi.org/10.33152/jmphss-6.2.9

Abellanosa, G. (2019). Status of physical plant and facilities of a state university as evaluated by the students. https://www.academia.edu/41096439/STATUS_OF_PHYSICAL_PLANT_AND_FACILITIES_OF_A_STATE_UNIVERSITY_AS_EVALUATED_BY_THE_STUDENTS

Acomolafe, C., & Adesua, V. (2016). The impact of physical facilities on students' level of motivation and academic performance in senior secondary schools in South West Nigeria. Journal of Education and Practice. https://files.eric.ed.gov/fulltext/EJ1092365.pdf

Ahmed, G., Tayyub, M., & Ismail, R. (2020). Effects of classroom environment for improving students' learning at secondary level in Punjab Province, Pakistan. Sci Academique.

https://scienceacademique.com/effects-of-classroom-environment-for-improving-students-learning-at-secondary-level-in-punjab-province-pakistan/
Amponsah, K., et al. (2022). The impact of internet usage on students' success in selected senior high schools in Cape Coast Metropolis, Ghana. https://files.eric.ed.gov/fulltext/EJ1353463.pdf
Balog, N. (2018). Impacts of the learning environment on developer's progress.
Blatchford, P., Russell, A., & Brown, P. (2009). Teaching in large and small classes.
Brilliantes, K., Orbeta, A. Jr., Abrigo, K., Capones, E., & Jovellanos, J. (2019). Status of senior high school implementation: A process evaluation.
Calderon, J. F., & Gonzales, E. C. (1993). Methods of research and thesis writing. National Book Store, Inc.
Combalicer, L. (2016). Best practices and problems in the initial implementation of the K+12 curriculum among teachers in Infanta, Quezon: Its implications to an effective implementation of senior high school. https://www.jesoc.com/wpcontent/uploads/2016/08/Edu-4.pdf
Duruji, M., Azuh, D., & Oviasogie, F. (2014). Learning environment and academic performance of secondary school students in external examinations: A study of selected schools in Ota. https://core.ac.uk/download/pdf/32224685.pdf
Ganaden, A., Barrientos, G., & Anaud, D. (2017). Constraints in sports participation among pupils of Cabangan Central Elementary School, Cabangan District, Zambales, Philippines. Journal of Social Sciences and Humanity Studies. https://www.textroad.com/pdf/JSSHS/J.%20Soc.%20Sci.%20Hum.%20Stud.%203(6)1-9-%202017.pdf
Grauer, S. (2019). A small school revolution: The benefits of small schools on student motivation and engagement.
Hafizoglu, A., & Yerdelen, S. (2019). The role of students' motivation in the relationship between perceived learning environment and achievement in science: A mediation analysis. https://files.eric.ed.gov/fulltext/EJ1236386.pdf
Hassan, U., Tayyab, M., & Awan, A. (2018). Effect of school environment on teacher's motivation and self-esteem at secondary level in District Multan-Pakistan. https://www.academia.edu/35870779/EFFECT_OF_SCHOOL_ENVIRONMENT_ON_TEACHERS_MOTIVATION_AND_SELF_ESTEEM_AT_SECONDARY_LEVEL_IN_DISTRICT_MULTAN_PAKISTAN
Havidz, H., & Mujakiah, N. (2023). The effect of learning environment on student motivation and student achievement: Literature review study. https://www.researchgate.net/publication/366774718_The_Effect_of_Learning_Environment_on_Student
Khwaja, M., Saeed, S., & Urooj, M. (2018). Preliminary environmental impact assessment (EIA) study of China-Pakistan Economic Corridor (CPEC) Northern route road construction activities in Khyber Pakhtunkhwa (KPK), Pakistan. Retrieved from https://www.researchgate.net/publication/322626087_Preliminary_environmental_impact_assessment_EIA_study_of_China_Pakistan_Economic_Corridor_CPEC_Northern_route_road_construction_activities_in_Khyber_Pakhtunkhwa_KPK_Pakistan
Kumari, J., & Kumar, J. (2023). Influence of motivation on teachers' job performance. Humanities and Social Sciences Communications, 10 (158). https://doi.org/10.1038/s41599-023-01662-6
Maffea, J. (2020). Lack of resources in classrooms. Kutztown University Research Commons at Kutztown University. Retrieved from https://research.library.kutztown.edu/cgi/viewcontent.cgi?article=1003&context=wickedproblems

Nambuya, O. (2013). School-based factors influencing student's academic performance at Kenya certificate of secondary education in Teso South District (Master's thesis). University of Nairobi. Retrieved from https://eap.uonbi.ac.ke/sites/default/files/cees/education/eap/ONYARA%20PROJECT%20.pdf

Navarro, A. M. (2022). School infrastructure in the Philippines: Where are we now and where should we be heading? Philippine Institute for Development Studies.

Nyoni, M., Nyoni, T., & Bonga, W. G. (2017). Factors affecting students' academic achievement in Zimbabwe's rural secondary schools: A case study of Marimasimbe secondary school in Jiri community. Retrieved from https://www.researchgate.net/publication/315767454_Factors_Affecting_Students'_Academic_Achievement_in_Zimbabwe's_Rural_Secondary_Schools_A_Case_Study_of_Marimasimbe_Secondary_School_in_Jiri_Community

Octaviani, E., Ahmad, E., & Kesumawati, N. (2022). The effect of school environment and extrinsic motivation on teacher performance. Journal of Social Work and Science Education. Retrieved from https://www.academia.edu/37037071/3Ps_of_Conducive_Learning_Environments

Radovan, M., & Makovec, D. (2015). Relations between students' motivation, and perceptions of the learning environment. Retrieved from https://files.eric.ed.gov/fulltext/EJ1128947.pdf

Surya, M. (2004). Psikologi Pembelajarun dan Pengajaran. Bandung: Pustaka Bani Quraisy.

Takupiwa, P., et al. (2013). A comparative study of motivational levels for rural and urban teachers in Masvingo District, Zimbabwe. Retrieved from https://docplayer.net/120947350-A-comparative-study-of-motivational-levels-for-rural-and-urban-teachers-in-masvingo-district-zimbabwe.html

Usaini, I., Abubakar, N., & Bichi, A. (2015). Influence of school environment on academic performance of secondary school students in Kuala Terengganu, Malaysia. Retrieved from https://www.researchgate.net/publication/305659360_INFLUENCE_OF_SCHOOL_ENVIRONMENT_ON_ACADEMIC_PERFORMANCE_OF_SECONDARY_SCHOOL_STUDENTS_IN_KUALA_TERENGGANU_MALAYSIA

Usman, Y., & Madudili, C. (2019). Evaluation of the effect of learning environment on student's academic performance in Nigeria.

Wieking, B. A. (2016). Technology integration and student learning motivation (Master's thesis, Northwestern College, Orange City, IA). Retrieved from http://nwcommons.nwciowa.edu/education_masters/5/

APA Citation:

Dacquil, B. B. (2024). THE TEACHING-LEARNING ENVIRONMENT OF SENIOR HIGH SCHOOL IN THE CITY DIVISION OF ILAGAN: ITS EFFECT ON THE LEVEL OF MOTIVATION AND PERFORMANCE OF STUDENTS AND TEACHERS. Ignatian International Journal for Multidisciplinary Research, 2(8), 1037–1085. https://doi.org/10.5281/zenodo.13335453

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

TRANSITIVITY ANALYSIS IN THE 2021 STATE OF THE COLLEGE ADDRESS (SOCA) OF ASSCAT PRESIDENT, DR. JOY C. CAPISTRANO

Mikeen V. Sawe, Evangeline H. Alvarez, Roxan R. Remorosa, Shiryl T. Ytoc

Graduate School, Agusan del Sur State College of Agriculture and Technology (ASSCAT) Philippines

https://doi.org/10.5281/zenodo.13329049

ABSTRACT

In the lush hills of Agusan, the 2021 State of the College Address (SOCA) by Dr. Joy C. Capistrano, President of Agusan del Sur State College of Agriculture and Technology (ASSCAT), painted a vivid picture of resilience and triumph amidst the shadows of the COVID-19 pandemic. Using M. A. K. Halliday's Transitivity system, we journey through her speech, uncovering the linguistic tools that bring this narrative to life. Dr. Capistrano's address is a tapestry of actions, relationships, emotions, and realities that reveal ASSCAT's steadfast pursuit of its mission. Material processes, comprising 39% of the clauses, dominate the landscape, depicting dynamic actions as ASSCAT rises above challenges with innovative solutions like flexible learning approaches and service upgrades. Relational processes, at 31%, weave the identity and achievements of ASSCAT into the fabric of the address, highlighting its esteemed position in the academic community. Mental processes, representing 13%, offer glimpses into the emotional and cognitive states of both the speaker and the institution, underscoring empathy, and collective resilience. Verbal processes account for 9%, emphasizing the vital role of communication in leadership, while existential processes, at 8%, ground the narrative in the reality of present challenges. Dr. Capistrano's SOCA is more than a speech; it's a compelling story of an institution navigating through a storm, showcasing the strategic use of language to inspire and unite its community. This transitivity analysis reveals how linguistic choices shape the narrative of ASSCAT's progress and fortitude, providing valuable insights for educational leaders seeking to communicate effectively in turbulent times

Keywords: *Joy Capistrano, State of the College Address (SOCA), Transitivity System, Agusan del Sur State College of Agriculture and Technology (ASSCAT)*

INTRODUCTION

The use of language in formal speeches, particularly in an institutional context, is a powerful means of conveying messages, influencing perceptions, and shaping the identity of an organization. The annual State of the College Address (SOCA) is a pivotal event in the academic calendar, where institutional leaders communicate their vision, report achievements, and outline future goals. In 2021, Dr. Joy C. Capistrano, President of Agusan del Sur State College of Agriculture and Technology (ASSCAT), delivered a significant SOCA amidst the ongoing challenges of the COVID-19 pandemic. This study employs M. A. K. Halliday's Transitivity system to perform a detailed clause-by-clause analysis of the address, aiming to uncover how linguistic structures convey the multifaceted narrative of ASSCAT's resilience and progress.

The significance of this analysis lies in its potential to reveal how language functions as a tool for leadership and persuasion in educational contexts. By examining the SOCA through the lens of Halliday's Transitivity system, this study seeks to contribute to the understanding of how educational leaders use linguistic strategies to address their audience, communicate institutional achievements, and foster a sense of community and resilience.

Research Questions

1. How does Dr. Joy C. Capistrano employ different process types in her 2021 State of the College Address to construct a narrative of resilience and progress at ASSCAT?

2. What percentage of material, relational, mental, verbal, and existential processes are used in the SOCA, and how do these processes contribute to the overall rhetorical strategy of the address?

Theoretical Lens

This study employs M. A. K. Halliday's Systemic Functional Linguistics (SFL) and Transitivity Model as its theoretical lens to examine the linguistic choices and their implications in the 2021 State of the College Address (SOCA) by Dr. Joy C. Capistrano. Halliday's SFL framework conceptualizes language as a social semiotic system, emphasizing the interrelation between linguistic form and social function. Central to SFL is the notion that language operates simultaneously on three metafunctions: the ideational, interpersonal, and textual. The ideational metafunction is particularly relevant to this study, as it pertains to how language represents experiences and constructs reality. Within the ideational metafunction, the Transitivity Model serves as a tool to analyze the types of processes—material, mental, relational, behavioral, verbal, and existential—encoded in the text. Material processes are concerned with actions and events, indicating what is happening in the physical world. Mental processes relate to internal experiences, reflecting cognition, emotion, and perception. Relational processes express states of

being and relationships, defining and identifying entities. Behavioral processes denote physiological and psychological behaviors, while verbal processes involve acts of communication. Existential processes state the existence of entities or events.

METHODOLOGY

This study utilized a qualitative research design, described by Creswell (1994) as an unfolding model that occurs in a natural setting, enabling the researcher to develop detailed insights through high involvement in actual experiences (as cited by Eyisi, 2016). The primary data source is the 2021 State of the College Address (SOCA) delivered by Dr. Joy C. Capistrano, President of the Agusan del Sur State College of Agriculture and Technology (ASSCAT). The speech was obtained through a formal request to the Office of the President, approved by the research adviser.

Following the qualitative data analysis framework by Attride-Stirling (2001), this study utilized a three-stage process: reduction of the text, exploration of the text, and integration of the exploration (as cited in Akinyode & Khan, 2018), along with Braun and Clarke's (2006) approach (as cited in Akinyode & Khan, 2018).

RESULTS AND DISCUSSION

Types of Transitivity Process

Material processes dominate the 2021 State of the College Address (SOCA) by Dr. Joy C. Capistrano, comprising 39% of the total clauses.

This high percentage underscores the focus on dynamic actions and tangible achievements of ASSCAT during the challenging period of the COVID-19 pandemic. By highlighting clear actors, actions, goals, and circumstances, the address effectively conveys the institution's proactive measures and accomplishments.

Examples of material processes identified in the SOCA:

Clause 1.1. "*Our alma mater stands...*"

Our alma mater	stands	above the verdant hills of Agusan
Actor	Pro: material	Circumstance

Clause 1.2. *"We implemented flexible learning approaches"*

We	implemented	flexible learning approaches
Actor	Pro: material	Goal

Clause 1.3. *" The college library upgraded their services"*

The college library	implemented	flexible learning approaches
Actor	Pro: material	Goal

Clause 1.4. *" ASSCAT rises above challenges"*

ASSCAT	rises	above challenges
Actor	Pro: material	Circumstance

Clause 1.5. *" We are visiting the Local Government units twice a month"*

We	are visiting	the Local Government units	twice a month
Actor	Pro: material	Goal	Circumstance

Clause 1.6. *"The faculty developed innovative teaching methods"*

The faculty	developed	innovative teaching methods
Actor	Pro: material	Goal

Clause 1.7. *"Students participated in online learning"*

Students	participated	in online learning
Actor	Pro: material	Goal

The frequent use of material processes in the address highlights the institution's focus on action-oriented strategies and tangible outcomes. This emphasis on physical actions and their impacts creates a narrative of a proactive and resilient institution committed to overcoming challenges and achieving progress.

Relational processes constitute 31% of the clauses in the SOCA. These processes play a crucial role in establishing and defining the identity, attributes, and values of ASSCAT. By linking the institution to its achievements, qualities, and esteemed status, relational processes help build a cohesive and positive image.

Examples of relational processes identified in the SOCA:

Clause 2.1. "*The institution remains committed.*"

The institution	remains	committed
Carrier	Pro: relational	Attribute

Clause 2.2. *"ASSCAT has a prestigious position in the academic community"*

ASSCAT	has	a prestigious position in the academic community
Carrier	Pro: relational	Goal

Clause 2.3. *"Our efforts are recognized nationally"*

Our efforts	are	recognized nationally
Carrier	Pro: relational	Attribute

Clause 2.4. *"The faculty are dedicated educators"*

The faculty	are	dedicated educators
Carrier	Pro: relational	Attribute

Relational processes in the address help reinforce the institution's identity and values, establishing a strong sense of pride and commitment to excellence within the ASSCAT community.

Mental processes account for 13% of the clauses, highlighting the cognitive and emotional dimensions of the address. These processes provide insight into the thoughts, perceptions, and emotions of the speaker and the institution, fostering a sense of empathy and shared experience.

Examples of mental processes identified in the SOCA:

Clause 3.1. *"We understand the challenges"*

We	understand	the challenges
Senser	Pro: Mental	Phenomenon

Clause 3.2. *"We understand the importance of flexibility"*

We	understand	the importance of flexibility
Senser	Pro: Mental	Phenomenon

Clause 3.3. *"Students believe in the power of education"*

Students	believe	in the power of education
Senser	Pro: Mental	Phenomenon

Clause 3.4. *"I appreciate the dedication of our staff"*

I	appreciate	the dedication of our staff
Senser	Pro: Mental	Phenomenon

By incorporating mental processes, the address emphasizes the shared emotional and cognitive experiences of the ASSCAT community, promoting a sense of unity and collective resilience.

Verbal processes make up 9% of the clauses, underscoring the importance of communication in leadership and institutional governance. These processes highlight the actions of saying, reporting, and asserting, reflecting the role of dialogue and information exchange in the institution.

Examples of verbal processes identified in the SOCA:

Clause 5.1. *"The faculty communicated their needs"*

The faculty	communicated	their needs
Sayer	Pro: verbal	Verbiage

Clause 5.2. *"The board discussed the challenges"*

The board	discussed	the challenges
Sayer	Pro: verbal	Verbiage

Verbal processes in the address emphasize the role of effective communication in leadership, facilitating transparency, collaboration, and informed decision-making within the institution.

Existential processes account for 8% of the clauses, acknowledging the realities and circumstances faced by ASSCAT. These processes often introduce the existence of particular states, events, or conditions, grounding the narrative in the actual experiences of the institution.

Examples of existential processes identified in the SOCA:

Clause 6.1. *"There are countless changes"*

There	are	countless changes
Pro: existential	Existent	Circumstance

Clause 6.2. *"There is a need for flexibility"*

There	is	a need for flexibility
Pro: existential	Existent	Circumstance

Clause 6.2. *"There is hope for the future"*

There	is	hope for the future
Pro: existential	Existent	Circumstance

Existential processes help to create a realistic and grounded narrative, recognizing the challenges and achievements of ASSCAT and reinforcing the institution's commitment to navigating and overcoming these realities.

Table 1. Occurrences and Percentage of Types of Transitivity Process

No.	Types of Transitivity Process	Occurrences of Processes	Percentage
1	Material	49	**39%**
2	Relational	39	**31%**
3	Mental	16	**13%**
4	Verbal	11	**9%**
5	Existential	10	**8%**
	Total	**125**	**100%**

Table 1 shows that the material process is the most frequently used with 49 occurrences, making up 39% of the total. The second most common is the relational process, with 39 occurrences, accounting for 31%. The mental process follows, with 16 occurrences (13%). Verbal processes appear 11 times (9%), while existential processes occur 10 times (8%).

This distribution highlights the emphasis on actions and dynamic activities (material processes) in the address. It also shows the importance of defining identities and attributes (relational processes) and reflecting cognitive and emotional states (mental processes). The relatively lower frequency of verbal and existential processes indicates less focus on communication and existence within the speech.

Themes Identified in the State of the College Address (SOCA) of Dr. Joy C. Capistrano

In this section, the linguistic features were identified through transitivity analysis to the interactions that generate the themes reflected in the SOCA. The following theme was found in the address:

Table 2. Commitment and Innovation

Theme	Supporting Clauses
Commitment and Innovation	"We remain committed to our mission" (Clause 4) "Innovative teaching methods were developed" (Clause 5) "The daring and valiant moves of ASSCAT" (Clause 6)

Commitment and innovation are also significant themes in the address. The clause "We remain committed to our mission" illustrates the steadfast dedication of ASSCAT to its core goals. The mention of "innovative teaching methods were developed" highlights the institution's proactive approach to improving education. Additionally, "The daring and valiant moves of ASSCAT" reflects the institution's willingness to take bold steps towards achieving its objectives.

Table 3. Resilience and Progress

Theme	Supporting Clauses
Resilience and Progress	"Our alma mater stands tall" (Clause 1) "We have overcome numerous challenges" (Clause 2) "Our flag is still flying strong" (Clause 3)

Resilience and progress are central themes in the SOCA, highlighted by the institution's ability to withstand and overcome challenges while continuing to move forward. The phrases "Our alma mater stands tall" and "Our flag is still flying strong" symbolize the enduring strength and ongoing progress of ASSCAT. The emphasis on overcoming challenges underscores the resilience of the community.

Table 4. Adaptation and Growth

Theme	Supporting Clauses
Adaptation and Growth	"We will continue to bring societal influence and impact" (Clause 10) "Our enrolment speaks otherwise" (Clause 11) "We reimagined and reinvented strategies" (Clause 12)

Adaptation and growth are significant themes in the address, highlighting the institution's ability to evolve and expand in response to changing circumstances. The clause "We will continue to bring societal influence and impact" reflects ASSCAT's ongoing commitment to societal contributions. The statement "Our enrolment speaks otherwise" signifies the institution's growth despite external challenges, while "We reimagined and reinvented strategies" emphasizes the innovative approaches adopted to ensure continuous improvement.

Table 5. Recognition and Gratitude

Theme	Supporting Clauses
Recognition and Gratitude	"We are grateful for their leading" (Clause 13) "This occasion is a good time to assess the state of the college" (Clause 14) "My salute to all of you" (Clause 15)

Recognition and gratitude are essential themes that permeate the address. The clause "We are grateful for their leading" acknowledges the contributions of past leaders who have shaped the institution. The phrase "This occasion is a good time to assess the state of the college" highlights the significance of reflection and evaluation. Lastly, "My salute to all of you" conveys heartfelt appreciation for the efforts and dedication of the entire ASSCAT community.

Table 6. Community and Collaboration

Theme	Supporting Clauses
Community and Collaboration	"We are grateful for the leadership" (Clause 7) "Our faculty, staff, students, and alumni engaged in community services" (Clause 8) "The collective gains we achieve" (Clause 9)

Community and collaboration are pivotal themes in the SOCA, emphasizing the unity and cooperative efforts within the ASSCAT community. The clauses "We are grateful for the leadership" and "Our faculty, staff, students, and alumni engaged in community services" underscore the collective efforts and mutual support that drive the institution's success. The mention of "The collective gains we achieve" highlights the shared achievements resulting from collaborative endeavors.

DISCUSSION

The analysis reveals a strategic use of different process types to construct a compelling narrative of resilience, progress, and community at ASSCAT. Material processes dominate the address, reflecting the dynamic actions taken by the institution to navigate the challenges posed by the pandemic and to implement innovative solutions, such as flexible learning approaches and service upgrades. Relational processes are equally significant, as they establish the identity and achievements of ASSCAT, reinforcing its esteemed position and continuous pursuit of excellence. These processes help create a strong connection between the institution and its stakeholders, fostering a sense of pride and belonging. Mental processes, though fewer in number, play a crucial role in conveying the emotional and cognitive states of the speaker and the community. By expressing empathy, determination, and resilience, these processes help maintain morale and trust among stakeholders during challenging times. Verbal processes highlight the importance of communication in leadership. The act of preparing and delivering the address is itself a significant communicative event, and the analysis shows how verbal processes are used to articulate the institution's vision and strategies effectively. Existential processes acknowledge the reality of the challenges faced by ASSCAT. By recognizing the existence of various difficulties, the address creates a realistic and grounded narrative that acknowledges the complexities of the current situation.

Conclusions

This transitivity analysis of Dr. Joy C. Capistrano's 2021 SOCA highlights the strategic use of different process types to construct a narrative of resilience, progress, and community at ASSCAT. The findings suggest that the deliberate use of material, relational, mental, verbal, and existential processes enables the institution to effectively communicate its achievements and challenges, fostering a sense of shared purpose and determination among its stakeholders.

Future research could extend this analysis to compare SOCA addresses across different institutions or years, providing a broader understanding of how educational leaders use language to navigate and articulate institutional goals and challenges. Such comparative studies could further elucidate the role of linguistic choices in shaping institutional narratives and influencing stakeholder perceptions.

Acknowledgements

I would like to express my sincere gratitude and deepest appreciation to my co-authors, Dr. Evangeline H. Alvarez, Dr. Roxan Remorosa, and Dr. Shiryl T. Ytoc, for their invaluable contributions to this research. Their expertise, guidance, and unwavering support have been instrumental in the completion of this study.

Recommendations

Future research could expand on this study by analyzing the State of the College Addresses from different years or by various college presidents to identify changes and trends in the use of transitivity processes over time. Comparative studies could also be conducted across different institutions to explore how different educational leaders employ language to convey their messages and objectives. Additionally, incorporating other linguistic frameworks, such as appraisal theory or multimodal discourse analysis, could provide a more comprehensive understanding of the rhetorical strategies used in these speeches. Research could also examine the impact of these speeches on various stakeholders, including faculty, students, and external partners, to assess the effectiveness of the communication strategies employed. Finally, a longitudinal study could investigate the long-term effects of the linguistic choices made in these addresses on institutional identity and stakeholder engagement.

Compliance with Ethical Standards

The authors obtained the informed consent of the respondents and the latter were informed of their freedom to withdraw from the study at any time. Their identities were kept anonymous and the respondents' well-being was safeguarded. There was no conflict of interest in the conduct of the study. Plagiarism was strictly avoided and there was no bias in the interpretation of the findings. The results were used purely for research.

REFERENCES

Akinyode, B. F., & Khan, T. H. (2018). Step by step approach for qualitative data analysis.International Journal of Built Environment and Sustainability, 5(3), 163–174.https://doi.org/10.11113/ijbes.v5.n3.267

Attride-Stirling, J. (2001). Thematic Networks: An Analytic Tool for Qualitative Research.Qualitative Research, 1(3), 385–405.

Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. Qualitative Research in Psychology, 3(2) (77–101). https://doi.org/doi:10.1191/1478088706qp063oa

Creswell, J. W. (1994). Research design: Qualitative & quantitative approaches. Sage Publications, Inc.

Eyisi, D. (2016) The Usefulness of Qualitative and Quantitative Approaches and Methods in Researching Problem Solving Ability in Science Education Curriculum. Journal of Education Practice, 7, 91-100.

Halliday, M. A. K., & Hasan, R. (1985). Language, Context, and Text: Aspects of Language in a Social Semiotic Perspective. Victoria: Deakin University Press.

Halliday, M. A. K., Matthiessen, C. M. I. M., Halliday, M., & Matthiessen, C. (2014). An Introduction to Functional Grammar. In An Introduction to Functional Grammar. Edward Arnold.https://doi.org/10.4324/9780203783771

Halliday, M.A.K. & Matthiessen. (2004). An introduction of Functional Grammar (Third ed.). London: Hodder Headline Group.

Halliday, M.A.K. (1994). An Introduction to Functional Grammar (2nd Ed.). London: Arnold

Halliday, M.A.K., & Matthiessen, C. M. I. M. (2014). An introduction to functional grammar. Oxon & New York: Routledge.

APA Citation:

Sawe, M. V., Alvarez, E. H., Remorosa, R. R., & Ytoc, S. T. (2024). TRANSITIVITY ANALYSIS IN THE 2021 STATE OF THE COLLEGE ADDRESS (SOCA) OF ASSCAT PRESIDENT, DR. JOY C. CAPISTRANO. Ignatian International Journal for Multidisciplinary Research, 2(8), 868–878. https://doi.org/10.5281/zenodo.13329049

Corresponding author: *mvsawe@asscat.edu.ph*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

UNDERGRADUATE STUDENTS' SCIENCE ENGAGEMENT IN USING CHATBOT AS PREDICTOR TO THEIR ACADEMIC PERFORMANCE IN CHEMISTRY

Shane T. Sumaway, LPT, Reynalyn L. Diaz, LPT, Bryan DC. Gabriel, PhD

Graduate School Department, Bulacan Agricultural State College, Pinaod San Ildefonso, Bulacan, Philippines

https://doi.org/10.5281/zenodo.13324727

ABSTRACT

In this era, known as the "digital age," technology is viewed as necessary components of daily life. It only makes sense for educational institutions like schools to successfully employ technology like chatbot integration in classroom, given their increasing popularity among the students. This paper investigated the impact of chatbot engagement and class participation on freshmen students' in their academic performance in chemistry at Norzagaray College. Using a quantitative research design, the study involved 88 first-year Bachelor of Secondary Education (BSED) students. Based on the results of the study, it was revealed that there is a high level of chatbot engagement (mean = 3.39) and participation (mean= 3.36) of students in Chemistry. However finding also revealed that although chatbot has high impact to engagement and participation of students there was no significant correlation found between students' science engagement using chatbot ($r = 0.117$; $p = 0.280$) and class participation ($r = 0.041$; $p = 0.705$) in their academic performance. This implies that although chatbot assist student in the learning process, but it is not necessary guarantee them to get a high grades.

Keywords: *chatbot, academic performance, science engagement, AI in education, chemistry education, personalized learning, virtual assistants*

INTRODUCTION

The integration of artificial intelligence (AI) in the field of education has a great impact to our learners just like our life anchored on Science. This AI-powered tools offer us numerous advantages this include personalized learning experiences, basic process skills and develop basic scientific knowledge or concepts. Employing this technological tool to education has a bright future to create a informal learning inside and outside of the classroom. Aside from that there is undeniable fact that more students are spending more time using different technological tool to support their academic endeavors.

A chatbot, also known as a bot, is a type of software program that simulates or imitate human conversation through text and voice interactions over the internet and mobile phone. This chatbot make students lives easier because they can access information through their electronic gadgets. This software has access to an endless amount of data and information since this chatbot can be used as educational assistant offer 24/7 availability. Their ability to understand is very impressive they can respond to human language makes a relevant answer to any various questions, from virtual assistants to online customer support systems. (Pérez et al., 2020).While chatbot development is undeniably very useful in every field it is also have many specialized technical skills like different platforms provided by different companies like Microsoft, Facebook, Google, and LINE have significantly simplified the process (Abdellatif et al., 2020). Effective usage of chatbot may have good effects on efficient work and help them to multitask.

The integration of chatbot technology, especially Chat GPT into educational settings is very useful especially to the learners who have a hard time in their academic performance; this tool can help students a lot due to the widespread adoption of smart phones among learners (Okonkwo & Ade-Ibijola, 2021). Since it is available to everyone, we can all have it on our device. These chatbots can be highly beneficial especially it can offer them a personalized learning, acting as free virtual tutors, and even assisting with their writing and even with their assignments (Hong, 2023). These chatbot can provide benefits such as quick access to information for students, diverse ways of learning, contextual learning control over own learning, support encouragement of learning, increase participation in the course, will to use in the course, and positive meaningful difference in academic achievement. However, like any other tool, there is a potential negative impact especially to the learners. Some experts said that excessive used on chatbots may lead to students' lack of development to their critical thinking and problem-solving skills and also tend to become very dependent to this chatbots. Teacher guidance in integrating this tools for maximizing the benefits while understanding their potential drawbacks and creating a learning environment that suited for building a critical thinking and independent learning (Ali et al., 2023).

In recent years, the growing gap between the increasing number of students to teacher worsened every year by increasing their gap ratio (Essel et al., 2022), it affect our educational system this factor need to he considered why students tend to used chatbot. In some case students' reluctance to ask questions due to shyness and fear of

negative feedback (Oktaria & Soemantri, 2021) in this case students tend to shift towards chatbots for immediate assistance to their queries. This AI tutors, powered by chatbot give them a personalized support and intelligent feedback in subjects like mathematics without fear to get some negative feedback to others, they used it in programming, and even in language learning. Platforms such as Duolingo leverage advanced AI systems to enhance the learning experience (Bicknell et al., 2023), this platform give them independence to learn by their own pace, having a confidence to do some various task, and engagement to some activities. By that students build and developed their critical thinking skills through inquiry and by exploring a diverse perspective.

Using this chatbots are becoming relevant in education, particularly in situations where instructors cannot provide immediate feedback to students. These AI-powered tools can simulate human-like conversations, allowing students to easily access learning resources and immediate receiving assistance particularly for those who reside in rural and remote areas. It also gives engagement in interactive learning experiences. This versatility of chatbots has definitely has a great way for improving students experience and learning.

Additionally, chatbots can also be valuable tools for students who need help in making homework. These AI-powered tools are capable to give assistant and detailed feedback on their assignments. It also can also used as a tool to identify the areas for improvement and suggesting further learning resources by asking them (Celik et al., 2022). For instance, chatbots can act as study companions, they will give you some explanations and even clarify on every various things that you need to know about lesson that we may not fully grasped in the classroom. This tools can assist students with their homework by just simply type the problem and it will provide step-by-step solutions in an instance and guiding students through complex problems (Crawford et al., 2023; Fauziet al., 2023; Lo, 2023; Shidiq, 2023).

However, the potential for chatbots to exacerbate pre-existing biases such as in language and perpetuate societal inequalities is a concern that can be mitigated through appropriate training and monitoring measures. Potential for giving misinformation, by asking them without clear questions. This chatbot also have the potential to disseminate misinformation if their training datasets are biased or inaccurate, or if their programming prioritizes engagement at the expense of accuracy. The potential violation of privacy may occur if chatbots are utilized to gather and scrutinize some sensitive personal data without your consent so always be mindful when we using it. In another study by Kohnke et al. (2023), it is mentioned that chatbots have a risk of causing ethical violations and in some instances it can give misleading answers to their users that lead to confusion of the users. Moderation used should be appropriate with the academic demands for the sake of the learning process.

By understanding how chatbots impact our learning and skill development in many field like science subjects it can give some strategies to improved out technology integration, leading us for more effective and engaging science education. This research is beneficial to educators and first-year college students by helping them to improve

accessibility to learning resources and support by enhancing the learning experience for occasion. This prompted the researchers to conduct this study to investigate the impact of chatbot engagement on first-year college students' academic performance in chemistry, with the objective of determining whether chatbots contribute positively to student learning outcomes during this critical stage. The findings of this study are expected to provide insights into whether the engagement of chatbots helps first-year college students improve their academic performance in chemistry.

Review of Related Literature and Studies

Science classrooms are embracing a new learning companion such as chatbots. These tools can give us interactive and meaningful learning experiences by simply asking questions, getting help with experiments. In this technological tool can give teachers an idea on how they can build a new ways to make their lessons more engaging and personalized by using this chatbots they can help students understand science in a fun and exciting way.

The technology evolved so fast this include as virtual and augmented reality, learning management systems, and artificial intelligence that will lead us to a new pedagogical approaches and give innovative teaching strategies and even in our assessment methods in classroom. These development help teacher and students to develop a modern style of learning with the integration of chatbot. Furthermore, modern learning was a learning style that would develop to set skills of the students with the use of benefits of technology advancement for exploration and preparation to the realities of the modern workplace. These technological innovations are influence our student in every aspect of their life by continuous technological changes and improvement learners also evolved their learning process (Sürmelioğlu & Seferoğlu, 2019).

Besides to the traditional ways of learning where basically teacher centered, there's a new approach called "flexible personalized learning" that uses AI-powered chatbots. This approach use an AI smart tutors that can give students needs by giving them individual guidance and feedback, helping them to understand some difficult topics (Boateng & Tindi, 2022). These chatbots aim to help the students to development new knowledge, just like teacher do (Han & Lee, 2023; Pérez et al., 2020).

According to Boateng and Tindi (2022), to make learning more engaging, students utilized this chatbots often, it can also be found in many messaging platforms like Telegram or We Chat, making it easy for students to interact with this platform. This platform is very accessible, that we all know that all individual nowadays are having mobile phone. These chatbots can be used to adapt any forms of teaching style to fit of what student's needs (Fariani et al., 2023; Kikalishvili, 2023). The two of the most popular AI-powered chatbots are Chat GPT and Google Bard. These two chatbots are designed on a huge amount of text and code, which allows them to generate text, create different types of content, and answer questions, although they might not always be perfectly accurate they are very useful. Since students can use chatbot like Chat GPT anytime anywhere, it makes learning more convenient for them. Researchers have found that

Chat GPT's conversational style can make learning more enjoyable and personalized, increasing student engagement and motivation (Kasneci et al., 2023).

In the study of Chamorro-Atalaya (2023) reviewed that acceptance and effectiveness of chatbots in some university in education adopted a technology in fostering a learning environments. The research highlighted that chatbots can enhance some various learning activities by applying some student interactions during to their learning process. It suggests that using some technological advancement like chatbots provide a positive impact on having a learning outcome.

Along with Almada (2023) it is suggested by developing a proactive chatbot with natural language processing and the k-means clustering algorithm to help students with failing grades. The research focuses on a long-standing problem of early identification and intervention for students experiencing academic difficulties by presenting a model that recognizes and assists students based on their modified academic characteristics. Although the opinions and perceptions of each teacher are frequently taken into consideration when deciding whether to employ technology in the classroom.

Also, a study at Georgia State University found that a chatbot called "Pols Pounce" significantly improved the final grades of students in an American government course (Meyer et al., 2022). This chatbot can helps students to create a personalized message asked this tool to remind them to finish their task and even answers their questions. They concluded that 8% of students who used chatbot are likely to get or higher in the course. Also in their research found that using chatbot can have impact to having a greater improvement and increasing their grade by 11 percentage points. These findings suggest that chatbots can be an important tool to improve the student learning outcomes, but take note it is important to note that chatbots are not a replacement for human instructors.

In contrast, various studies suggest that while chatbot is not necessarily boosting academic performance although chatbot can positively influence student motivation and engagement. Yin et al. (2021) observed that undergraduate students using a chatbot showed increased motivation, even without significant differences in their academic performance. This aligns with Arruda et al. (2019), who found that a chatbot designed for computer science students was a helpful and desirable for future use. Similarly, Kamita et al. (2019) found chatbots used alongside web courses for mental health support to be effective by providing guiding self-learning, boosting student motivation, and reducing stress. Their findings suggest that although chatbots can positively affect the motivation and engagement in the learning process it might not always lead to high grades.

In the K-12 science curriculum, teaching Science across grade levels involves a variation of complex and abstract concepts and ideas that show how students may find science as a challenging subject to grasp on their own. In that case that the student face hindrance to learn the teachers may break down some concepts into easy to understand and with the use of chatbot to help student especially those undergraduate with their

task, activities and academic performance. Through this kind of technique, some of the students are able to do their class works by using different technological support to access with different topics especially with Science related topics. By doing that their knowledge bridges the gap between theory and practice, allowing student to take the challenges more easily to face off.

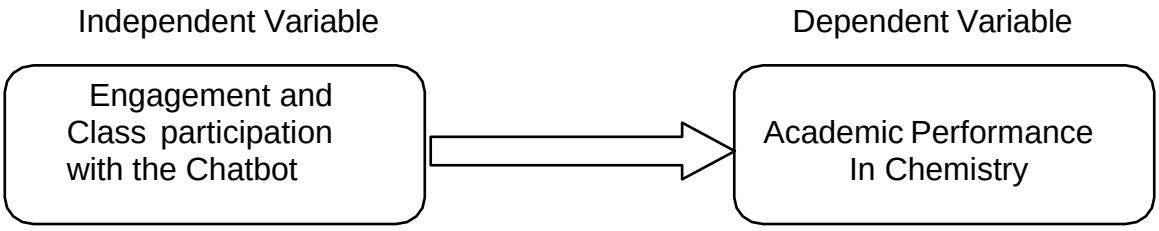
Integrating technology such as chatbot can give better outcome in teaching science by utilizing it as a supplement to enhance the learning experience of the students. This technology tool have potential to significantly change the education of Filipino students by visualizations, and virtual experiments that make learning materials more tangible and 6 engaging for students. It also open door to explore more to achieve learning experiences more fruitful. By leveraging technology in science education, teachers can empower students to explore and understand challenging scientific ideas in a more interactive and in fun way.

Conceptual Framework

The investigation was anchored on the Information Processing Theory which views the mind as a system that receives, processes, stores, and retrieves information, provides a valuable framework for understanding how a chatbot can impact student learning in science.

This theory suggests that a chatbot can act as a tool to support students in processing and accessing information more efficiently. By providing instant answers, explanations, and feedback, a chatbot can help students navigate the stages of information processing, from input and processing to storage and retrieval. This, in turn, can lead to improved understanding, retention, and application of scientific concepts, ultimately enhancing academic performance in science.

Paradigm of the Study



In Figure 1, engagement and class participation with the chatbot is the independent variable, while academic performance is the dependent variable. The arrow indicates that chatbot engagement and participation may influence learners' academic performance in chemistry. The level of engagement and participation with the chatbot is expected to impact the academic performance of learners.

Research Questions

This study aims to investigate the use of chatbots as a predictor of academic performance among undergraduate students in chemistry.
Specifically, the study sought to answer the following questions:

1. How may the students' science engagement in using chatbot be described?
2. How may the students' class participation in Chemistry be described?
3. How may the academic performance of student in Chemistry be described?
4. Do students' science engagements in using chatbot and class participation significantly predict their academic performance in Chemistry?
5. What program can be developed based on the result of the study?

Hypothesis

The study was guided and tested by the hypothesis below: Engagement and Class participation with the Chatbot Academic Performance in Chemistry 7 Students' science engagement in using chatbot and class participation do not predict their academic performance in Chemistry.

Significance of the Study

The purpose of the study was to investigate the use of chatbots as a predictor of academic performance among undergraduate students in chemistry. The research findings may help students to understand on how using chatbots can potentially improve their academic performance. This leads to give them a better study strategies and a better understanding of their progress. Teachers can also benefit from this research by learning how to use chatbots in their classes to improve student learning. By connecting technology with learning objectives so that chatbot use will have an educational purpose and applications, because although students use their devices on their own, they would benefit more if their instructors found deliberate uses for these powerful tool to meet the specific needs of their students. Moreover, this study will also serve as a guide to future researchers by offering an idea for how to evaluate the impact of chatbot engagement on academic performance and providing a basis for further exploration in the field of technology-enhanced in chemistry education.

METHODOLOGY

Research Design

This research utilized a quantitative research design with a descriptive evaluation and descriptive correlation to investigate the relationship of chatbot as predictor to engagement and class participation on academic performance in chemistry among first-year BSED students. The study employed a descriptive approach by analyzing existing

data on student performance in chemistry, specifically focusing on the correlation between chatbot engagement and participation to their academic outcomes.

Respondents and Sampling

The study involved all 88 first-year BSED students from Norzagaray College as respondents. The selection of participants utilized the total population, ensuring representation from both BSED 1A (population of 40) and BSED 1B (population of 48). This approach will provide a comprehensive understanding of the use of chatbots among the entire first-year BSED student population at Norzagaray College.

Instrumentation

The researchers investigate undergraduate students' engagement using chatbots as a predictor of their academic performance in chemistry.

Science Engagement and Class Participation Using Chatbot

To assess engagement and class participation using a chatbot, the researchers utilized a modified Likert scale instrument adapted from Riggs (2024) containing 20 items that is divided into two parts: 10 items for student engagement and 10 items for class participation. Each item will be answered by (1) Strongly Disagree; (2) Disagree; (3) Agree; (4) Strongly Agree. The reliability of the scale was measured through Cronbach's alpha, resulting in a reliability range from 0.78 to 0.93; this range is considered acceptable.

Academic Performance

To assess the academic performance, the researchers utilized existing and reliable data from the class records maintained by the chemistry teacher. This approach ensured the use of comprehensive data that reflected students' overall performance in the chemistry course. The class record data provided a comprehensive measure of academic performance, encompassing various assessments and assignments throughout the semester.

Data Gathering Procedure

Before initiating the research on investigating the impact of chatbot engagement on academic performance in chemistry among first-year BSED students at Norzagaray College, the researchers obtained permission from the President of the school and to the Dean of the College of Education. Adhering to Regional Memo No. 228, s. 2020, ethical guidelines were followed to ensure confidentiality, informed consent, and participant briefing on the study's objectives, duration, and potential risks and benefits. Data handling procedures included strict confidentiality measures and secure storage. The study involved 88 first-year BSED students.

Upon receiving approval from the School's Academic Office, the data-gathering procedure for the participating first-year undergraduate BSED students began. The researchers administered the questionnaires using Google Form to the respondents through Facebook Messenger Group Chats, and consent and assent letter were used, with clear instructions provided before administering the actual questionnaire. The gathered responses were checked to ensure they satisfied the required number of samples.

The data gathered from research competencies and perceived difficulties in thesis writing were tabulated in Jamovi, statistical spreadsheet software. Data analysis involved the use of Pearson's r correlation coefficient to analyze the quantitative data collected. The mean were utilized to describe the science engagement, students' class participation and academic performance in Chemistry in using chatbot. Pearson's r correlation was used to determine if there are significant relationship between students' science engagement in using chatbot and class participation to predict their academic performance in Chemistry.

RESULTS

Table1. Demographic Profile in terms of Sex

Sex	Frequency	percentage
Male	18	20.5%
Female	70	79.5%
Total	88	100%

Table 2. Demographic Profile in terms of Age

Age	Frequency	percentage
18-21	75	85.2%
22-24	13	14.8%
Total	88	100%

Table 3. Science Engagement in Using Chatbot.

No.	Item Statement	Mean	Verbal Interpretation
1	I want to ask my science teacher or classmates personally or through social media if I have a trouble understanding a lesson	3.52	Strongly Agree
2	My science lessons and performance tasks are realistic and contextualized in the Chatbot.	3.59	Strongly Agree
3	I am inspired to learn new things in science class through Chatbot.	3.34	Strongly Agree

4	My science lessons and task in Chatbot stimulate my curiosity.	3.30	Strongly Agree
5	I feel encouraged and interested to work on something in science class with the integration of Chatbot.	3.34	Strongly Agree
6	My science lessons and tasks in the Chatbot are interesting and meaningful.	3.27	Strongly Agree
7	I appreciate the nature of scientific method or process.	3.41	Strongly Agree
8	I am inspired and prepared to come to science class every day with the integration of Chatbot	3.31	Strongly Agree
9	I always pay attention to my teacher and classmates who communicate during science class.	3.48	Strongly Agree
10	I follow the instructions closely in doing my science work with the integration of Chatbot.	3.30	Strongly Agree
Overall		3.39	Strongly Agree

**Scale: 1.00 – 1.75=Strongly Disagree; 1.76 – 2.50 =Disagree; 2.51 – 3.25 =Agree; 3.26 – 4.00 = Strongly Agree*

Table 4. Students Class Participation in Science

No.	Item Statement	Mean	Verbal Interpretation
1	I raise my hand to participate in science class discussions.	3.36	Strongly Agree
2	I do and finish my science tasks on time.	3.45	Strongly Agree
3	I participate and interact during small-group discussions in Science.	3.39	Strongly Agree
4	I prepare thoroughly before the test to be conducted in Chatbot.	3.17	Agree
5	I am having fun during collaborative learning activities in science with the integration of Chatbot	3.39	Strongly Agree
6	My science lessons and performance tasks are important and relevant to my life.	3.39	Strongly Agree
7	I want to investigate and understand the societal and environmental impacts and implications from Science and technology.	3.27	Strongly Agree
8	I consult and share my views and knowledge to my classmates and Science teacher	3.30	Strongly Agree

9	I read and review my modules, class notes, handouts, and textbook between classes to make sure that I learn from these Science learning materials.	3.41	Strongly Agree
10	I give maximum effort to my science class	3.51	Strongly Agree
Overall		3.36	Strongly Agree

**Scale: 1.00 – 1.75=Strongly Disagree; 1.76 – 2.50 =Disagree; 2.51 – 3.25 =Agree; 3.26 – 4.00 = Strongly Agree*

Table 5. Total mean of Academic Performance

	Mean	Verbal Interpretation
Academic Performance	88.3	Good

**Scale:100-96.5=Excellent; 96.4-93.4=Superior; 93.4-90.5=VeryGood; 90.4-87.5=Good 87.4-84.5=VerySatisfactory; 84.4-81.5=HighAverage; 81.4-78.5=Average; 78.4-75.5=Fair 75.4-74.5= Pass*

Table 6. Pearson's r Correlation Matrix

Academic Performance	Pearson's r	p-value	Interpretation	Decision
Science engagement in using Chabot.	0.117	0.280	Not Significant	Do not Reject the null hypothesis
Academic Class Participation	0.041	0.7.5	Not Significant	Do not Reject the null hypothesis

*Note.*p< .05,**p<.01,***p<.001*

DISCUSSION

Table 1. Shows that the demographic profile in terms of sex indicates a sample size of 88 individuals, with 18 males representing 20.5% and 70 females accounting for 79.5% of the total. The data reveals a higher proportion of females in the sample population, highlighting a gender imbalance with females being the majority.

Table 2. Shows that the demographic profile in terms of age comprises a total sample size of 88 individuals, with 75 individuals (85.2%) falling in the 18-21 age group and 13 individuals (14.8%) in the 22-24 age group. The data indicates a significant majority of individuals in the18-21 age range, suggesting that the sample is primarily composed of young adults.

Table 3. Shows a high level of undergraduate students' engagement in using a Chatbot reveals a strong impact to their learning process. The overall mean engagement score is 3.39, indicating a high level of agreement among students, indicating that using chatbot boosts their eagerness to learn more. This suggests that the Chatbot is generally contributed to student engagement positively to the learning experience. This finding supports the study of Chamorro-Atalaya (2023) and Kasneci et al. (2023), who found that chatbots can enhance students learning activities by fostering student interactions, increasing engagement, and providing personalized feedback to their work, and suggesting that technological advancements like chatbots can positively impact their learning engagement.

Table 4. Shows that the undergraduate students' participation in science reveals a strong commitment to learning. The overall mean participation score of 3.36 indicates a high level of agreement among students regarding their participation, indicating a positive attitude towards their involvement in science-related activities. This finding aligns with research suggesting that interactive learning tools can enhance student engagement and motivation to participate. Studies like Kamita et al. (2019) and Topal et al. (2021) suggest that chatbots can be used in self guided learning, enhance motivation, and even improve mental health of the students to be more active in the classroom. These findings suggest that incorporating chatbots into science education could contribute to a more engaging and supportive learning environment, potentially leading to increased student participation in science-related activities.

Table 5. Shows that the mean of academic performance of 88.3 suggests that students have demonstrated a good level of understanding and mastery of the Science related activities, but may need some additional support or practice to reach their full potential. The fact that most students grade between 87.4 and 90.5 indicates that there may be a "ceiling" effect, where students have reached a certain level of proficiency but are not yet achieving at an exceptional level. This observation aligns with research suggesting that while chatbots may not always lead to significant improvements in academic achievement, they can positively impact student motivation. Yin et al. (2021) found no significant difference in learning achievements between students who used a chatbot and those who did not. However, the study reported higher levels of motivation among students who interacted with the chatbot. This suggests that while chatbots might not directly improve test scores, they can be very helpful in keeping engagement and encouraging students to continue learning.

Table 6. Shows that the Pearson's r correlation calculated for science chatbot engagement and students participation has no significant correlation found between students' science engagement using chatbot ($r = 0.117$; $p = 0.280$) which is greater than the alpha value of 0.05. In class participation ($r = 0.041$; $p = 0.705$) which also greater

than the alpha value of 0.05 so both null hypotheses are not rejected. Therefore, it was found that although chatbot may used to support the learning process of the students engagement and participation in Science they are not guaranteed that using chatbot will lead them to high grades. The result of the findings contrasts to Meyer et al. (2022), which conclude that using chatbot can improve academic performance. They found that 8% of the students were more likely to get a B or higher in the course, with their grades increasing by 11 percentage points.

These findings suggest that chatbots can be a important tool to improved the student learning outcomes. In the study of Boonmoh et al. (2021) mentioned that the knowledge of students when it comes to technology and using different technological tools also has an impact on the effectiveness of technology integration in school. So therefore, it is not about how often you use the chatbot, but rather about how you utilized and apply it to enhance your own understanding. Chatbot can be used to come up with a program to improve chemistry students' academic performance.

The program being proposed by the researchers will help to design and utilize a chatbot-assisted learning system for college level students in chemistry which will assist them in improving their academic achievement and other outcomes related to their studies, This program aims to improve the BSED students learning outcomes in Chemistry by giving them immediate assistance and easy access to the information, we hope to increase their motivation, engagement, participation together with their academic performance.

Propose program	Timeline	Resources
***** Integrate Chatbot into the curriculum for example create a chatbot platform exclusive for chemistry related studies, encourage use of chatbot as a supplement for traditional teaching.	*1-2 months for chatbot integration and platform.	*Development team for chatbot platform.
*****Training and support for Chemistry teachers on how to effectively integrate Chabot in their teaching practice, and provide technical support to the students who needs assistance.	*1-2 months Training and support for chemistry instructors.	*Instructors for training and support staff.
*Regular evaluation of students learning outcomes to their academic performance such as quizzes and exams.	*1wholesemester evaluation and polishing of the program.	*Evaluation tools and other materials.

Conclusions

This study revealed that although chatbots can encourage students to be more engaged and actively participate in the classroom. Finding also revealed that chatbot can't necessary guarantee them to improved their academic performance. Furthermore, in terms of support chatbot can help students to become more independent learners, more confident to their abilities and better solver to their problem. Moreover, chatbot can enhance students learning experience by learning more accessible regardless on time or location. However, despite of positive engagement and participation level of participants in this research, there is still a need of improvement to reach higher level of proficiency. Therefore, this indicates that while chatbots can help students to enhance their motivation and engagement, they do not necessarily rely on chatbots to improve their academic performance.

Recommendations

The researchers formulate some recommendations based on the findings of the study, to improve the academic performance of the students as well as their engagement experience.

1. Enhance Chatbot Functionality. To address the needs of students and learning gaps, chatbot may incorporate features that will offer more personalized feedback and adaptive learning paths. Additionally, to maintain the interest of students and to deepen their understanding, chatbot might also consider adding more interactive and engaging elements like quizzes, simulations, and gamification.
2. Combine Chatbot with Other Teaching Methods. Complement chatbot engagement with traditional teaching methods and friendly learning activities that will create a holistic learning exposure.
3. Provide More Support and Resources. Offering extra activities like tutoring and support workshops will help students, especially those who are in needs to reach their academic goals.
4. Examine and Evaluate Chatbot Effectiveness. Continuously assessing and conducting regular evaluations will help identify the impact of chatbot towards the students' engagement, participation and academic performance
5. Encourage Equal Learning Tactic. By promoting the use of combined digital and traditional learning tools will enhance student's learning habits. Fostering a learning environment that merit engagement and academic performance, giving an emphasis in the crucial role of sustaining effort and practice.

Compliance with Ethical Standards

The participants of the study were provided detailed information about the research before they were allowed to participate. Those who chose to participate were given consent and assent form adhering to the provisions outlined in the Data Privacy Act of 2012, also known as RA 10173, all responses provided by respondents will be kept private and utilized exclusively for academic purposes. Ensuring the confidentiality of participants' identities and privacy. Additionally, the study strictly followed the

recommended procedures of Memorandum No. 9, s. 2022 for data collection, security of collected data, storage, transfer, and destruction procedures. The participants' identities and other identifying information were not disclosed without their explicit consent. Proper citation and credit were given to the authors mentioned in the study. The researchers upheld the integrity of the data avoiding data fabrication and data falsification, as outlined in the ethical practices. The actual benefit of the study, meeting the needs of the respondents, and encouraging positive change in the classroom will be prioritized. Furthermore, the researchers ensured that after the specific purpose for which the data were gathered and used, the data were no longer retained and were subjected to disposal. To ensure data security and participant privacy, the researcher implemented a comprehensive data disposal protocol. After fulfilling the research objectives, all data were permanently deleted, 9 leaving no possibility of recovery. This involved digital deletion from the Google Form used for data collection, effectively erasing all entries and submissions.

Acknowledgments

The researchers of this study acknowledge the guidance and blessings of the Lord. The researchers would like to thank Bryan DC. Gabriel, PhD, their research adviser, for his invaluable insight, expertise, and encouragement. The researchers extend their gratitude to the 88 first-year BSED students from Norzagaray College as respondents who generously shared their time, experiences, and perspectives. The researchers also express their thanks to the Norzagaray School President and the Dean of the College of Education, without them, the research will not be 15 accomplished. Sincere gratitude is extended to all individuals and organizations that have provided support, guidance, and assistance throughout the completion of this study.

REFERENCES

Abdellatif, A., Costa, D., Badran, K., Abdalkareem, R., &Shihab, E. (2020). Challenges in chatbot development: A study of stack overflow posts. *In Proceedings of the 17th International Conference on Mining Software Repositories* (pp. 174-185).

Ali, J. K. M., Shamsan, M. A. A., Hezam, T. A., & Mohammed, A. A. Q. (2023). Impact of ChatGPT on learning motivation: *Teachers and students' voices. Journal of English Studies in Arabia Felix*, 2(1), 41-49.

Almada, A. (2023). NLP k-means algorithm incorporated into a proactive chatbot to assist failing students. *2022 2nd International Conference on Machine Learning and Intelligent Computing (ICMLIC)*.

Arruda, D., Marinho, M., Souza, E., &Wanderley, F., et al. (2019). A chatbot for goal-oriented requirements modeling. In S. Misra (Ed.), *Computational science and its applications—ICCSA 2019*. Lecture notes in computer science (pp. 506–519). Springer.

Bicknell, K., Brust, C., & Settles, B. (2023). *How Duolingo's AI Learns What You Need to Learn.* Retrieved April 10, 2024,

Boateng, A. B., &Tindi, S. (2022). Technology appropriation in Higher Education: The case of Communication Educators in Ghana. *Integrated Journal for Research in Arts and Humanities.*

Boonmoh,A.,Jumpakate,T.,&Karpklon,S.(2021).*Teachers' Perception and Experiencein UsingTechnologyfor the Classroom.*

Celik, M., &Bulut, O. (2022). The effect of chatbot-based learning on students' academic performance and motivation in an online learning environment. *Turkish Online Journal of Educational Technology*, 21(1), 133-145.

Chamorro-Atalaya, O. (2023). Application of the chatbot in university education: A systematic review on the acceptance and impact on learning. *International Journal of Learning Teaching and Educational Research*, 22(9), 156-178.

Chang, C. Y., Hwang, G. J., & Gau, M. L. (2021). *Promoting students' learning achievement and self-efficacy: A mobile chatbot approach for nursing training.* British Journal of Educational

Crawford, J., Cowling, M., & Allen, K.-A. (2023). *Leadership is needed for ethical ChatGPT: Character, assessment, and learning using artificial intelligence (AI).* Journal of University Teaching and Learning Practice, 20(3), 02.

Essel, H. B., Vlachopoulos, D., &Tachie-Menson, A. (2021). The relationship between the nomophobic levels of higher education students in Ghana and academic achievement. PLoS ONE, 16(6), e0252880.

Fariani, R. I., Junus, K., &Santoso, H. B. (2023). A systematic literature review on personalised learning in the higher education context. *Technology, Knowledge and Learning,* 28(2), 449–476.

Fauziet, R. (2023). Chatbots in Education: A Comprehensive Guide to Implementation and Best Practices. *Routledge*.

Han, S., & Lee, M. K. (2023). FAQ chatbot and inclusive learning in massive open online courses. *Computers & Education,* 179, 104395.

Hong, W. C. H. (2023). The impact of ChatGPT on foreign language teaching and learning: opportunities in education and research. *Journal of Educational Technology and Innovation*, 5(1), 37-45.

Kamita, M., & Suzuki, K. (2019). A review of chatbot applications in education: Opportunities and challenges. International *Journal of Artificial Intelligence in Education*, 29(1), 1-18.

Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günnemann, S., &Hüllermeier, E. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences,* 103, 102274.

Kikalishvili, S. (2023). Unlocking the potential of GPT-3 in education: *Opportunities, limitations, and recommendations for effective integration. Interactive Learning Environments,* 1–13.

Kohnke, L., Moorhouse, B. L., &Zou, D. (2023). ChatGPT for language teaching and learning. *RELC Journal,* 54(2), 537–550.

Lo,E.(2023).HowDuolingo'sAILearnsWhatYouNeedtoLearn.*IEEESpectrum.*

Meyer, K., et al. (2022). Let's chat: Chatbot nudging for improved course performance. *Working paper from Annenberg Institute at Brown University.*

Okonkwo, C. W., & Ade-Ibijola, A. (2021). Chatbots applications in education: A systematic review. *Computers and Education: Artificial Intelligence,* 2, 100033.

Oktaria, D., &Soemantri, D. (2021). Undergraduate medical students' perceptions on feedback-seeking behaviour. *Malaysian Journal of Medical Sciences,* 25(1), 75–83.

Pérez, J. Q., Daradoumis, T., &Puig, J. M. M. (2020). Rediscovering the use of chatbots in education: A systematic literature review. *Computer Applications in Engineering Education*, 28, 1549-1565.

Riggs, E. (2024). Integrating chatbot in inquiry based approach in teaching science. *EPRA International Journal of Multidisciplinary Research (IJMR),* 2455- 3662

Shidiq, M. (2023). The use of artificial intelligence-based chat-gpt and its challenges for the world of education; from the viewpoint of the development of creative writing skills. Proceeding of International Conference on Education, Society and Humanity, 1(1), 353–357.

Sürmelioğlu, Yeşim, and SüleymanSadiSeferoğlu. 2019. "An Examination of Digital Footprint Awareness and Digital Experiences of Higher Education Students." *World Journal on Educational Technology* 11 (1): 48–64.

Topal, A. D., Eren, C. D., &Geçer, A. K. (2021). Chatbot application in a 5th grade science course. *Education and Information Technologies,* 26, 6241–6265

Trương, H., Nguyễn, P., Cao, L., Nguyễn, T., &Nguyễn, P. (2023, June 28). Role of ChatGPT in Vietnamese education.

Yang, S., & Evans, C. (2019). Opportunities and Challenges in Using AI Chatbots in Higher Education. *Proceedings of the 3rd International Conference on Education and E-Learning* (pp. 79–83).

Yin, J., Goh, T. T., Yang, B., &Xiaobin, Y. (2021). Conversation technology with micro-learning: The impact of chatbot-based learning on students' learning motivation and performance. *Journal of Educational Computing Research*, 59(1), 154–177.

APA Citation:

Sumaway, S. T., Diaz, R. L., & Gabriel, B. D. (2024). UNDERGRADUATE STUDENTS' SCIENCE ENGAGEMENT IN USING CHATBOT AS PREDICTOR TO THEIR ACADEMIC PERFORMANCE IN CHEMISTRY. Ignatian International Journal for Multidisciplinary Research, 2, 851–867. https://doi.org/10.5281/zenodo.13324727

Corresponding author: *shanesyke@gmail.com*

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

UTILIZATION OF SUBSTITUTION, AUGMENTATION, MODIFICATION, AND REDEFINITION MODEL FOR BACHELOR OF SCIENCE IN TOURISM MANAGEMENT STUDENTS' SPEAKING AND WRITING SKILLS

Ryan Marquez Hilario

Laguna State Polytechnic University-Los Baños Campus
Brgy. Malinta, Los Baños, Laguna, Philippines

https://doi.org/10.5281/zenodo.13335881

ABSTRACT

The primary purpose of this study was to determine if the SAMR model could assist the students in improving their English proficiency, organization, grammar, fluency, and word choice in terms of speaking and writing skills. This was carried out in a state university at Sta. Cruz, Laguna. The theories of Experiential, Dual Code, and Language acquisition served as the framework for this study. Quasi-experimental research methodology was adopted in this work. Simple random sampling was used to identify Tourism Management students with certain criteria as study respondents. The Cambridge English Proficiency Test, on the other hand, was chosen as the research instrument. The T-test was also utilized in this investigation for independent samples at the.05 level of significance. The pretest and posttest data were statistically analyzed to see whether learners exposed to the SAMR model fared better than those who were not. The posttest revealed that there was a substantial difference in student performance between the control and experimental groups. Moreover, the study produced an action plan titled "WRITE2SPEAK" or Project on Improving Writing and Speaking Skills in the English Language. Project WRITE2SPEAK has included enrichment exercises to help students cope with areas where they were struggling, including organization, grammar, fluency, and word choice

Keywords: *utilization, SAMR model, "WRITE2SPEAK", writing, speaking, English proficiency*

INTRODUCTION

The English language is often considered as an active universal, the world's language. People who learn the English language view it as personal competence. As a result, many people today, particularly students can speak English. Mastering the English language is a vital skill for students to have. Students who master the language improve both their academic and life skills. Once students understand it, they will be well-accepted by society. English is the world's most extensively used language for communication. It is an international language throughout the world. English is one of the foreign languages spoken in the Philippines. It is the most widely taught foreign language, with instruction ranging from elementary school to tertiary level. By learning English, students are expected to absorb and keep up with scientific, technological, and artistic developments. The teaching of English focuses on learners' capacity to master the four macro skills, which pertain to hearing, speaking, reading, and writing.

As it is, the Philippines is recognized as one of the most populous English-speaking nations. After the Philippine-American War concluded in 1902, the American colonial authority established English as the primary language of government, business, and education. English is currently listed in the Philippines' constitution as one of its official languages. It is the principal medium of instruction in schools and the language of commerce, science, technology, government, and international communication. With two-thirds of the population fluent in English, according to Mariñas (2021), the Philippines was also one of the leading ESL destinations. Even though the majority of the Philippine population speaks English fluently, the EF English Proficiency Index (an annual ranking by English level) has shown a progressive decline in recent years. The Philippines was delegated to the group known as TOEIC. Rex Wallen Tan, general manager of Hopkins International Partners, explained that this was concerning given that taxi drivers in Dubai, United Arab Emirates, were expected to have a TOEIC proficiency score of 650 and business process outsourcing agents should have a score of 850 in the metric, while the average English proficiency score of a Philippine college graduate was only 631.4, according to the Test of English for International Communication metrics the overall average score of Filipino IELTS takers was disappointing because many of them were supposedly "educated." This implies that English standards in the Philippines are declining, according to IPD Education's 2021 outcomes.

The Filipino culture eventually assimilated the English language. Despite persistent disagreements about the preferred medium of instruction, the nation has established language regulations. Following bilingualism, President Gloria Macapagal Arroyo established the Executive Order 210. It is intended to increase the use of English as a teaching tool inside the school system. At the tertiary level, terminology is frequently consistent with that found in course descriptions. Due to this, most of the courses are taught by teachers in English. Due to the linguistic switch from Filipino to English to Filipino and English again, students frequently switch between codes. The relevance of language competence in the workplace is emphasized in community and education.

Retnaningsih (2020) stated that online learning, also known as e-learning, is the only means to give education during the COVID-19 pandemic. This includes university-level coursework. Therefore, it seems sensible to conclude that e-learning should be used. To overcome these obstacles, lecturers must adjust to suitable e-learning implementation strategies. To create technology-based learning, the SAMR model was utilized as a guideline. Izza and Rusydiyah (2020) claimed that internet usage encouraged students to learn. Images, movies, and music are used in conjunction with the teachings to raise students' intellectual awareness and foster the development of their thinking skills. Students who access English-related applications on their phones are another advantage. According to Speck (2022), English language learners benefit from the use of technology. Technology is used in various ways, particularly in education. People knew something near them in the past. However, everyone's thinking has been altered by technology. Students may now instantly use cell phones to interact with their friends, family, and teachers.

Tourism is one of the government's considered sources of revenue. Every country in the world plans how to welcome domestic and international visitors, which necessitates enough human resources. A variety of educational institutions have been established around the world to develop skilled labor. In this regard, language was an essential tourist media tool. Tourism students must have strong speaking and writing skills that they can utilize in the workplace. However, students continue to confront a variety of issues when expressing their communication abilities.

In line with this, the researcher determined students' speaking and writing abilities by incorporating technology. The SAMR Model uses computer software to help teachers and students during the teaching-learning process, particularly in speaking and writing activities. The goal of this study was to see if the SAMR model could improve students' speaking and writing abilities. If this suggested technology integration into students' speaking and writing activities are both successful, it would serve as a launchpad for new creative instruction.

Research Questions

1. What is the pretest result of Tourism students in speaking and writing in the control group in English language proficiency in terms of:
    - 1.1 Organization,
    - 1.2 Grammar,
    - 1.3 Fluency, and
    - 1.4 Word Choice?
2. What is the pretest result of Tourism students in speaking and writing in the experimental group in English language proficiency in terms of:
    - 2.1 Organization,
    - 2.2 Grammar,
    - 2.3 Fluency, and
    - 2.4 Word Choice?

3. Is there a significant difference between the pretest results of the control and experimental groups?
4. What is the posttest result of Tourism students in speaking and writing in the control group in English language proficiency in terms of:
    4.1 Organization
    4.2 Grammar,
    4.3 Fluency, and
    4.4 Word Choice?
5. What is the posttest result of Tourism students in speaking and writing in the experimental group in English language proficiency in terms of:
    5.1 Organization,
    5.2 Grammar,
    5.3 Fluency, and
    5.4 Word Choice?
6. Is there a significant difference between the posttest results of the control and experimental groups?
7. What action plan may be proposed based on the results of the study?

METHODOLOGY

Research Design

The study utilized the quasi-experimental method, which sought to establish a cause-and-effect relationship between an independent and dependent variable, was deemed to be the most appropriate research design for this study (Thomas, 2020). The researcher thus collected the learners' raw pretest and posttest data. A pair of groups served as the research subjects in this quasi-experimental investigation. The experimental group and learner-respondent control groups received a pretest and a posttest, respectively. After applying the SAMR model technique, the control group was given conventional teaching-learning procedures, or what the learners performed regularly, to see whether there was a substantial change in the experimental group's English ability.

Research Locale

The study was carried out in one of the state universities in Laguna Province. This university provided both senior high school and college education. One of the programs provided by this university was the College of Hospitality Management and Tourism. Due to the large student body of this college, the researcher felt that many students might

benefit from the study. The study was curious to observe if the experiment had any influence on the student's English skills before and after the experiment.

Research Participants

The population was the first-year students at Laguna State Polytechnic University in Sta. Cruz, Laguna, who enrolled in the Bachelor of Science in Tourism Management program during the first semester of the 2023-2024 academic year. The BSTM was divided into four (4) sections, with a total of one hundred fifty-five (155) students

Research Instrument

The instrument used in this study was a validated English Proficiency Test from Cambridge. The speaking test was separated into three (3) sections. The first test involved speaking about a visual presentation. The second test involved them expressing their experiences, while the third involved them giving an argumentative statement. The writing test was composed of two (2) sets of questions. The first part pertained to summarizing a particular article and the second part was essay writing.

Data Gathering Procedure

The required data, hypotheses, and related literary works and concentrates all came from books that were borrowed mainly from the library of Laguna College of Business and Arts (LCBA). The study made use of the internet to strengthen the resources through the utilization of Mendeley, Academia, ScienceDirect, and Google Scholar. After validating the questionnaire, the following steps were utilized.

Initially, a formal letter was sent to the Dean of the College of Hospitality Management and Tourism requesting their approval that the tourism students might be the subject of this research. The significance of the study, its goals, how to complete the survey, and when to obtain the results were all discussed by the researcher.

Subsequently, a consent letter and a pretest questionnaire were distributed to all BSTM students to determine their English language proficiency. This questionnaire was to measure the level of speaking and writing skills of the students before applying the SAMR model. The survey questionnaire was self-administered by the students. The results were then compared using the ratings from each section. There was no discernible difference between the experimental and control groups' outcomes.

Afterward, the researcher used the SAMR model in the course design, activities, evaluation, and other areas, according to the instructions given to the experimental group in the classroom. The researcher taught and exposed the students to online resources and gave them hands-on training in navigating the Internet, making Google accounts, encoding, uploading, commenting, and sharing documents using Google Docs.

Furthermore, students were instructed to look for grammar checker sites online that would assist them in detecting and rectifying their errors when composing their output.

The following were the steps of intervention using the SAMR model for the experimental group. In writing skills, at the substitution level, the students composed their written outputs through the use of Google Docs. In augmentation, the students shared their output with their partners through the platform for corrections, feedback, or suggestions using its comment feature. In the modification, the students revised their output and then shared the document with their instructor for comments and suggestions. In redefinition, the class created a Facebook page in which they were able to upload their output so that the other classmates or instructors were able to comment if there were things to be improved or changed. In the aspect of speaking, at the substitute level, the researcher provided an activity regarding how to create a vlog using a sample video and PowerPoint presentation. In augmentation, the students used Google Docs to write down their lines or scripts with the use of available online dictionaries and grammar checkers. The students also used Google Drive for multimedia content and shared it with their groupmates and instructors for comments and suggestions. In the modification, the student enhanced their vlog using online platforms that helped to develop the output. In redefinition, the class created a YouTube channel in which they were able to upload their vlog so that the other classmates or instructors could interact through the comment feature.

The control group followed the course syllabus and carried on as usual in the classroom without receiving any treatment or assistance. After using the SAMR model and conventional way of teaching, the two groups took a posttest. This was also the type of test given in their first test.

Finally, the information was gathered online, documented, and tabulated. The statistician was given all of the collected data and conducted statistical analysis on it. To check if there were any differences, their scores were gathered and reassessed.

RESULTS AND DISCUSSIONS

Table 1.1. A. Pretest Result of the Tourism Students in the Control Group in English Language Proficiency (Speaking) in terms of Organization

Indicators	Grade	F	%
Advanced	90 – 100	2	6.67%
Proficient	85 – 89	1	3.33%
Approaching Proficient	80 – 84	5	16.67%
Developing	75 – 79	8	26.67%
Beginning	74 and below	14	46.67%
Total		**30**	**100%**

General Assessment	**75.47**	**Developing**

It shows that the learners lack sufficient knowledge in arranging concepts. This scenario suggests that the students have not yet been conversant with or skilled in terms of organizing ideas.

That result was nearly identical to the analysis of Asio and Quijano (2023) in their study on English Proficiency and Academic Performance of College Students. With 250 or 99.6%, nearly all of the respondents were in the low level. There was only one or 4% within the average level. No one achieved a high level. The study found that learners' ability to arrange thoughts needed to be developed further.

In addition, Waluyo and Bucol (2021) argued that among the speaking skills included in the exam namely: vocabulary, organization, and grammar. The most challenging aspect to manage is organization. Individuals could not communicate effectively unless they organized their ideas or information in the context.

Table 1.1. B. Pretest Result of the Tourism Students in the Control Group in English Language Proficiency (Writing) in terms of Organization

Indicators	**Grade**	**F**	**%**
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	3	10.00%
Developing	75 – 79	4	13.33%
Beginning	74 and below	23	76.67%
Total		**30**	**100%**
General Assessment	**70.80**	**Beginning**	

The results show that learners in the control group struggle to write in English. This implies that the students are unable to articulate their thoughts properly. This occurs initially when the learners have not yet been introduced to the concepts.

To back up this claim of Toba and Norr (2019) in their study on current issues of Indonesian EFL students' writing skills: ability, problem, and reason in writing comparison and contrast essays. The content problem was related to challenges in investigating and developing relevant concepts, including object comparison; as a result, the idea of their essay was sometimes unknown. In terms of organization, errors were found in the sentence organization, lack of transition words, inconsistently composed whole-to-whole, similarities-to-differences, and point-by-point structures, the unstated topic sentence for each body paragraph, undeveloped assisting ideas, and repetition idea/words in the concluding paragraph of the essay.

Table 1.2. A Pretest Result of the Tourism Students in the Control Group in English Language Proficiency (Speaking) in terms of Grammar

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	2	6.67%
Approaching Proficient	80 – 84	3	10.00%
Developing	75 – 79	4	13.33%
Beginning	74 and below	21	70.00%
Total		**30**	**100%**
General Assessment	**72.00**	**Beginning**	

The findings above suggest that learners in the control group struggle with writing. This shows that these students are unable to convey their concepts. It is also possible to conclude that some students' written expression skills require further growth and polish.

In similar study by Betoni and Ulfaika (2020), it was stated that students who received low grammatical scores on their writing tests could be attributed to one factor which was a lack of students' vocabulary, it was easier for them to write anything they wanted to write. However, students who lacked vocabulary struggled to write even when they had ideas.

Table 1.2. B. Pretest Result of the Tourism Students in the Control Group in English Language Proficiency (Writing) in terms of Grammar

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	4	13.33%
Developing	75 – 79	6	20.00%
Beginning	74 and below	20	66.67%
Total		**30**	**100%**
General Assessment	**72.07**	**Beginning**	

The college students in the control group have lower levels of proficiency in grammar. This suggests that their knowledge of grammar is inadequate and that they are not familiar with the structure of language manifested in their performance in writing.

Puspitaloka (2019) found out that grammar proficiency was vital in helping a learner understand the meaning of a sentence throughout the writing process. Having a set of grammar skills did not imply that someone can produce descriptive text automatically. Critical thinking must be increased so that she/he can jot down the descriptive text as well. Even if the influence of critical thinking is not as strong as grammatical mastery, it was an inner modality for a learner to take an advanced activity to write properly.

Table 1.3. A Pretest Result of the Tourism Students in the Control Group in English Language Proficiency (Speaking) in terms of Fluency

Indicators	**Grade**	**F**	**%**
Advanced	90 – 100	1	3.33%
Proficient	85 – 89	1	3.33%
Approaching Proficient	80 – 84	6	20.00%
Developing	75 – 79	0	0
Beginning	74 and below	22	73.33%
Total		**30**	**100%**
General Assessment	**72.33**	**Beginning**	

The factors causing speaking problems are lack of general knowledge, lack of speaking practice, fear of making mistakes, lack of word usage and grammar practice, poor motivation, low involvement, reading laziness, shyness, less dictionary usage, anxiousness, fear of criticism, and unfamiliar word pronunciation are all contributing factors to speaking difficulties.

Based on the study, the aspects of fluency across assessed levels of speaking proficiency by Tavakoli et al. (2020). Students still felt guilt and anxiety during dialogues. This was a critical component in encouraging students to refrain from speaking in public. This was due to a lack of self-confidence, and learners' vocabulary was relatively low. Therefore, they preferred quiet over talking or having a discourse.

Table 1.3. B. Pretest Result of the Tourism Students in the Control Group in English Language Proficiency (Writing) in terms of Fluency

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	3	10.00%
Developing	75 – 79	4	13.33%
Beginning	74 and below	23	76.67%
Total		30	100%

General Assessment	69.47	Beginning

Learners have difficulties when it comes to writing. These problems can be caused by a variety of factors like lack of practice, insufficient time, a lack of enthusiasm, feedback from the instructor, and the nature of the writing process.

To back up this, The Role of Handwriting Instruction in Education by Limpo and Graham (2020) found that good and fluent handwriting was required for efficient and effective writing development, which could be promoted by explicit and systematic training.

Table 1.4. A. Pretest Result of the Tourism Students in the Control Group in English Language Proficiency (Speaking) in terms of Word Choice

Indicators	Grade	F	%
Advanced	90 – 100	2	6.67%
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	3	10.00%
Developing	75 – 79	7	23.33%
Beginning	74 and below	18	60.00%
Total		30	100%
General Assessment	73.80	Beginning	

Communication challenges arise when the learner encounters a word. They do not comprehend, use a word they are unfamiliar with, or are unable to articulate their intended meaning. Other issues that students face when speaking include a lack of self-confidence and anxiousness. They may experience sentiments such as insecurity, shyness, anxiety, nervousness, and worry that interfere with their speaking abilities. If the learners themselves do not believe that they can speak, it has become a major issue for them.

Aziz and Kashinathan (2021) found that few difficulties with communication were reported among college students. The students believed they could not compose English sentences because of their restricted terminology. Furthermore, learners took far too long to produce English phrases. They began with words and strived to organize the complete language into sentences and phrases before conversing. They also employed erroneous phrase structure and pronunciation frequently.

Table 1.4. B. Pretest Result of the Tourism Students in the Control Group in English Language Proficiency (Writing) in terms of Word Choice

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0

Approaching Proficient	80 – 84	1	3.33%
Developing	75 – 79	5	16.67%
Beginning	74 and below	24	80.00%
Total		30	100%
General Assessment	71.60	Beginning	

Many of the students who do not read much or come across a diverse range of vocabulary in their daily life may have a restricted word bank to draw on. This makes it tough to choose the most exact and striking phrases to explain their ideas.

According to Derakhshan and Karimian Shirejini (2020), punctuation, the use of prepositions, weak expressions, exceptional structure, consistency, and the use of irregular verbs, all played important roles in making writing difficult. This could be considered an intrinsic aspect of the English learning process; therefore, understanding the learners' academic writing challenges and their attitudes about such problematic regions was critical in the educational context. Students were faced with developing logical writing in addition to correct sentence construction and paragraph development.

Table 2.1. A. Pretest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Speaking) in terms of Organization

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	11	36.67%
Developing	75 – 79	7	23.33%
Beginning	74 and below	12	40.00%
Total		30	100%
General Assessment	76.40	Developing	

The experimental group experienced problems in speaking skills regarding organization, based on their overall score. It simply indicates that the students are unable to arrange the ideas in a particular context.

According to Islam and Stapa (2021), learners were also hampered by a lack of previous knowledge on a variety of topics. They appeared to struggle to retrieve material from their long-term memory when they attempted to speak on a topic. Having appropriate topical knowledge enabled speakers to connect to the context, and with this connection, they might continue a conversation or build a speech. It was believed that learners' speaking performance was substantially influenced by how much knowledge and thoughts they had about the issue at hand.

Table 2.1. B. Pretest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Writing) in terms of Organization

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	2	6.67%
Developing	75 – 79	4	13.33%
Beginning	74 and below	24	80.00%
Total		30	100%
General Assessment	69.67	Beginning	

College students show deficiency when it comes to establishing ideas and information in writing activities despite having a series of tests, training, and learning from the past.

To support this, Siddiqui (2020) found that writing in English is extremely important all around the world, especially for academic and professional success. Despite having studied English for years, tertiary students, like other foreign language students, struggled with writing. One of the primary challenges in their writing was unable to express or organize their thoughts in a paragraph to convey the proper sense.

Table 2.2. A. Pretest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Speaking) in terms of Grammar

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	5	16.67%
Developing	75 – 79	6	20.00%
Beginning	74 and below	19	63.33%
Total		30	100%
General Assessment	73.00	Beginning	

The Tourism students in the experimental group perform poorly in grammar. This suggests a lack of grammatical competence and a lack of familiarity with a grammar structure.

According to Wahyuningsih and Afandi (2020), the analysis results showed that the problems encountered by students in the English language education department in speaking English included a lack of appropriate vocabulary, a lack of grammar mastery,

a lack of correct pronunciation, a lack of English input outside of the classroom, a lack of confidence, and a lack of English-speaking curriculum development.

Table 2.2. B. Pretest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Writing) in terms of Grammar

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	1	3.33%
Approaching Proficient	80 – 84	3	10.00%
Developing	75 – 79	5	16.67%
Beginning	74 and below	21	70.00%
Total		30	100%
General Assessment	70.53	Beginning	

The findings indicate that learners' grammar competency in writing is low. This occurs when a learner does not understand what he or she is reading and does not have a strong command of the vocabulary.

According to Omar (2019), many English language learners have been facing difficulties when writing an academic paper in English due to a lack of grammar. Most foreign colleges required passing international tests at a high level, which most international students have failed to do. The cause was attributed to a lack of fundamental knowledge about grammar in writing.

Table 2.3. A. Pretest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Speaking) in terms of Fluency

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	2	6.67%
Developing	75 – 79	10	33.33%
Beginning	74 and below	18	60.00%
Total		30	100%
General Assessment	72.67	Beginning	

This only connotes that the students have poor communication skills, this happens when learners are not encouraged to express their ideas, thoughts, and feelings inside or outside of the classrooms. As a result, the students become more unwilling and experience stage fright or lack of self-confidence in using English as a language.

Some may have attributed this shortcoming to a lack of time for oral practice both in and out of the classroom (Su, 2021). As a result, students lacked confidence and were unwilling to speak English. They were nervous when they used English to express themselves verbally, had debates, or communicated with teachers or classmates. Furthermore, the bulk of these pupils were not at ease speaking English and were hence not fluent. Some students performed well in English lessons but struggled to communicate in real-life settings.

Additionally, Masuram and Sripada (2020) stated that college students' speaking ability and oral fluency must be evaluated. The majority of learners were having difficulty continuing a discussion with minimal hesitations and unnecessary pauses. There could be a variety of explanations for such occurrences. There could be pedagogical reasons to blame for students' weak public speaking skills.

Table 2.3. B. Pretest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Writing) in terms of Fluency

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	1	3.33%
Developing	75 – 79	6	20.00%
Beginning	74 and below	23	76.67%
Total		30	100%
General Assessment	68.80	Beginning	

The findings show that the learners are terrified of making mistakes while writing. When they find it difficult to express themselves in English, they choose to use their own words instead. Limited vocabulary hinders learners' ability to communicate effectively in English.

Ramamuthie and Aziz (2022) stated that English could be difficult for English language learners, especially if they were not exposed to the language well. The most common issue for learners was a lack of confidence in the English language. Participation of students in writing activities necessitated a certain level of interest on their behalf. In general, intrinsic and extrinsic elements that developed the yearning and energy in students to be continually engaged and dedicated to studying and engaging in English activities were characterized as intrinsic and extrinsic components.

Table 2.4. A. Pretest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Speaking) in terms of Word Choice

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	8	26.67%
Developing	75 – 79	6	20.00%
Beginning	74 and below	16	53.33%
Total		30	100%
General Assessment	74.87	Developing	

The findings show that students demonstrate fear during speaking activities resulting in their struggle in performance. Providing learners with a comfortable setting and a series of activities for them to be exposed to the language was vital for their success. Some learners may struggle to communicate in the language due to their shy type nature or personality.

Syafiq et al. (2021) stated that learners with limited vocabulary and practice might struggle to communicate effectively in English. Lack of material could cause anxiety and impair communication skills. In the event the learners might be fearful of making mistakes or being ridiculed by their peers, preventing them from sharing their thoughts.

Table 2.4. B. Pretest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Writing) in terms of Word Choice

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	1	3.33%
Developing	75 – 79	2	6.67%
Beginning	74 and below	27	90.00%
Total		30	100%
General Assessment	69.07	Beginning	

There are still fundamental problems in student's writing-related language use, such as organization, tense, quantity, word fragments, deletion, and meaning confusion or ambiguity.

To support this, Mandasari (2019) discovered that the inaccuracies written by students caused confusion and misconception among readers. One hundred-eighty (180) pieces of writing were collected and evaluated from 24 students enrolled in the Business

Correspondence course. The results suggested that word choice was one of the most committed errors, accounting for 9.1% of all errors.

Table 3.1. Test of Significant Difference between the English Language Proficiency Pretest Scores in Speaking of Tourism Students in Control and the Experimental Group

	Paired Differences					
Pretest	Mean	SD	T	P value	Remarks	Decision
Organization	-.09333	1.02619	-.498	.622	Not Significant	Accept Ho
Grammar	-.1000	.99343	-.551	.586	Not Significant	Accept Ho
Fluency	-.0333	.83721	-.218	.829	Not Significant	Accept Ho
Word Choice	-.10667	.90931	-.643	.526	Not Significant	Accept Ho

It signifies that the control and experimental groups performed equally at the start of the investigation. Their pretest results are identical. The pretest results show no statistically significant differences between the experimental and control groups, indicating that they were all at or near the same level of English language competence before the study's creation and implementation.

In this sense, students were frequently given a pretest at the start of a course. According to Papageorgiou et al. (2021), this was to determine their baseline understanding of the measurements specified in the learning objectives. It was given before a course to establish a baseline of knowledge.

Table 3.2. Test of Significant Difference between the English Language Proficiency Pretest Scores in Speaking of Tourism Students in Control and the Experimental Group

	Paired Differences					
Pretest	Mean	SD	T	P value	Remarks	Decision
Organization	.11333	.82493	.752	.458	Not Significant	Accept Ho
Grammar	.15333	.84801	.990	.330	Not Significant	Accept Ho
Fluency	.06667	.72841	.501	.620	Not Significant	Accept Ho
Word Choice	.2533	.5655	2.454	.020	Significant	Reject Ho

It means that both the control and experimental groups started the study with the same performance. Their pre-test findings show no differences except in word choice. The pretest findings for the experimental and control groups revealed no statistically significant differences in terms of organization, grammar, and fluency. In contrast, there is a significant difference in terms of word choice.

Zohrabi and Tahmasebi (2020) stated that in his study the result of pretest in both was no statistically significant difference between the experimental and control group regarding grammar, and vocabulary scores. It indicated that both groups have nearly the same competencies before the experiment.

Table 4.1. A. Posttest Result of the Tourism Students in the Control Group in English Language Proficiency (Speaking) in terms of Organization

Indicators	Grade	F	%
Advanced	90 – 100	2	6.67%
Proficient	85 – 89	1	3.33%
Approaching Proficient	80 – 84	7	23.33%
Developing	75 – 79	9	30.00%
Beginning	74 and below	11	36.67%
Total		30	100%
General Assessment	78.07	Developing	

This table shows that speaking in English in terms of organization can be tough, especially if they do not have good training on how to use the language properly.

Another difficulty that learners confront when learning to speak English is interruption from their mother tongue. According to Budiharto (2019), the students' interlingual errors were classified into four types: grammar errors (words or sentences that are relative to tense, subject-verb agreement, singular/plural markers, articles, and prepositions), lexico-semantic errors (errors associated with incorrect vocabulary meaning), mechanical errors (spelling errors), and word order errors.

Table 4.1. B. Posttest Result of the Tourism Students in the Control Group in English Language Proficiency (Writing) in terms of Organization

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	1	3.33%
Approaching Proficient	80 – 84	3	10.00%
Developing	75 – 79	5	16.67%

Beginning	74 and below	21	70.00%
Total		30	100%
General Assessment	74.40	Beginning	

The results show that the students do not have a proper guide on how to construct a concise and well-constructed paragraph from their point of view.

To support this, according to Farhan et al. (2019), writing was effective when the message was easy to follow and grasp due to its structure and organization. Language learners must use all paragraph criteria for producing a good paragraph while writing a paragraph to guarantee the message was apparent to the readers. A paragraph was a collection of sentences connected in a succession to build an idea. These ideas were made explicit in paragraphs by descriptions that clearly explained the point of view.

Table 4.2. A. Posttest Result of the Tourism Students in the Control Group in English Language Proficiency (Speaking) in terms of Grammar

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	3	10.00%
Approaching Proficient	80 – 84	5	16.67%
Developing	75 – 79	8	26.67%
Beginning	74 and below	14	46.67%
Total		30	100%
General Assessment	76.20	Developing	

In terms of grammar, the learners in the control group showed a bit of improvement in their performance on the pretest and posttest. On the other hand, it indicates that the learners have not yet acquired or become acquainted with the grammar structure. This means that the teacher will still need to devise a strategy to improve the performance of their students.

As evidenced by Eisenberg (2020) the primary goal of all grammatical interventions should be to assist students in developing greater facility with syntax and morphology, narration, exposition, and other textual genres in both written and oral modalities. As a result, considering that no additional procedure or intervention was used in the control group, as opposed to the experimental group, it was plausible to conclude that the increase in posttest score in the control group was not significant.

Table 4.1. B. Posttest Result of the Tourism Students in the Control Group in English Language Proficiency (Writing) in terms of Grammar

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	6	20.00%
Developing	75 – 79	9	30.00%
Beginning	74 and below	15	50.00%
Total		30	100%
General Assessment	75.40	Developing	

The result indicates that there is a bit of improvement in their performance in writing in terms of grammar. It implies that learners who belonged to the control group are still struggling with written expression. They still cannot articulate cohesive thoughts.

According to Fitria (2021) grammar websites enable students to teach themselves by providing different representations of an idea. Many prominent grammar software products included grammar check online, free grammar checker, online editor, Grammarly, and so on. As for how to check English grammar utilizing the following tools, an internet connection was required, and some of these online grammar check services provided customers with two service options: free or premium features.

Table 4.3. A. Posttest Result of the Tourism Students in the Control Group in English Language Proficiency (Speaking) in terms of Fluency

Indicators	Grade	F	%
Advanced	90 – 100	2	6.67%
Proficient	85 – 89	1	3.33%
Approaching Proficient	80 – 84	6	20.00%
Developing	75 – 79	6	20.00%
Beginning	74 and below	15	50.00%
Total		30	100%
General Assessment	76.60	Developing	

The result indicates that there is a bit of improvement in their performance in speaking in terms of fluency. Task-based teaching should be emphasized to promote an engaging activity to enhance their skills in speaking.

Namaziandost, Homayouni, & Rahmani (2020) indicated that improving learners' oral proficiency necessitates primarily overcoming personal obstacles. As a result, teachers must equip learners with a means for increasing their opportunities to utilize

language. Organizing the lesson in groups was one of the best strategies to give learners comprehensive oral production and conversation.

Table 4.3. B. Posttest Result of the Tourism Students in the Control Group in English Language Proficiency (Writing) in terms of Fluency

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	7	23.33%
Developing	75 – 79	4	13.33%
Beginning	74 and below	19	63.33%
Total		30	100%
General Assessment	74.80	Developing	

To enhance student's fluency in writing, collaborative or cooperative learning should be utilized. It is usually regarded as an important exercise for tertiary students.

To back this up, Pham (2021) found that collaborative writing had a significant impact on students' writing fluency in both cooperatively and separately produced papers. In addition, the study developed an effective framework for collaborative writing activities.

Table 4.4. A. Posttest Result of the Tourism Students in the Control Group in English Language Proficiency (Speaking) in terms of Word Choice

Indicators	Grade	F	%
Advanced	90 – 100	1	3.33%
Proficient	85 – 89	2	6.67%
Approaching Proficient	80 – 84	6	20.00%
Developing	75 – 79	4	13.33%
Beginning	74 and below	17	56.67%
Total		30	100%
General Assessment	76.20	Developing	

As a result, some students may be unable to communicate effectively. As a result, the data strongly suggests that learners require a considerable amount of reading material to improve their speaking skills in terms of pronunciation, vocabulary, and word choice.

In support of this, according to Ambarwati and Mandasari (2020), in terms of pronunciation mastery and vocabulary enrichment, dictionaries had an impact on student

pronunciation and vocabulary. It was proposed that the use of the online Cambridge dictionary as an alternative solution to the pronunciation and word choice.

Table 4.4. B. Posttest Result of the Tourism Students in the Control Group in English Language Proficiency (Writing) in terms of Word Choice

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	0	0
Approaching Proficient	80 – 84	4	13.33%
Developing	75 – 79	7	23.33%
Beginning	74 and below	19	63.33%
Total		30	100%
General Assessment	74.40	Beginning	

It shows that instructors should strengthen writing practices in the classroom to improve their students' writing skills. Writing is incredibly useful, even if the writing process remains challenging.

In this regard, the findings of Mantra, Handayani, and Widiastuti's (2021) study revealed that a substantial number of students were still unable to write descriptive paragraphs. Students should, therefore, attend intense writing workshops to strengthen their writing skills.

Table 5.1. A. Posttest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Speaking) in terms of Organization

Indicators	Grade	F	%
Advanced	90 – 100	15	50.00%
Proficient	85 – 89	7	23.33%
Approaching Proficient	80 – 84	7	23.33%
Developing	75 – 79	1	3.33%
Beginning	74 and below	0	0
Total		30	100%
General Assessment	88.06	Proficient	

As for the outcomes, this means that the students show growth in their speaking activities in terms of organization, they also find ways to engage in classroom activities and become more fun in utilizing technology. They know how to manage conflicts or challenges that they meet in their courses.

Based on the study of Mandasari and Aminatun (2020), it was possible to conclude that video blogging was useful in developing students' speaking abilities. There were several stages that students took when utilizing Vlog in English study. Throughout those stages, students discovered that Vlog provided some benefits for students studying English. Furthermore, students broadened their understanding of the structure of their ideas.

Table 5.1. B. Posttest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Writing) in terms of Organization

Indicators	Grade	F	%
Advanced	90 – 100	8	26.67%
Proficient	85 – 89	10	33.33%
Approaching Proficient	80 – 84	12	40.00%
Developing	75 – 79	0	0
Beginning	74 and below	0	0
Total		30	100%
General Assessment	86.07	Proficient	

The results show that the writing performance of the students has improved in terms of organization. It may be determined that the learners in this group are no longer struggling to organize their ideas in a specific context and can already explain cohesive thoughts. It means that the SAMR model used by the teacher in class aided the pupils in enhancing their writing skills.

According to Williams and Beam (2019), technology-mediated writing instruction yielded improvements in students' composing processes and writing skills as well as their knowledge and use of new literacies. Students designed, produced and presented a variety of multimodal and digital texts that represented their knowledge and understanding of literary material and contemporary social justice issues.

Table 5.2. A. Posttest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Speaking) in terms of Grammar

Indicators	Grade	F	%
Advanced	90 – 100	14	46.67%
Proficient	85 – 89	13	43.33%
Approaching Proficient	80 – 84	3	10.00%
Developing	75 – 79	0	0
Beginning	74 and below	0	0
Total		30	100%
General Assessment	89.00	Proficient	

The learners in this group's performance can be considered adequate knowledge of grammatical rules. Furthermore, they have become acquainted with the grammar structure covered in the test. It can be concluded that the learners' grammar competency has improved because of the SAMR model.

To support this claim, Sosas (2021), cited that the internet, podcasts, video conferencing, videos, and some of the best instruments for training speaking skills include speech recognition software, TELL, and blogging. It claimed that technology was used for instructional speech rather than in trades and economic activities. It became the way of communication for instructors and students nowadays, which meant that technology was required to enter the modernized world. Technology became an additional tool for teachers to improve the student's speaking abilities.

Table 5.2. B. Posttest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Writing) in terms of Grammar

Indicators	Grade	F	%
Advanced	90 – 100	8	26.67%
Proficient	85 – 89	10	33.33%
Approaching Proficient	80 – 84	12	40.00%
Developing	75 – 79	0	0
Beginning	74 and below	0	0
Total		30	100%
General Assessment	86.07	Proficient	

The use of technology or gamification is critical in providing language learners with a quality learning experience. The results show how this approach affects the writing skills of the students in terms of grammar.

Tran and Nguyen (2021) claimed that digital games were useful to improve learners´ grammar in aspects concerning the use of modals, gerunds, and infinitives; also, students showed an improvement in their vocabulary knowledge, especially in topics related to jobs and education.

Table 5.3. A. Posttest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Speaking) in terms of Fluency

Indicators	Grade	F	%
Advanced	90 – 100	13	43.33%
Proficient	85 – 89	5	16.67%
Approaching Proficient	80 – 84	12	40.00%
Developing	75 – 79	0	0

Beginning	74 and below	0	0
Total		30	100%
General Assessment	87.07	Proficient	

This means that the students are well-directed to complete learning tasks for them to develop as effective participants they gain self-confidence and competency in the use of the English language, resulting in good communication skills. They are encouraged to use new technology platforms to share their ideas and opinions.

In addition, Mahdi (2022) claimed that the effect of digital news on spoken language skills and the development of content knowledge to the 15 students who used Voice Thread, an interactive media tool had a good impact on student's speaking skill development. The strategy empowered the learners and resulted in improved communication among them. It also improved students' speaking fluency.

Table 5.3. B. Posttest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Writing) in terms of Fluency

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	3	10.00%
Approaching Proficient	80 – 84	24	80.00%
Developing	75 – 79	3	10.00%
Beginning	74 and below	0	0
Total		30	100%
General Assessment	81.93	Approaching Proficient	

This simply implies that the students are correctly guided to complete the writing tasks for them to develop as fluent writers. They gain self-confidence and proficiency in the use of the English language, resulting in good communication skills. They are encouraged to use new technological platforms such as digital portfolios to focus on art, pronunciation, and fluency.

According to Cabrera-Solano (2020), the results demonstrated that the digital portfolios were beneficial in improving students' pronunciation and fluency. It was also confirmed that using Google Drive to create digital portfolios could boost students' motivation to improve speaking skills in the target language.

Table 5.4. A. Posttest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Speaking) in terms of Word Choice

Indicators	Grade	F	%
Advanced	90 – 100	14	46.67%
Proficient	85 – 89	13	43.33%
Approaching Proficient	80 – 84	3	10.00%
Developing	75 – 79	0	0
Beginning	74 and below	0	0
Total		30	100%
General Assessment	89.27	Proficient	

The result simply means that the students have enhanced their vocabulary. The results also indicated that the student's ability to select the appropriate term in each topic had improved. Learners can benefit from technology-mediated learning, such as video conferencing, to improve their vocabulary through collaborative learning.

Lenkaitis (2020) revealed that technology-mediated learning occurred because participants were collaborative learners who communicated with other members of the group. Video conferencing like Zoom enhanced the improvement of conversation skills by allowing learners to contribute individually to the conversation to 'build confidence... with a safe setting in which to practice and assess themselves.

Table 5.4. B. Posttest Result of the Tourism Students in the Experimental Group in English Language Proficiency (Writing) in terms of Word Choice

Indicators	Grade	F	%
Advanced	90 – 100	0	0
Proficient	85 – 89	5	16.67%
Approaching Proficient	80 – 84	24	80.00%
Developing	75 – 79	1	3.33%
Beginning	74 and below	0	0
Total		30	100%
General Assessment	82.80	Approaching Proficient	

The results show that their written expression performance has improved. It is possible to conclude that the students in this group no longer have difficulty with word choice in the written and can already explain cohesive concepts. It means that the teacher's use of the interactive tool "Grammarly" in class aided students in enhancing their written expression.

In support of this, according to the study by Koltovskaia (2020), Grammarly was recommended for students with low levels of English competence for them to receive sufficient direction and training on how to effectively engage in writing with the assistance of Grammarly feedback.

Table 6.1. Test of Significant Difference between the English Language Proficiency Posttest Scores in Speaking of Tourism Students in Control and the Experimental Group

Pretest	Paired Differences				Remarks	Decision
	Mean	SD	T	P value		
Organization	-1.05333	.78597	-7.340	.000	Significant	Reject Ho
Grammar	-1.28000	.69798	-10.045	.000	Significant	Reject Ho
Fluency	-1.04667	.62958	-9.106	.000	Significant	Reject Ho
Word Choice	-1.30667	.66795	-10.715	.000	Significant	Reject Ho

This suggests that the experimental and control groups obtained different outcomes. Another implication is that after exposing the Experimental group to the SAMR model during their session, they display near mastery.

Wahyuni et al. (2020) concluded that the usage of technology may broaden student's knowledge and skills in the language. Furthermore, incorporating technology may help learners to be more creative and self-directed learners.

Table 6.2. Test of Significant Difference between the English Language Proficiency Posttest Scores in Writing of Tourism Students in Control and the Experimental Group

Pretest	Paired Differences				Remarks	Decision
	Mean	SD	T	P value		
Organization	-1.16667	.52806	-12.101	.000	Significant	Reject Ho
Grammar	-.81333	.40999	-10.866	.000	Significant	Reject Ho
Fluency	-.71333	.39543	-9.881	.000	Significant	Reject Ho
Word Choice	-.84000	.27493	-16.735	.000	Significant	Reject Ho

It signifies that the experimental and control groups got different results. Another result is that after exposing the Experimental group to the SAMR paradigm during their online course, they displayed nearly mastery level.

Indonesia's (2019) findings were validated in the study The Use of Integrated Technology of Substitution, Augmentation, Modification and Redefinition in Increasing

English Skill at Stik Siti Khadijah Palembang. Using information technology made learning English more enjoyable, SAMR models could boost students' capacity to learn English, particularly writing abilities, and the usage of SAMR models in learning makes English courses more fascinating. The use of SAMR models could promote student creativity in the use of information technology, making learning English more genuine, and students feel the benefits of adopting the SAMR model. Students preferred to learn English independently through online media, with 96.7% stating that they preferred to learn English with online facilities.

Conclusions

Based on the abovementioned findings of the study, the following conclusions have been obtained:

1. That Tourism students in the control group do not know enough about grammatical rules and are unfamiliar with their structure during their pretest. On the other side, the students have difficulties in writing and speaking in English and cannot explain cohesive thoughts. Furthermore, the students are reported to be inadequate in terms of organization. They are unable to understand the content and lack language of proficiency.

2. That during their pretest for speaking and writing competencies, students in the experimental group performed poorly in grammar. The pupils are unable to express coherent ideas and do not know enough grammar rules. Still, there is room for improvement in the learner's organizing skills for both competencies. Conversely, the students have trouble with word choice and fluency. Their poor language skills prevent them from understanding what they are reading.

3. That as the results of their pretests are nearly identical, the control and experimental groups perform similarly at the start of the research. The pretest results for both speaking and writing skills do not reveal any statistically significant differences between the experimental and control groups, indicating that previous to the design and implementation of the study, all groups were at or near identical levels of English language competency.

4. That the Tourism students in the control group are unfamiliar with the structure of grammar throughout their posttest in terms of speaking and writing skills. Similarly, there is a bit of improvement in their written expression performance. Furthermore, the student's fluency skills are poor.

5. That the Tourism students in the experimental group demonstrated a sufficient grasp of grammatical rules throughout their posttest. Furthermore, they are now familiar with the grammatical structure that will be tested. One may claim that the instructor's use of

SAMR in the classroom improved the students' grammar proficiency. Similarly, their ability in organization and fluency has improved.

6. That the control and experimental groups perform differently after the posttest because their posttest results differ. The posttest findings of the experimental and control groups demonstrate a substantial difference. Based on the implementation and deployment of the SAMR model to the experimental, one may deduce that performance changes.

7. As a result of this study, "WRITE2SPEAK“ an action plan was proposed to help the learners deal with the areas in which they are having difficulty, like organization, grammar, fluency, and word choice.

Recommendations

The following recommendations are strongly encouraged considering the findings and conclusions:

1. The learners may be given the most relevant instructions in subject-verb agreement and basic essay writing to assist them in becoming more adept in grammar as quickly as possible. Additionally, learners may broaden their vocabulary range, avoid recurrent errors in word choice, and avoid confusing words that are irrelevant to the topic. This set of students, on the other hand, requires a more significant amount of reading resources to be better equipped in terms of organizing and gathering ideas.

2. The learners may be introduced to fundamental sentence construction and grammar standards. To help with the expression of cogent ideas, they may also increase the scope of their vocabulary. Yet, the learner's speaking and writing abilities still need to be developed and improved. In addition to these topics, they may learn about capitalization, punctuation, spelling, pronunciation, articulation, handwriting, vocabulary, word usage, sentence structure, and paragraph organization. On the other hand, learners need more appropriate reading materials to enhance their language understanding.

3. Before the design and implementation of the study, the control and experimental groups have the same degree of English language competency for both competencies since they performed similarly at the beginning of the investigation and showed almost no variations in their pretest scores. Therefore, students can enhance their organization, grammar, fluency, and word choice by following the first two criteria mentioned above.

4. Instructors may use the SAMR model in their instruction to help students become more proficient in speaking and writing English by considering the posttest results of the tourism students in the control group.

5. Teachers can keep using the SAMR approach in their instruction to help students practice and get better at speaking and writing English, considering the posttest outcomes of the tourism students in the experimental group.

6. It is suggested to continue using this strategy in teaching because there is a substantial difference in the outcome of the control and experimental groups following the execution and implementation of the SAMR model in the experimental group.

7. This study's suggested outcome, an action plan called "WRITE2SPEAK," is currently advised for approval. It can be used to help students deal with areas where they are having difficulty, like organization, grammar, fluency, and word choice.

8. The results of this study may be used by future researchers in their work helping all learners improve their speaking and writing proficiency in the English language. They would refer to and use pertinent studies and literature as a resource.

Compliance with Ethical Standards

This research study followed ethical guidelines. Since these ethical problems were explored throughout this work, the study adhered to the ethical guidelines outlined in the research manual published by the institution. To ensure that the participants understood that their remarks and opinions would be kept private and that this study would not hurt them, the researcher wrote a consent letter outlining the guidelines and goal of the study. The research study was kept confidential the entire time, and in the research content letter, the researcher would use the proper name of the study. For the public to trust and support the study, the researcher adhered to ethical standards. The expert ensured that the respondents' data was protected. Additionally, the purpose of the questionnaire was to collect only the data required for this study; respondents were not asked any private or sensitive questions, and the names of the students were not published in the report in response to the Data Privacy Act of the Philippines 2012, also known as Republic Act No. 10173.

Acknowledgments

To begin, the researcher wishes to express his gratitude to his thesis adviser, Dr. Vivien E. Untalan, for being always available to assist him anytime he encounters a problem or query regarding his research.

Furthermore, the researcher wishes to express gratitude to the following:

A heartfelt thanks to Dr. Ma. Lorena Tagala, the Research Director of LCBA, for her tireless efforts. Without her guidance, this study would not have been possible;

Moreover, the researcher would like to acknowledge Dr. Peejay G. Gecolea and Dean Alfredo G. Perez Jr. of the School of Graduate Studies. The researcher wants to extend his gratitude for their insightful comments on this thesis. Additionally, the researcher

wishes to thank the very approachable Dr. Melchor Villapando, for serving as the study's statistician;

The researcher would like to express his heartfelt appreciation to his Papa Remy and Mama Rose for their unwavering support and encouragement during his years of study and the process of researching and writing this thesis. Without them, this feat would not have been possible, and to his beloved Ms. Joella Nolasco for her unending support and love;

Finally, Thanks to our Lord Jesus Christ, to Him be glory forever!

REFERENCES

Ambarwati, R., & Mandasari, B. (2020). The Influence Of Online Cambridge Dictionary Toward Students' Pronunciation And Vocabulary Mastery. Journal Of English Language Teaching and Learning, 1(2), 50-55.

Asio, H., & Quijano, M. G. (2023). English Proficiency And Academic Performance Of College Students. International Journal Of Multidisciplinary Research And Analysis, 06(03). https://Doi.Org/10.47191/Ijmra/V6-I3-50

Aziz, A. A., & Kashinathan, S. (2021). ESL Learners' Challenges In Speaking English In Malaysian Classroom. Development, 10(2), 983-991.

Betoni, T., & Ulfaika, R. (2020). The Correlation Between Students' Grammatical Mastery and Students' Writing Achievement At Xi Grade Students Of Sman 1 Tarakan Academic Year 2019/2020. Borneo Journal Of English Language Education, 2(1).

Budiharto, R. A. (2019). Native Language Interference on Target Language Writings Of Indonesian EFL Students: An Exploratory Case Study. Indonesian EFL Journal, 5(1), 107-116.

Cabrera-Solano, P. (2020). The use of digital portfolios to enhance english as a foreign language speaking skills in higher education. International Journal Of Emerging Technologies In Learning (Ijet), 15(24), 159-175.

Derakhshan, A., & Karimian Shirejini, R. (2020). An Investigation of The Iranian EFL Learners' Perceptions Towards The Most Common Writing Problems. Sage Open, 10(2), 2158244020919523.

Eisenberg, S. L. (2020). Using General Language Performance Measures to Assess Grammar Learning. Topics In Language Disorders, 40(2), 135-148.

Farhan, W., Razmak, J., Demers, S., & Laflamme, S. (2019). E-Learning Systems Versus Instructional Communication Tools: Developing and Testing a New E-Learning User Interface from The Perspectives of Teachers And Students. Technology In Society, 59, 101192.

Fitria, T. N. (2021). Grammarly As AI-Powered English Writing Assistant: Students' Alternative for Writing English. Metathesis: Journal Of English Language, Literature, And Teaching, 5(1), 65-78.

Indonesia, A. B. A. B. I. (2019). The Use Of Integrated Technology Of Substitution, Augmentation, Modification, And Redefinition In Increasing English Skill At Stik Siti Khadijah Palembang. 16 November 2019, Bandar Lampung, Indonesia

Islam, M. S., & Stapa, M. B. (2021). Students' Low Proficiency In Spoken English In Private Universities In Bangladesh: Reasons And Remedies. Language Testing In Asia, 11, 1-31.

Izza, A., & Rusydiyah, E. F. (2020). Analisis Model SAM/R Pada Guru Pendidikan Agama Islam Dalam Mengembangkan Motivasi Belajar Siswa. Edureligia: Pendidikan Agama Islam, 4(1), 11-34.
Koltovskaia, S. (2020). Student Engagement with Automated Written Corrective Feedback (AWCF) Provided By Grammarly: A Multiple Case Study. Assessing Writing, 44, 100450.
Lenkaitis, C. A. (2020). Technology as a Mediating Tool: Videoconferencing, L2 Learning, And Learner Autonomy. Computer Assisted Language Learning, 33(5-6), 483-509.
Limpo, T., & Graham, S. (2019). The Role of Handwriting Instruction In Writers' Education. British Journal of Educational Studies, 68(3), 311–329. https://Doi.Org/10.1080/00071005.2019.1692127
Mahdi, D. A. (2022). Improving Speaking and Presentation Skills Through Interactive Multimedia Environment For Non-Native Speakers Of English. SAGE Open, 12(1), 21582440221079811.
Mandasari, B., & Aminatun, D. (2020). VLOG: A Tool to Improve Students" English Speaking Ability At University Level. Proceedings Universitas Pamulang, 1(1).
Mantra, I. B. N., Handayani, N. D., & Widiastuti, I. A. M. S. (2021). Empowering Mind Mapping Strategy to Improve Students' Writing Skills In The EFL Classroom. International Journal Of Linguistics And Discourse Analytics, 3(1), 14-21.
Mariñas, J. (2021, July 28). 3 Reasons Why the Philippines is One of the Top English-Proficient Countries for Business. Cloud Employee.
Masuram, J., & Sripada, P. N. (2020). Developing Spoken Fluency Through Task-Based Teaching. Procedia Computer Science, 172, 623-630.
Namaziandost, E., Homayouni, M., & Rahmani, P. (2020). The impact of cooperative learning approach on the development of efl learners' speaking Fluency. Cogent Arts & Humanities, 7(1), 1780811.
Omar, Y. Z. (2019). Teaching Pedagogical Grammar in Context To Enrich English Language Learners' Academic Writing. Online Submission, 2(3), 213-225.
Papageorgiou, S., Davis, L., Norris, J. M., Garcia Gomez, P., Manna, V. F., & Monfils, L. (2021). Design Framework for The TOEFL Essentials Test 2021. Research Memorandum No. RM-21-03). ETS. Https://Www. Ets. Org/Media/Research/Pdf/RM-21-03. Pdf.
Pham, V. P. H. (2021). The Effects Of Collaborative Writing On Students' Writing Fluency: An Efficient Framework For Collaborative Writing. Sage Open, 11(1), 2158244021998363.
Puspitaloka, N. (2019). The Effects of Grammar Mastery and Critical Thinking Towards Student's Descriptive Writing Skill. ELT In Focus, 2(1), 19-28.
Ramamuthie, V., & Aziz, A. A. (2022). Systematic Review: The Effectiveness Of Digital Tools To Improve Writing Skill Of ESL Students. International Journal Of Academic In Business And Social Science, 12(3), 408-427.
Retnaningsih, R. (2020). E-Learning System Sebuah Solusi Pragmatis Program Vokasional Semasa Pandemi COVID19. Jurnal Taman Vokasi, 8(1), 28–34. https://Doi.Org/10.30738/Jtv.V8i1.7751
Siddiqui, K. A. (2020). Analyzing Factors Influencing the Paragraph Organization In English Language Writing Of Intermediate Students. International Journal Of Teaching And Learning In Higher Education, 32(1), 99-106.
Sosas, R. V. (2021). Technology In Teaching Speaking and Its Effects To Students Learning English. Journal Of Language and Linguistic Studies, 17(2), 958-970.
Speck, B. G. (2022). Students' Perceptions of Online Equine Courses and Their Impacts on Learning Outcomes.
Su, Y. C. (2021). College Students' Oral Communication Strategy Use, Self-Perceived English Proficiency and Confidence, And Communication Anxiety In Taiwan's EFL Learning. Educational Studies, 57(6), 650-669.

Syafiq, A. N., Rahmawati, A., Anwari, A., & Oktaviana, T. (2021). Increasing Speaking Skill Through Youtube Video as English Learning Material During Online Learning In Pandemic COVID-19. Elsya: Journal Of English Language Studies, 3, 50- 55. Https://Doi.Org/10.31849/Elsya.V3i1.6206

Tavakoli, P., Nakatsuhara, F., & Hunter, A. M. (2020). Aspects Of Fluenof Across Assessed Levels Of Speaking Proficiency. The Modern Language Journal, 104(1), 169-191.

Thomas, L. (2020). An Introduction To Quasi-Experimental Designs. Scribbr. Retrieved From: Https://Www.Scribbr.Com/Methodology/Quasi-Experimental-Design/

Toba, R., & Noor, W. N. (2019). The Current Issues of Indonesian EFL Students' Writing Skills: Ability, Problem, And Reason In Writing Comparison And Contrast Essay. Dinamika Ilmu, 19(1), 57-73.

Tran, T. M. L., & Nguyen, T. T. H. (2021). The Impacts of Technology-Based Communication on EFL Students' Writing. Asiacall Online Journal, 12(5), 54-76.

Wahyuni, S., Mujiyanto, J., Rukmini, D., & Fitriati, S. W. (2020, June). Teachers' Technology Integration into English Instructions: SAMR Model. In International Conference on Science and Education And Technology (ISET 2019) (Pp. 546-550). Atlantis Press.

Wahyuningsih, S., & Afandi, M. (2020). Investigating English Speaking Problems: Implications for Speaking Curriculum Development In Indonesia. European Journal of Educational Research, 9(3), 967-977.

Waluyo, B., & Bucol, J. L. (2021). The Impact of Gamified Vocabulary Learning Using Quizlet On Low-Proficiency Students. Computer-Assisted Language Learning, 22(1), 158-179.

Williams, C., & Beam, S. (2019). Technology And Writing: Review Of Research. Computers & Education, 128, 227-242.

Zohrabi, M., & Tahmasebi, Z. (2020). A Study of The Effect of Dictogloss as a Medium Of Form-Focused Instruction On Vocabulary Versus Grammar Development Of Iranian EFL Learners. Applied Research on English Language, 9(2), 183-204.

APA Citation:

Hilario, R. M. (2024). UTILIZATION OF SUBSTITUTION, AUGMENTATION, MODIFICATION, AND REDEFINITION MODEL FOR BACHELOR OF SCIENCE IN TOURISM MANAGEMENT STUDENTS' SPEAKING AND WRITING SKILLS. Ignatian International Journal for Multidisciplinary Research, 2(8), 1086–1117. https://doi.org/10.5281/zenodo.13335881

ryanmarquezhilario@gmail.com

IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

WORK ENGAGEMENT, ORGANIZATIONAL COMMITMENT, AND EMPLOYEE DEVELOPMENT PROGRAMS OF RESEARCH AND DEVELOPMENT COMPANIES IN METRO MANILA: BASIS FOR EMPLOYEE RETENTION FRAMEWORK

Edward Jan Paul E. Ebreo

Lyceum of the Philippines University - Batangas, Batangas City, Batangas, Philippines

https://doi.org/10.5281/zenodo.13581580

ABSTRACT

By employing both descriptive and correlational methodologies, the study aimed to provide a comprehensive understanding of the research and development companies specifically from three pharmaceutical companies in Metro Manila. The descriptive research design focused on systematically collecting data to describe the situation and three host pharmaceutical institutions engaged in research and development. Supplementing the descriptive approach, the correlational research design aimed to quantify the relationships between variables or sets of scores. This involved identifying variables of work engagement, organizational commitment and employee development programs, and their interrelationships to ascertain potential significant correlations. Results revealed that there was strong evidence for both work engagement and organizational commitment while moderate evidence for employee development programs. These variables have significant connections with each other. Based from the findings, the proposed employee retention framework may be used to improve the employee retention at research and development companies especially within the pharmaceutical industry. Future researchers may use other variables that could have similar effects on the work engagement of research and development companies especially within the pharmaceutical industry.

Keywords: *Work Engagement, Organizational Commitment, Employee Development Programs, Employee Retention Framework*

INTRODUCTION

Employee retention within an organization is intricately linked to various factors (Chaudhary, 2023). In the context of an organization, job characteristics, and individual attributes collectively influence the inclination of employees to remain with their current organization. Factors within the organization encompass elements such as the organizational culture, leadership style, opportunities for advancement, compensation and benefits, work-life balance initiatives, and overall organizational climate (Andrianto & Alsada, 2019). Similarly, job-related factors incorporate the nature of the work, amount of work, autonomy, task variety, prospects for skill utilization, and inherent rewards.

Behavioral intentions and inclinations of the employee precede how an employee acts in their organization posited by the Theory of Reasoned Action (Fishbein & Ajzen, 1975). Individual employee attributes which comprise attitudes, values, motivations, and career objectives exercise significant influence on employees' decisions regarding retention within an organization. It also becomes evident that employees' intentions to remain with their current organization are critical to determining their subsequent actions. Thus, when individuals observe a coherence between their personal goals, work characteristics, and work environment, they are more inclined to show actions and behaviors indicative of their intention to stay with their organization (Silva, et al., 2023).

In essence, employees are more likely to commit when they believe that their values align with those of the organization, when they feel a supportive work culture, and when they perceive a sense of autonomy and control over their work environment (Nguyen, et al., 2020). This alignment nurtures a sense of belonging and fulfillment, enhancing employees' commitment and reducing turnover rates. Moreover, when employees feel that their professional aspirations are acknowledged and supported by the organization, they are more likely to invest in their long-term growth within the company, further solidifying their intention to stay.

Additionally, an organization’s efforts to enhance job fulfilment, provide opportunities for skill development, and create a positive work culture can significantly contribute to reinforcing employees' intentions to remain with the organization (Fishbein & Ajzen, 1975). Therefore, understanding and addressing individual attributes and aligning them with organizational objectives are crucial strategies for promoting employee retention and fostering a committed and engaged workforce. Thus, employee retention emerges as a dynamic process influenced by the interplay of organizational, job-related, and personal-related factors, wherein employees' intentions serve as a precursor to their retention-related actions (Rasdi & Chen, 2018).

Employee retention and effective people management are essential factors in maintaining a competitive edge and sustaining economic growth in the Philippines (Malinao & Agustin, 2022). In a dynamic and competitive job market like the Philippines, where the economy is rapidly expanding, retaining talented employees has become more

critical than ever for businesses striving to thrive amidst fierce competition. Businesses need to recognize that their workforce is one of their most valuable assets, and losing skilled employees can significantly impact productivity, innovation, and overall success. Therefore, investing in strategies to attract, engage, and retain top talent is crucial. This includes offering competitive compensation and benefits packages, providing opportunities for career development and advancement, fostering a positive work culture that values diversity and inclusivity, and implementing effective performance management and employee recognition programs. By prioritizing employee retention and people management initiatives, businesses in the Philippines can not only reduce turnover costs but also create a sympathetic and conducive environment where employees feel valued, motivated, and committed to achieving organizational goals, ultimately driving success and sustainability in the research and development sector.

Research and development (R&D) play a multifaceted and essential role in an economy's growth, innovation, and competitiveness. The economic research in the field of econometrics consistently demonstrates that, irrespective of the diverse methods used it is typically observed that a substantial and statistically meaningful enhancement in productivity and economic expansion is seen as a result of increased investment in research and development (OECD, 2015). R&D endeavors yield novel technologies, goods, and procedures. By increasing the productivity, efficiency, and competitiveness of industries, these innovations can promote economic growth. The Philippine business companies have been severely affected by the COVID-19 pandemic hence, there is a need to strengthen employee retention within the organizations in the country (Caredo, et al., 2022). There are also a few studies specific to the research and development industry of the country, a sector that can help in the economic growth of the Philippines. Employee retention within this sector has been a point of contention among employees and organizations for several reasons and this point of contention has to be addressed.

The R&D sector in the Philippines, specifically the pharmaceutical industry, is significant as it is one of the sectors that provides hope to alleviate health and well-being of the people, not only in the country, but in a more global scale. Employee retention within this sector is vital as it aids in keeping the goals of the organization (Andrianto & Alsada, 2019). The implications of the study are imperative within the three host institutions/organizations within the sector in the Philippines. However, these implications maybe applicable to other organizations in a global scale.

The outcomes of R&D initiatives ripple through the economic landscape, fostering a climate ripe for growth and ingenuity. This is accentuated by strong empirical evidence within the field of econometrics, consistently underscoring the tangible benefits of increased R&D investments within an economy of a country (Olaoye, 2021). The infusion of resources into research and development not only fosters novel technologies but also births groundbreaking goods and refined processes. These advancements act as pivotal agents which amplifies productivity and competitiveness across various sectors (Szarowská, 2018). Consequently, the resultant surge in economic growth becomes a

testament to the indispensable role that R&D plays in steering the course of a thriving and dynamic economy.

In an interconnected and technologically evolving world, each of the countries recognize the crucial role of R&D in maintaining a competitive edge and achieving sustainable economic growth. Investments are strengthened in the R&D sector to promote innovation, improve productivity, and advance various sectors, including healthcare, technology, and manufacturing (Soltanisehat, et al., 2022). The economic benefits of R&D are not restricted to amplified production; they extend to job creation, higher living standards, and long-term economic growth. The transformative impact of R&D reverberates through different industries; redefining norms of the economic landscapes.

Entrenched within the canons of econometrics exhibits a resounding affirmation of the correlation between intensified investment in research and development and positive economic advancement (Szarowská, 2018). The outcomes are made apparent in various forms of revolutionary technologies, pioneering products, and streamlined methodologies. These advancements become the foundation for increased productivity, improved efficiency, and heightened competitiveness within sectors, shaping a conducive environment for sustained economic growth and laying the groundwork for continued innovation and advancement.

The emphasis on R&D is not limited to economic growth; it also extends to addressing pressing challenges in various sectors. R&D plays a critical role in finding solutions to complex problems, from healthcare to environmental sustainability. By investing in R&D, the government aims to stimulate innovation, drive economic growth, and enhance the quality of life for its citizens. It is a strategic investment in the future, a commitment to finding solutions to the most intricate challenges that transcend national borders. R&D serves as a beacon of hope, a testament to human ingenuity, and a testament to the unwavering dedication to a better, more sustainable, and healthier world.

This sector is one of the priorities of the Philippine government as this is highlighted in the Philippine Development Plan 2023-2028. R&D sector is seen as a vital pillar of economic progress and a clear sector to build up in the country (NEDA, 2023). The R&D sector in the Philippines is a dynamic and growing part of the country's economy and academic landscape. It encompasses a wide range of activities, organizations and industries focused on scientific and technological advancement. As a result, the country has seen an exponential growth in research initiatives and academic collaborations.

In the medical and pharmaceutical context, R&D companies contribute to the development of various new drugs, devices and solutions aimed to address medical quandaries (Shabani, et al., 2022). This is essential to address medical challenges, advance public health and entice investment into the health sector. The transition from R&D to the pharmaceutical industry is a crucial driver that delivers development of life-

saving procedure, equipment, and drugs. The combination of scientific discovery, clinical development and regulatory approval is a complex path that promises to improve human health and countries' economies (Varntanian, 2018). As research continues to advance and new breakthroughs emerge, synergy between R&D and the pharmaceutical industry will remain essential to solving healthcare challenges and driving innovation.

The Philippine pharmaceutical industry includes a wide range of companies, both local and multinational. Local companies such as United Laboratories (Unilab), Pascual Laboratories and others operate alongside global pharmaceutical giants such as Pfizer, GlaxoSmithKline (GSK), Sanofi-Aventis, and others (Reyes & Taguba, 2020). These companies are involved with developing, manufacturing, distribution and marketing of pharmaceutical products, including prescription and over-the-counter drugs, medical devices and various healthcare-related products. The Philippines is one of the major pharmaceutical markets in the ASEAN region only trailing to Indonesia and Thailand (BOI, 2017). Roughly 4.4% of the top 500 Non-Individual Taxpayers in the Philippines are pharmaceutical companies according to the Bureau of Internal Revenue (BIR) contributing P15.7 Billion in taxes in 2011 alone (NTRC, 2014).

Research on employee retention in pharmaceutical companies engaged in R&D is of particular importance due to the unique and important nature of this field. It is true that employee retention is a key challenge in any sector; it creates a challenging situation in balancing an organization's ability financial and knowledge resources (Patriota, 2009). The pharmaceutical R&D sector is marked by its inherent complexity, the importance of innovation and its significant dependence on qualified experts. There are only a very small number of studies on the profile of the Philippine pharmaceutical industry; the majority of works deal with market research, association reports, and drug prices (Reyes & Taguba, 2020). Employee retention extends beyond the conventional realms of human resource management. It is inherently tied to the industry's ability to innovate, remain competitive, and respond to evolving healthcare hurdles (Alkafafy & Siddiqui, 2022). Moreover, the loss of specialized experts on respective fields can ultimately undermine the pharmaceutical industry's ability to bring innovative resolutions.

Research Questions

The purpose of this to study is to assess the work engagement, organizational commitment and employee development programs of research and development companies in Metro Manila as basis for an employee retention framework. Specifically, the study aims to:

1. assess work engagement their employees in terms of vigor (physical), absorption (cognitive), and dedication (emotional) engagement;
2. determine their organizational commitment as affective, normative and continuance commitment;

3. evaluate the employee development and training programs of the Pharmaceutical companies in terms knowledge /skills retention, significance of programs, and employees' appreciation / satisfaction;
4. test the correlation among work engagement, organizational commitment, and employee development programs; and
5. lastly, develop an employee retention framework.

METHODOLOGY

The participants of the study were employees from the three (3) host pharmaceutical companies engaged in in research and development in Metro Manila. They were from different positions and roles in different pharmaceutical companies. Samples were randomly obtained across the three pharmaceutical companies and the survey participants of the study totaled four hundred twenty-eight (428). Participants also had a diverse range of age salaries, educational attainment and years of service. As per the confidentiality agreement, the number of participants from each host institutions was not revealed.

As there were no current data on the number of employees in pharmaceutical companies in Metro Manila at the time of writing, the researcher used the latest available data from the Philippine Competition Commission's Issue Paper published in 2020. The number of employees totaled one thousand four hundred two (1,402). The number of pharmaceutical companies totaled twenty (20) based on the official published account of the country in 2020.

The study used four sets of questionnaires (first would be the profile of the respondents) as the primary instrument in collecting the necessary data from the respondents. Items in the instrument were presented as descriptive statements, and respondents were given the frequency with which each of the descriptive statement applies on a four-point Likert scale with an interpretation of 3.50 – 4.00 scale means strongly agree, 2.50 – 3.49 rate means agree, 1.50 – 2.49 scale means disagree and, 1.00 – 1.49 rating means strongly disagree.

The questionnaire was composed of two parts. The first part contained the profile of the respondents from the pharmaceutical companies. The second part, on the other hand, contained the assessment of work engagement, organizational commitment and employee development programs of their host institution. Work engagement is a three-factor model consisting of physical engagement (5 items) with Cronbach alpha of 0.830, cognitive (5 items) with Cronbach alpha of 0.808, and emotional engagement (5 items) with Cronbach alpha of 0.798. For this variable, questions totaled 15 items.

Measuring organizational commitment was materialized and tabulated through the instrument adopted to the study of Kassaw & Golga (2019) which standardized it. This

study applies a four-point Likert scale. It was a 15-item questionnaire with three factors; affective commitment (5 items) with Cronbach alpha reading of 0.854, continuance commitment (5 items) with alpha reading of 0.823 and normative commitment (5 items) with Cronbach alpha reading of 0.823.

Lastly, in assessing parts of employee development programs, the questionnaire was adopted from a previous study that proposed a (Hajjar & Alkhanaizi, 2018). It applied a four-point likert scale with verbal interpretation of 3.50 – 4.00 scale means strongly agree (with great evidence), 2.50 – 3.49 rate means agree (with moderate evidence), 1.50 – 2.49 scale means disagree (with little evidence) and, 1.00 – 1.49 rating means strongly disagree (without evidence). It was a 15-item questionnaire with three factors; knowledge/skills retention with a Cronbach alpha reading of 0.826, significance of programs with an alpha reading of 0.791, and employees' appreciation/satisfaction with an alpha reading of 0.785.

Cronbach's alpha was used by the authors to test the reliability of the adopted instrument. This statistical method provides a coefficient that quantifies the degree to which items within a test consistently measure the same underlying construct (Jugessur, 2022). It was used under the assumption the researcher has multiple items measuring the same fundamental concept to guarantee the reliability and consistency of their measurement instruments, thereby fortifying the credibility of their study outcomes. A strong Cronbach's alpha value, typically falling within the 0 to 1 range which signals an internal consistency, signifying a high correlation among variables and a reliable measurement of the targeted concept (Taber, 2018). The researcher of this study used the published theses and dissertations as sources for the gathering and collection of data. In addition to these, books, articles and peer-reviewed journals that are reliable for the study were used where relevant data and related information will be collected. Additional and relevant information on the pharmaceutical companies were collected through informal interviews.

Before gathering of the data, it was reiterated to the host institutions that the purpose of the survey to be conducted will be used for academic purposes and that all information collected will be kept confidential. Upon the approval of the respective heads of departments of the research and development companies, specifically from the pharmaceutical industry, and approval of the adopted questionnaires by the adviser, the researcher started by distributing questionnaires to the staff of the three (3) selected pharmaceutical companies in Metro Manila engaged in research and development.

The schedule for the date of distribution and retrieval of the questionnaire was discussed and set on a mutually agreed date with the pharmaceutical companies. The questionnaires were administered by using google forms as per the request of the host institutions. To ensure the accuracy and confidentiality of the results, limited people handled the survey results.

Weighted mean and rank were used to assess work engagement their employees in terms of vigor (physical), absorption (cognitive), and dedication (emotional) engagement; to determine their organizational commitment as affective commitment, normative commitment, and continuance; and to evaluate the employee development and training programs of the Pharmaceutical companies in terms Knowledge/skills retention, significance of programs, and employees' appreciation/satisfaction. The result of Shapiro-Wilk Test showed that p-values of all variables were less than 0.05 which means that the data set was not normally distributed. Therefore, Spearman rho was used as part of the non-parametric tests to determine the significant relationship. All analyses were performed using SPSS version 28.

RESULTS

Table 1
Work Engagement in terms of Physical Engagement

Indicators	WM	VI	Rank
1. I recognize the importance of reporting for work	3.66	Strongly Agree	1
2. I am willing to participate in the activities at work	2.65	Agree	4
3. I keep active in my workplace	3.39	Agree	2
4. I am enthusiastic about work and doing my duties	2.61	Agree	5
5. I put a lot of effort when it comes to achieving my tasks at work	2.96	Agree	3
Composite Mean	**3.05**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 2
Work Engagement in terms of Cognitive Engagement

Indicators	WM	VI	Rank
1. I finish the task assigned at work in a timely manner	3.78	Strongly Agree	2
2. I understand my role and responsibilities at work	2.85	Agree	4
3. I understand how my work contributes to the overall goal of the institution	2.92	Agree	3

4. I am able to decide on the best course of action to finish my assigned task	3.80	Strongly Agree	1
5. It is difficult to detach myself from my job	2.62	Agree	5
Composite Mean	**3.19**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 3

Work Engagement in terms of Emotional Engagement

Indicators	WM	VI	Rank
1. I see professional growth and career development opportunities for myself in the institution	3.29	Agree	3
2. I am happy and satisfied with my current work/job	3.43	Agree	2
3. I have good working relationship with my co-workers	3.04	Agree	4
4. I get a sense of personal accomplishment when I do my work and tasks	3.51	Strongly Agree	1
5. I am inspired by my work to do better	2.83	Agree	5
Composite Mean	**3.22**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 4

Summary Table on Work Engagement

Key Result Areas	Composite Mean	VI	Rank
Physical Engagement	3.05	Agree	3
Cognitive Engagement	3.19	Agree	2
Emotional Engagement	3.22	Agree	1
Grand Composite Mean	**3.15**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 5

Organizational Commitment as Affective Commitment

Indicators	WM	VI	Rank
1. I would be very happy to spend the rest of my career in this organization.	3.42	Agree	2
2. I really feel as if this organization's problems are my own.	2.97	Agree	3
3. I feel this organization makes me feel like I am part of a family.	3.70	Strongly Agree	1
4. I feel that I am "emotionally attached" to this organization.	2.93	Agree	4.5
5. I have a strong sense of belonging in my organization	2.93	Agree	4.5
Composite Mean	**3.19**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 6

Organizational Commitment as Normative Commitment

Indicators	WM	VI	Rank
1. It would be very hard for me to leave my job at this organization right now even if I wanted to.	3.60	Strongly Agree	2
2. Different aspects of my life would be affected if I left this organization.	2.93	Agree	5
3. I believe that staying with this organization is a matter of necessity and desire.	3.19	Agree	4
4. I believe I have not enough options to consider leaving this organization.	3.99	Strongly Agree	1
5. Leaving this organization would require a considerable personal sacrifice from me is one of the reasons why I continue to work here.	3.23	Agree	3
Composite Mean	**3.39**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 7

Organizational Commitment as Continuance

Indicators	WM	VI	Rank
1. I do not feel it would be right to leave even if leaving would be better for me.	3.38	Agree	3
2. I would have a feeling of guilty if I left this organization now.	3.40	Agree	2
3. This organization deserves my loyalty.	2.94	Agree	5
4. I would not leave my organization right now because of my sense of obligation to it.	3.51	Strongly Agree	1
5. I owe a great deal to this organization.	3.08	Agree	4
Composite Mean	**3.26**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 8

Summary Table on Organizational Commitment

Key Result Areas	Composite Mean	VI	Rank
Affective Commitment	3.19	Agree	3
Normative Commitment	3.39	Agree	1
Continuance	3.26	Agree	2
Grand Composite Mean	**3.28**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 9

Employee Development Programs in terms of Knowledge and Skills Retention

Indicators	WM	VI	Rank
1. I find the learnings from previous programs still applicable today	2.79	Agree	4
2. I learned new skills from programs instituted by my organization	3.37	Agree	1
3. I still use skills I've learned from previous programs	2.77	Agree	5
4. I apply things I learn from the programs of my institution	2.81	Agree	3

5. I value the knowledge and skills I gain from my organization's programs	3.24	Agree	2
Composite Mean	**3.00**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 10
Employee Development Programs in terms of Significance of Programs

Indicators	WM	VI	Rank
1. I find the programs in my organization highly relevant to my work	2.87	Agree	4
2. I find the programs in my organization are utilizable even outside my work	3.12	Agree	3
3. The programs in my organization aid me while doing tasks at work	3.35	Agree	1
4. The programs in my organization aligns my expectations to that of my organization	2.82	Agree	5
5. The programs in my organization addresses my needs and that of others to be more efficient and effective at performing my tasks	3.24	Agree	2
Composite Mean	**3.08**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 11
Employee Development Programs in terms of Employees' Appreciation

Indicators	WM	VI	Rank
1. I feel empowered after attending the employee development programs of my organization	2.81	Agree	5
2. I am confident with performing my tasks after attending the programs of my organization	3.17	Agree	2
3. The programs of my organization make me feel like I am part of the future of my organization as it prepares me for other tasks	3.23	Agree	1

4. I am satisfied with the work I am doing and I feel like I am growing professionally when I attend the programs of my organization	3.06	Agree	4
5. The programs of my organization help decide into staying with my organization	3.08	Agree	3
Composite Mean	**3.07**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 12
Summary Table on Employee Development Programs

Key Result Areas	Composite Mean	VI	Rank
Knowledge and Skills Retention	3.00	Agree	3
Significance of Programs	3.08	Agree	1
Employees' Appreciation	3.07	Agree	2
Grand Composite Mean	**3.05**	**Agree**	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 13
Relationship Between Work Engagement and Organizational Commitment

Variables	rho	p-value	Interpretation
Physical Engagement			
Affective Commitment	0.862**	<.001	Highly Significant
Normative Commitment	0.407**	<.001	Highly Significant
Continuance	0.462**	<.001	Highly Significant
Cognitive Engagement			
Affective Commitment	0.833**	<.001	Highly Significant
Normative Commitment	0.462**	<.001	Highly Significant
Continuance	0.584**	<.001	Highly Significant
Emotional Engagement			
Affective Commitment	0.456**	<.001	Highly Significant
Normative Commitment	0.709**	<.001	Highly Significant
Continuance	0.920**	<.001	Highly Significant

**. Correlation is significant at the 0.01 level

As seen in the table, the computed rho-values ranging from 0.407 to 0.920 indicate a moderate to very strong direct relationship among the sub variables of work engagement and organizational

commitment. There was a statistically significant relationship between work engagement and organizational commitment because the obtained p-values were less than 0.01.

Table 14
Relationship Between Work Engagement and Employee's Development Programs

Variables	rho	p-value	Interpretation
Physical Engagement			
Knowledge and Skills Retention	0.673**	<.001	Highly Significant
Significance of Programs	0.638**	<.001	Highly Significant
Employees' Appreciation	0.647**	<.001	Highly Significant
Cognitive Engagement			
Knowledge and Skills Retention	0.690**	<.001	Highly Significant
Significance of Programs	0.693**	<.001	Highly Significant
Employees' Appreciation	0.685**	<.001	Highly Significant
Emotional Engagement			
Knowledge and Skills Retention	0.556**	<.001	Highly Significant
Significance of Programs	0.418**	<.001	Highly Significant
Employees' Appreciation	0.474**	<.001	Highly Significant

**. Correlation is significant at the 0.01 level

As seen in the table, the computed rho-values ranging from 0.418 to 0.693 indicate a moderate to strong direct relationship among the sub variables of work engagement and employee's development programs. There was a statistically significant relationship between work engagement and employee's development programs because the obtained p-values were less than 0.01.

Table 15
Relationship Between Organizational Commitment and Employee's Development Programs

Variables	rho	p-value	Interpretation
Affective Commitment			
Knowledge and Skills Retention	0.689**	<.001	Highly Significant
Significance of Programs	0.658**	<.001	Highly Significant
Employees' Appreciation	0.710**	<.001	Highly Significant
Normative Commitment			
Knowledge and Skills Retention	0.621**	<.001	Highly Significant
Significance of Programs	0.481**	<.001	Highly Significant
Employees' Appreciation	0.501**	<.001	Highly Significant
Continuance			
Knowledge and Skills Retention	0.538**	<.001	Highly Significant

Significance of Programs	0.456**	<.001	Highly Significant
Employees' Appreciation	0.461**	<.001	Highly Significant

**. Correlation is significant at the 0.01 level

As seen in the table, the computed rho-values ranging from 0.456 to 0.710 indicate a moderate to strong direct relationship among the sub variables of organizational commitment and employee's development programs. There was a statistically significant relationship between organizational commitment and employee's development programs because the obtained p-values were less than 0.01.

DISCUSSION

Table 1 delivers a thorough investigation of work engagement, specifically focusing on physical engagement. The respondents' perspectives are measured across five distinct indicators, each assigned a weighted mean (WM) score. The overall composite mean for all five indicators records at 3.05, positioning it within the "Agree" range. This implies a collective consensus among respondents concerning their physical engagement in the workplace. The weighted mean score reflects a positive evaluation of employees' involvement in physical aspects of their work. The "Agree" categorization suggests a shared acknowledgment of active participation, indicating a positive alignment between the workforce and their physical engagement at work. This comprehensive overview serves as a valuable insight into the employees' perceptions, highlighting a generally favorable assessment of their physical involvement in the work environment.

It is important to note that the highest-ranking indicator, with a WM of 3.66, is "I recognize the importance of reporting for work," and the respondents expressed a "Strongly Agree" sentiment towards this aspect of Physical Work Engagement. This signifies that there is a high level of acknowledgment among the respondents regarding the significance of punctuality and attendance (Sijabat, 2023). This indicator also can be considered as the "Task Completion" indicator of this facet of Work Engagement. The strong agreement expressed by the respondents in recognizing the importance of reporting for work suggests a communal understanding of the connection between punctuality and overall work engagement. This resonates with the concept of work engagement, a term popularized by Kahn in 1990, which posits that employees invest not only their physical but also their mental efforts in the execution of their tasks at work.

The indicator "Maintaining an active presence in my workplace" secures the second position with a WM of 3.39. This signifies a unanimous agreement among respondents with this aspect of Physical Engagement. The obtained result indicates a prevalent inclination among respondents to actively engage in workplace activities, underscoring a significant inclination for Work Engagement. The consensus observed among the surveyed individuals implies a highly favorable disposition towards their professional involvement. This unanimous agreement across the employee spectrum not only underscores a positive work environment but also signifies that employees are

consistently and energetically executing their duties and responsibilities. Such active participation contributes significantly to fostering a collective sense of engagement within the organizational framework (Abdulrahman, et al., 2022).The widespread commitment to workplace involvement suggests that individuals are not merely fulfilling their roles but are also actively contributing to the overall productivity and success of the team or organization.

However, it is notable that while the majority of indicators fall within the "Agree" range, there is variation in the degree of agreement among respondents. For instance, the indicators "I am enthusiastic about work and doing my duties" and “I am willing to participate in the activities at work” have lower weighted means of 2.61 and 2.65, respectively. These places the two indicators in the "Agree" range but towards the lower end of the spectrum. This submits that there is somewhat tempered enthusiasm among respondents when it comes to their duties. This, therefore indicates a potential area for improvement in fostering greater enthusiasm and work engagement within the three host organizations.

The majority of indicators for Physical Engagement reflect a positive work engagement, particularly in terms of recognizing the importance of reporting for work and staying active in the workplace. However, the nuanced disparities in agreement levels across different the five indicators highlight specific areas that may warrant further improvement. Elevating and refining Physical Engagement can cultivate a more engaged workforce and better work culture (Abidin, et al., 2021).

Table 2 shows that positive Cognitive Work Engagement is evident in the composite mean within the "Agree" range. This highlights laudable aspects of task completion efficiency and decision-making autonomy within the organizations of the respondents. These aspects can be considered as strengths that underscore a well-functioning and proactive work environment (Huang, et al., 2022). The efficiency in task completion signifies that the employees are capable of meeting objectives on time, while decision-making independence shows a level of empowerment and responsibility among employees within the pharmaceutical companies. The Composite Mean also reiterates that positive Cognitive Work Engagement enhances job performance, motivation, adaptability, job satisfaction, and overall organizational pursuits. (Amrollahifar, et al., 2023).

The assessment of work engagement, specifically focusing on cognitive engagement, reveals valuable perceptions into various facets of the total employee experience in an (Huang, et al., 2022). Based on the results from respondents, the competence in task accomplishment is deemed creditable. The majority of the respondents of the pharmaceutical companies expressed strong agreement that they consistently finish assigned tasks in a timely manner. This is reflected on indicator leading to the top rank in this Cognitive Engagement. This overwhelming consensus suggests a

positive trend in meeting work deadlines and underscores a communal commitment to the prompt delivery of responsibilities.

The high level of agreement among participants further strengthens the reliability and effectiveness of the team or individuals in question (Dawson, et al., 2019). The acknowledgement of this efficiency bodes well for the overall productivity and success of the tasks at hand. The emphasis on timely task completion not only highlights a disciplined work ethic and engagement but also signals a dedication to fulfilling professional obligations on a timely manner. This positive assessment indicates that the surveyed group exhibits a commendable level of time management and organizational skills, underwriting significantly to the overall effectiveness of the employees' work (Huang, et al., 2022). The strong majority's confirmation of timely task completion reflects a positive work culture and commitment to achieving goals.

On a positive note, employees feel empowered in their decision-making processes, with a substantial number strongly agreeing that they can decide on the best course of action to complete their assigned at work. This autonomy in decision-making is a notable asset contributing to overall work engagement within the organizational (Kim, et al., 2020). The challenge of detaching from the job is recognized by the respondents. The majority of the respondents agree that it is difficult to distance themselves from their work. While dedication to one's job is commendable, addressing this difficulty in detachment plays a crucial role in preventing potential burnout and promoting a healthier work-life balance.

Table 3 shows the assessment of work engagement focusing on emotional engagement. The Composite mean of Emotional Engagement is 3.22 which falls under the "Agree" range. This reflects a positive emotional work engagement among the respondents within their organizations. However, there are areas of improvement that can be addressed to enhance the efficiency of the organizations. Consistent feedback and strategic interventions grounded on these insights can further nurture a thriving and emotionally connected and engaged employees within the workplace. It reveals a generally positive sentiment among employees. Notably, the indicator which displays employees expresses a strong sense of personal accomplishment ranks the highest. Employees who are expressing a strong sense of personal accomplishment in organizations suggest high satisfaction and pride in their work at their organizations (Metz , 2018). In this light, Emotional Work Engagement can attribute to the overall success of completing tasks, achieving goals, and contributing meaningfully to the organization by the employee. This is reinforced by the second highest indicator: satisfaction with their current work or job. Acknowledgment, challenging work, goal attainment, autonomy, continuous learning, alignment with values, a encouraging work environment, and a vigorous work-life balance are key factors affecting this type of engagement (Selvi & Aiswarya, 2023). This creates a positive impact on both employees and the organization as a whole.

Employees perceive opportunities for professional growth and career development is placed third among the indicators. The mean score indicates that there is room for improvement in this area, signaling a potential gap between employee expectations and the current offerings. Enhancing initiatives for career advancement and skill development could contribute to even higher levels of engagement (Bai & Liu, 2018). Additionally, the indicator concerning working relationships with co-workers which ranked fourth implies a positive but not exceptional dynamic. This suggests that employees generally experience a good and harmonious working relationship with their colleagues, but it does not foster in the ideal level. The greater Emotional Work Engagement helps foster in an encouraging and constructive work culture, dynamics, and environment (Tharika, et al., 2022), Positive relationships among employees tender a positive emotional engagement at work. When employees have good relationships among their fellow coworkers, it fosters a holistic and collaborative work environment (Abdulrahman, et al., 2022). Employees who feel a sense of belonging and understanding with their coworkers are more likely to be emotionally engaged in their work. This emotional engagement can lead to increased job satisfaction, productivity, and overall well-being. It creates a workplace that fosters in a feeling of being valued, heard, and motivated which ultimately contributes to a positive work environment. Strong interpersonal relationships lay the foundation for a healthy emotional link which enhances the overall employee experience within the organization (Muda & Chan, 2020).

On the other hand, the indicator related to inspiration from work which ranks the last among the indicators reveals a slightly lower score which suggests that employees find room for development in feeling inspired by their tasks within their organization. Encouraging a more inspiring work culture and recognizing contributions of the employees could positively impact employees' motivation within the organization (Amrollahifar, et al., 2023). Creating an environment that values innovation and recognizes individual efforts by the employees cultivates a sense of purpose and achievement. This drives employees to excel in their work and improving overall workplace fulfilment and efficiency.

Table 4 provides an overview of work engagement across three key result in different aspects: Physical Engagement, Cognitive Engagement, and Emotional Engagement. Grand Composite Mean, with an overall average of 3.15, indicates an overall agreeable level of work engagement across all key areas within the organizations. This collective score proposes that employees within the three host organizations exhibit positive engagement in their work, encompassing the three aspects: physical, cognitive, and emotional. The balanced nature of this mean shows a rounded and satisfactory work environment where employees are likely to feel connected, mentally stimulated, and emotionally invested in their roles. The analysis highlights a generally positive work engagement across the organization. However, it also reveals specific areas for improvement, particularly in Physical and Cognitive Engagement aspect aspects.

Emotional Engagement, having the highest mean score of 3.22, underscores a strong agreement among employees, highlighting a profound connection and

commitment to the host organizations on an emotional level. The strong alignment emotionally suggests that employees feel a deep sense of belonging and investment in the three host organizations missions and values (Abdulrahman, et al., 2022). Recognizing and fostering this aspect becomes critical for organizations aiming to enhance employee satisfaction and productivity. Programs fostering a positive company culture, providing possible avenues for employee recognition, and ensuring effective communication channels within the workplace can further strengthen emotional engagement (Selvi & Aiswarya, 2023). This creates an environment where individuals are professionally committed and emotionally engaged in contributing to their organization's overall success.

Cognitive Engagement, marked by a mean score of 3.19, shows a better level of agreement compared to Physical Engagement within the organizations. Employees within the organization appear to have a positively engaged inclination towards tasks demanding mental effort. This indicates a strong placement with the cognitive aspects of their work (Li & Bunchapattanasakda, 2019). It being the second ranked indicator implies that while the overall engagement has a promising outlook, there may be specific areas for enhancement or opportunities to introduce further intellectual challenges. The three host organizations could explore development programs for skill enhancement, advanced training programs, or projects that stimulate employees' intellectual curiosity. Recognizing the issues and looking for ways to address them can enhance cognitive engagement and also contribute to a more active and intellectually stimulating work environment, enabling continuous growth and development among the employees of the organizations (Huang, et al., 2022).

The Physical Engagement aspect, with a mean score of 3.05, displays a largely agreeable but not outstanding level of engagement among the employees within their respective organizations. While there is a positive outlook towards physical engagement aspects of work, being the lowest ranked indicator implies that there is room for improvement. The organizations should strategically address this by implementing initiatives to enhance physical engagement. This could include encouraging a healthier work environment, regular breaks, and providing tailored solutions to ensure that the employees are comfortable and supported in their work within the organization (Chigeda, et al., 2022). By prioritizing addressing the issues, these organizations can positively impact employee well-being, satisfaction, and overall productivity. This leads to creating a workplace that improves the physical aspects of engagement for a more rounded and beneficial work environment for the employees (Kim, et al., 2020).

Table 5 shows an inclusive assessment of organizational commitment, specifically focusing on the affective commitment aspect. With a Composite Mean of 3.19, there is an overall agreement among the respondents which indicates a positive organizational commitment level. The individual indicators offer nuanced insights into specific facets of affective commitment. This guides potential organizational strategies and programs to further deepen the commitment of the employees.

The indicator "I feel this organization makes me feel like I am part of a family" is ranked highest with a WM of 3.70. This high score highlights a vigorous emotional connection among employees within the host organizations which transcends the conventional workplace dynamic and environment (Chigeda, et al., 2022). This accentuates a constructive organizational culture that dynamically nurtures a genuine sense of belonging. The cohesive and supportive environment, seen in employees' strong agreement in this indicator, goes beyond the conventional workplace dynamics within the organizations (Adewoyin, et al., 2020). As an alternative, it suggests that employees perceive the organization as more than just a place where they work but the organizations are seen as an extended family. This observation confirms a commendable commitment by the organizations to fostering meaningful connections among its employees which contributes to an organizational culture that prioritizes emotional connection and a sense of community (Khan, et al., 2021).

"I would be very happy to spend the rest of my career in this organization," has a WM of 3.42, claiming the second-ranking position among the indicators. This score emphasizes a notable inclination among employees to commit to long-term careers within their respective organizations. This reveals a positive disposition toward continuous dedication of the employees (Alrowwad, et al., 2019). This also signifies a significant alignment with the three host organizations' values and vision, indicating that the employees are generally contented within the organizations. The optimistic connection between the employees' individual career objectives and organizational values contributes to a positive work environment which fosters a sense of fulfillment among the employees (Fako, et al., 2018) This is also reflected in the third ranking indicator "I really feel as if this organization's problems are my own," which has a WM of 2.97. The result WM highlights a shared sense of responsibility among employees. This shows a collective commitment to addressing organizational challenges met by their respective organizations. This suggests a positive organizational attitude wherein the organizations' employees feel they are personally invested in overcoming problems, fostering a collaborative approach to problem-solving within their work environment (Kassaw & Golga, 2019).

The lowest ranked indicators are tied between "I feel that I am 'emotionally attached' to this organization" and "I have a strong sense of belonging in my organization" sharing the same WM of 2.93 revealing a moderate level of agreement. Both of these indicators address emotional attachment and a sense of belonging of the organizations' employees. While the verbal interpretation "Agree" still indicates positivity, these indicators suggest areas where the organization could enhance emotional ties and strengthen the sense of belonging among employees. Emotional connection and attachment cultivate devotion, commitment, and a sense of reason among the employees of the organization (Khan, et al., 2021). The host organizations should consider targeted interventions and development programs to distinguish and reinforce each of this aspect to further nurture their employees' connection to the workplace.

Table 6 provides an inclusive overview of organizational commitment measured through its normative commitment aspect. The composite mean of all indicators is 3.39 which places it within the “Agree” range. This shows a generally optimistic normative commitment among the employees of the host institution, with robust sense of agreement on the difficulty of leaving, perceived inadequate alternatives, and acknowledgment of personal costs in leaving. This overall agreement within the employees reinforces the notion that employees, on average, feel a substantial normative commitment to the organization (Nguyen, et al., 2020).

This aspect of organizational commitment refers to an employee's sense of obligation to remain with the organization due to a perceived necessity or desire (Kalitanyi, 2022). The indicators shed light on employees' sentiments regarding the exertion needed if they leave their current job, the impact on various life facets if they do, their certainty in the necessity and desire to stay, the seeming lack of alternative opportunities, and the acknowledgment of the employees’ personal sacrifices associated with leaving the organization.

The indicator, "I believe I have not enough options to consider leaving this organization," has the highest WM of 3.99 which is within the “Strongly Agree” range. This indicates a robust consensus among employees that they perceive limited alternatives if they leave their current organization. This can possibly be attributed to factors such as the employee’s specialized skills, job market conditions, or an optimistic outlook of the employee’s current work environment (Nitafan, 2020). Positive work cultures, effective leadership, and a supportive organizational climate contribute to employees viewing their current engagement optimistically. When employees have a positive experience in their current work, they may be less motivated to explore other opportunities (Adewoyin, et al., 2020).

"It would be very hard for me to leave my job at this organization right now even if I wanted to," has a weighted mean (WM) of 3.60, indicating a robust level of agreement and is ranked second among the indicators. This suggests that a substantial percentage of employees feels a strong attachment to their organization, making it difficult for them to consider the idea of voluntarily leaving. This could be indicative of a positive organizational culture, strong leadership, or fulfilling work experiences (Kuhal, et al., 2020). This idea is also highlighted by the indicator, "Leaving this organization would require a considerable personal sacrifice from me is one of the reasons why I continue to work here." This indicator has a WM of 3.23, falling into the Agree range. This suggests that employees recognize the personal disadvantages associated with leaving the organization which ultimately contributes to their decision to stay (Candelario, et al., 2020).

The second lowest and lowest ranked indicators are "I believe that staying with this organization is a matter of necessity and desire," and "Different aspects of my life would be affected if I left this organization," respectively. They have a WM of 3.19 and

2.93, respectively, which puts them together in the Agree range. While the agreement of the employees with the indicator is present, it is not as pronounced as the other indicators. This implies that employees recognize the effect of leaving but may not perceive it as strongly as the difficulty of leaving the organization (Kalitanyi, 2022). Employees that show a sense of obligation and desire to stay, suggests a combination of both intrinsic motivation and external issues inducing their commitment to the organization.

Table 7 presents a nuanced analysis of organizational commitment through the continuance commitment aspect. The composite mean of all indicators is 3.26 which places it within the “Agree” range. This reveals a strong sense of continuance commitment among the employees within the host institutions with a mostly high agreement on the sense of obligation as an important factor in their decision to stay in their organization. The presence of ethical considerations, emotional ties, and perceptions of organizational worthiness adds depth to the understanding of employees' commitment (Colquitt, et al., 2021).

This is the aspect of the organizational commitment wherein employees may feel compelled to stay with their organization due to perceived costs or their sense of obligation (Kassaw & Golga, 2019). The indicators for this aspect highlight the employees' sentiments regarding the perceived properness of leaving, feelings of guilt linked with leaving the organizations, the commendable nature of the organizations’ loyalty, the sense of responsibility to stay, and the indebtedness employees’ impression towards their organization.

The indicator, "I would not leave my organization right now because of my sense of obligation to it," has the highest WM of 3.51 which falls into the “Strongly Agree” range. This indicates a definitive consensus among employees that their sense of obligation is a significant factor in their decision to stay. This line up with the fundamental notion of continuance commitment wherein employees feel they are bound to the organization due to perceived costs, such as the time, effort, or resources invested (Kasogela, 2019). This idea is complemented by the second and third ranking indicator; both falling into the “Agree” range. The indicator "I would have a feeling of guilt if I left this organization now" has a WM of 3.40. The presence of guilt as an aspect in the choice to leave by an employee shows a strong emotional tie to their organization (Colquitt, et al., 2021). This emotional tie contributes to the continuance commitment, as employees have a sense of fear for negative sentiments associated with abandoning their current roles in their organization. The third ranking indicator, "I do not feel it would be right to leave even if leaving would be better for me," has WM of 3.38. This suggests that employees recognize a struggle between what may be personally advantageous and what is perceived as ethically right (Abellanosa, et al., 2020). This inner struggle of an employee can create a sense of moral responsibility to continue which indicates a form of continuance commitment.

Lowest ranking indicators are “I owe a great deal to this organization," which has a WM of 3.08, and “This organization deserves my loyalty," which has a WM of 2.94. Both of the categories within the mid “Agree” range. While the agreement is present, the lower mean suggests a more nuanced standpoint among employees regarding the organizations’ right for the loyalty of their employees (Al-Jabri & Ghazzawi, 2019). The first indicator probes into the perception of the organization's actions, policies, or values that warrant employees' commitment. The second indicator suggests that employees recognize a debt to the organization, possibly stemming from the opportunities, support, or growth they have experienced (Chidega, et al., 2022). Recognizing and addressing this personal obligation an employee has to the organization can further reinforce the sense of continuance commitment.

Table 8 presents a wide-ranging summary of the different aspects of organizational commitment. The Grand Composite Mean of the Organizational Commitment is 3.28 which still falls under the “Agree” range. Organizational commitment is a vital aspect of an employee's connection and loyalty to the organization they are part of (Candelario, et al., 2020). The table comprises three key dimensions of commitment: Affective Commitment, Normative Commitment, and Continuance. Additionally, it makes available the Grand Composite Mean which offers an overall perspective on the level of agreement within the employees regarding organizational commitment.

Normative Commitment emerges as the highest-ranked dimension with a Composite Mean of 3.39 which signals a stronger agreement within the workforce. Normative Commitment is associated with a sense of obligation or moral responsibility of an employee towards his or her organization (Kalitanyi, 2022). The Composite Mean is within the “Agree” range. This higher level of commitment may be indicative of the employees’ feeling of moral obligation to stay with the organization; possibly owing to shared values, positive organizational culture, or a sense of duty (Mezeh, 2021). The employees, driven by a shared understanding of principles, an optimistic organizational culture, or a sincere sense of responsibility, demonstrate a commitment that exceeds the contractual or transactional dimension of employment.

Continuance, with a Composite Mean of 3.26 (putting it in the “Agree” range) and the second ranking dimension, demonstrates a commendable level of agreement among the respondents. This dimension of commitment is concerned about the perceived costs of employees associated with leaving the organization (Kalitanyi, 2022). The recognition of value and benefits made available from staying with the organization likely contributes immensely to the observed commitment within the employees. They may perceive tangible and intangible compensations, such as career growth opportunities, financial stability, or a constructive work environment, which influence their overall commitment level to the organization. This realistic perspective on commitment proposes that employees are making a rational assessment of the costs and benefits associated with their organizational tenure (Chidega, et al., 2022).

Affective Commitment, with a Composite Mean of 3.19, emphasizes a generally positive and favorable sentiment among employees towards their respective organizations. This dimension digs into the emotional attachment and identification that employees feel for their workplace (Adewoyin, et al. 2020). Despite its mean being slightly lower compared to the other aspects of commitment dimensions, it resides within the “Agree” which signifies a notable level of positive emotional connection and commitment. Furthermore, Affective commitment comprises the employees' notion of loyalty, affection, and belongingness to their organizations (Chidega, et al., 2022). The emotional connection within the three host organizations may stem from various foundations such as a supportive work environment, positive relationships with coworkers, or a strong connection with the organization's values and mission.

Table 9 presents the analysis of Employee Development Programs with a specific focus on Knowledge and Skills Retention dimension. The Composite Mean of 3.00, which falls within the “Agree” range, provides an aggregated view of employees' sentiments regarding the Employee Development Programs' effectiveness in terms of Knowledge and Skills Retention. This shows a collective agreement that the organizations’ programs contribute positively to employees' professional growth (Al-Rawahi, 2022). It mirrors a consensus that the initiatives executed by these organizations contribute meaningfully to enhancing the skills, knowledge, and overall growth of their workforce. The table includes five key indicators offering valuable insights about the employees’ notion on the effectiveness and impact of the organization's developmental initiatives towards them.

"I learned new skills from programs instituted by my organization" indicator boasts the highest WM of 3.37 among the indicators of this dimension. This indicates a strong consensus among employees of the three host organizations that they have learned new skills through the programs instituted by their respective organizations. Its WM falling under the “Agree” range aligns with its high score; reflecting the success of the organizations in fostering skill development programs. The indicator being ranked as the highest accentuates the effectiveness of these programs in imparting valuable skills to the employees. By aligning closely with the developing demands of their industry, the organizations cater to the dynamic needs of employees: ensuring technical proficiency and honing of crucial soft skills (Mishra, 2023). This position underscores a commitment by the organizations to create a supportive environment. This also compliments the second highest indicator; "I value the knowledge and skills I gain from my organization's programs." This indicator has a WM of 3.24 which falls under the “Agree” range. This indicator underscores that employees gives importance on the knowledge and skills acquired through the organization's programs. This emphasizes the positive perception of the overall influence of these developmental programs on the professional growth and competence of the employees (Mishra, 2023).

"I apply things I learn from the programs of my institution" is the third highest and has WM of 2.81 which falls under the “Agree” range. Employees confirm their application of knowledge and skills gained from their respective organizations’ programs. While there

is a level of agreement on the practical application of the acquired knowledge, there may be variations in the extent to which the employees implement these learnings in their daily roles (Bhanudas, 2021). The differences in the extent of implementation shows the complexity of translating learning into action in diverse professional contexts within the organizations.

The alignment between the skills acquired and the actual requirements of the job and this can be seen in the indicator "I find the learnings from previous programs still applicable today." With a WM of 2.79 and falling under the “Agree” range, employees of the host organizations generally recognize the continuing relevance of learnings from past programs. However, the fourth rank suggests that there is room for improvement in ensuring the sustained applicability of these acquired knowledge and skills over time. This indicator highlights the need of the organizations to focus on improving the enduring value of the knowledge imparted through the organizations’ developmental programs (Yedama, et al., 2020). This is also highlighted by the lowest ranking indicator; "I still use skills I've learned from previous programs." While employees generally agree (WM of 2.77) that they continue to use skills and knowledge acquired from previous developmental programs, the lowest rank suggests a potential challenge in retaining and applying these skills over time. This indicator provokes a deeper investigation into the factors prompting the sustainability of skills gained through developmental programs (Mishra, 2023).

Table 10 provides an in-depth examination of Employee Development Programs, focusing on the aspect of Significance of Programs. This aspect Composite Mean of 3.08 falls within the “Agree” range which provides an overall assessment of employees' sentiments regarding the Significance of Employee Development Programs. This is indicative of a collective understanding that the host organizations’ programs are largely perceived as relevant, utilizable, and address needs to enhance efficiency and productivity (Al-Rawahi, 2022). This shared perspective highlights a cohesive statement regarding the relevance and utility of the organization's endeavors, fostering a positive environment where programs are not only acknowledged but positively accepted for the programs’ role in improving performance and meeting organizational needs. The table includes five key indicators emphasizing valuable insights into how employees perceive the relevance and impact of the organization's developmental programs on their specialized roles and expectations.

"The programs in my organization aid me while doing tasks at work" has the highest WM of 3.35 in this aspect. This indicator stands out as one that is particularly impactful. Employees categorically agree that the programs initiated by the organizations help them in performing their tasks at work; emphasizing the practical value of these programs in improving job performance (Oluwaseun, 2018). The acknowledgment that these programs dynamically aid in task execution reflects their tangible and positive effect on job performance. This notion is reiterated by the "The programs in my organization address my needs and that of others to be more efficient and effective at performing my tasks" indicator which has the second highest WM of 3.24. This indicator underscores

that employees see the programs as relevant in addressing their needs and contributing to enhancing efficiency and effectiveness in their task performance (De Jesus & Fajardo, 2022).

The third ranking indicator, "I find the programs in my organization are utilizable even outside my work," has a WM of 3.12 which emphasizes that employees see the training and developmental programs as not only relevant to their work but also applicable outside their professional roles. It gestures a cohesive bond between organizational training goals and the broader aspirations and needs of employees within the organization (Oluwaseun, 2018). This fosters a culture of learning that extends well beyond the confines of the organizations

"I find the programs in my organization highly relevant to my work" with a WM of 2.87 is the second lowest ranked indicator. This is startling given that the association of this indicator to the highest ranked indicator. However, this indicator still imposes that employees generally see the significance of programs to their work (Bilderback & Miller, 2023). However, its ranking suggests that there may be aspects where improvements could be made to improve the perceived relevance of these programs. This is reiterated by the lowest ranking indicator: "The programs in my organization align my expectations to that of my organization." While employees mostly agree (WM of 2.82) that the programs imposed by the organizations align their expectations with those of the organization, there is room for improvement in this aspect. Employees may not completely perceive a continuous and cohesive integration between their expectations and the goals of the organizational programs (Bhatt, 2020).

Table 11 provides an evaluation of Employee Development Programs in terms of Employees' Appreciation. The Composite Mean of 3.07 directs a generally optimistic consensus among employees regarding the impact of the programs by the organizations. This suggests that, on average, employees see the developmental programs initiated by the organizations as beneficial, contributing to various aspects of their professional growth and employment satisfaction (Al-Rawahi, 2022). This score is indicative of a positive alignment between the organizations' objectives and employees' experiences.

"The programs of my organization make me feel like I am part of the future of my organization as they prepare me for other tasks," stands out as an exceedingly impactful aspect of the employee development programs as the highest-ranking indicator. The WM of 3.23 emphasizes the host organizations programs' effectiveness in addressing current requirements of the workplace and fostering a sense of community and future readiness in the organizations. This result signifies that employees not only acknowledge the current utility of the programs and recognize their role in preparing employees for future challenges and tasks within the (Chidega, et al., 2022). "I am confident with performing my tasks after attending the programs of my organization," indicator reiterates the top indicator's notion. This indicator has a WM of 3.17 which falls within the "Agree" range. This indicator highlights the positive impact of the programs on employees' confidence

levels by emphasizing their perceived efficiency in improving the employees' work performance. This suggests that the programs implemented by the organization are not merely theoretical but are seen as practical, instilling a sense of assurance and confidence in employees as they execute their work (De Jesus & Fajardo, 2022).

"The programs of my organization help decide into staying with my organization," secures a WM of 3.08 as the third ranking indicator. This further affirms the overall agreement among employees on the programs' influence on employees' decision to stay with their respective organizations. This suggests that the developmental programs contribute a prominent role in shaping employees' commitment to staying with the organization (Magaji, et al., 2021). This alignment is essential as it highlights the programs not only as vehicles for skill enhancement but also as integral components in building a positive employee experience and organizational culture that contribute to an employee's long-term organizational commitment. Organizational commitment can be seen through the programs initiated by the organizations through the "I am satisfied with the work I am doing, and I feel like I am growing professionally when I attend the programs of my organization," indicator. This is the fourth-ranking indicator with a WM of 3.06. Although falling within the "Agree" range, its ranking suggests that there may be opportunities for enhancement to improve satisfaction and perceived professional growth by the employees. Ensuring that employees perceive tangible benefits from their engagement in the developmental programs is essential to further organizational commitment (Dachner, et al., 2019). Lastly, the indicator "I feel empowered after attending the employee development programs of my organization," obtains a Weighted Mean of 2.81 and is the lowest ranked indicator. This signals an agreement among the employees with the notion but with a slightly lower impact compared to other indicators. The result also reiterates the need for improving the programs to address overall satisfaction and appreciation of the employees with the training and developmental programs initiated by the organization.

Table 12 serves as a comprehensive summary of Employee Development Programs, encapsulating its three dimensions; significance of the programs, and overall employee appreciation. This overarching measure provides a consolidated view of the programs' effectiveness across the different dimensions. The Grand Composite Mean, stands at 3.05 which places it within the "Agree" range. The positive interpretation reflects a general acceptance among employees regarding the value and impact of the Employee Development Programs in their work environment. The high Composite Mean for the Significance of Programs shows its strategic importance, while the Employees' Appreciation dimension confirms the positive impact of these programs. The nuanced insights provided by the Knowledge and Skills Retention dimension point to opportunities for enhancement and refinement.

Significance of Programs has the highest Composite Mean of 3.08 which indicates a strong collective affirmation among employees regarding the importance and impact of the developmental programs by their respective organizations. This highlights the

strategic value of these programs which emphasizes their perceived significance in contributing to individual and overall organizational growth (De Jesus & Fajardo, 2022). It submits that these programs are seen as an instrumental part in shaping the collective mindset of the employees. This means aligning employees with the organization's vision and mission, and fostering a culture of continuous learning and adaptability. The significance of the programs in adding to individual and organizational growth has broader implications. It indicates that employees view these programs as more than just requirements of training sessions; instead, employees see them as transformative programs that contribute to their professional advancement and, by extension, the overall success of their respective organizations (Mishra, 2023).

Employees' Appreciation has Composite Mean of 3.07 which falls under the "Agree" range. This suggests an optimistic sentiment among employees within the organizations regarding the value and impact of the initiated programs. This positive sentiment goes beyond the mere acknowledgment of the programs' existence but rather, it implies that employees actively appreciate and value the programs as vital parts of their professional development (Tharanya, et al., 2020). Employees are not only participants but they are dynamic contributors to the positive account surrounding the impact of these programs on their overall professional satisfaction and growth.

Knowledge and Skills Retention dimension has the Composite Mean of 3.00 which falls within the "Agree" range. Being the lowest-ranking dimension, this suggests a moderate consensus among employees regarding the effectiveness of the programs in retaining knowledge and skills. While the "Agree" interpretation is positive, the organization may benefit from a nuanced examination of specific program components to enhance knowledge retention further. This recognition becomes a critical pivotal point for the leaders of the organization aiming to refine and optimize the impact of developmental programs on knowledge and skills retention (Yedama, et al., 2021). This insight underscores the organization's commitment to ensuring that developmental programs not only meet the current needs of employees but also evolve to align with changing expectations and advancements in knowledge acquisition.

Table 13 presents the Relationship Between Work Engagement and Organizational Commitment, exploring the correlation (rho) and associated p-values for various subvariables or dimensions. The computed rho-values, ranging from 0.407 to 0.920, indicate a moderate to very strong direct correlation among the subvariables of work engagement and organizational commitment. The significance level, as seen with the p-values (<.001), posits that there is a statistically substantial relationship between work engagement and organizational commitment.

Physical Engagement has high correlation coefficients indicating strong and statistically significant relationships with Affective Commitment (rho = 0.862, $p < .001$), Normative Commitment (rho = 0.407, $p < .001$), and Continuance (rho = 0.462, $p < .001$). This suggests that employees who are further physically engaged in their work also

exhibit higher levels of affective, normative, and continuance commitment to the organization. This means that physical engagement nurtures a sense of connection between employees and the organization; employees feel more dedicated, integrated, and valued (Colquitt, et al., 2021). It enhances their motivation and energy, leading to increased job satisfaction and a stronger identification with organizational goals. This emotional bond reduces nonattendance and turnover rates which in turn, contributes to a more stable and productive work environment (Abidin, et al., 2021).

For Cognitive Engagement, a similar design appears with remarkably high correlation coefficients for Affective Commitment (rho = 0.833, $p < .001$), Normative Commitment (rho = 0.462, $p < .001$), and Continuance (rho = 0.584, $p < .001$). This infers that employees who are mentally devoted in their work, displaying cognitive engagement, also establish stronger affective, normative, and continuance commitments. The consistency of highly significant correlations across all three dimensions of both work engagement and organizational commitment is noteworthy. This consistency reinforces the strength of the observed relationships and this highlights the interrelated nature of work Engagement and organizational Commitment. The strongest correlation between dimensions is observed between Emotional Engagement and Continuance Commitment (rho = 0.920). This highlights a particularly compelling link between deep emotional connection to work and the perceived costs of leaving the organization. When employees exhibit a strong sense of emotionally engagement and continuance commitment, turnover rates are likely lower due to the employees staying with the organization for both emotional and practical reasons (Abellanosa, et al., 2020). The employees shows a multifaceted sense of loyalty.

This correlation analysis also implies that developing work engagement in its different dimensions can significantly contribute to enhancing organizational commitment (Rani, et al., 2020). The real-world implications of this analysis are substantially beneficial for organizational leaders. The findings of this analysis emphasize that engaged employees are more likely to exhibit higher levels of organizational commitment. Organizations aiming to nurture dedicated employees should consider strategies or programs that promote physically and cognitive engagement, and programs that foster emotional connections to their work or affective commitment (Nabhan & Munajat, 2023).

Table 14 explores the relationship between work engagement and employee development programs. The table shows summarizing the overall findings, stating that the computed rho-values ranging from 0.418 to 0.693 indicate a moderate to strong direct relationship among the sub-variables or dimensions of work engagement and employee's development programs. There is a statistically significant relationship between these two variables as seen on the obtained p-values being less than 0.01. This value confirms a strong correlation between work engagement and employee development programs.

For physical engagement, the rho-values with the employee development programs variables of range from 0.638 to 0.673 and have all p-values less than 0.001.

This indicates an exceedingly noteworthy relationship implying a strong positive correlation between physical engagement and employee development programs. Moving to cognitive engagement, similar variables are considered. The rho-values range from 0.685 to 0.693, again with p-values less than 0.001. This suggests an exceedingly significant relationship; indicating a strong positive correlation between cognitive engagement and employee development programs.

Emotional engagement's strong correlations with knowledge and skills retention, significance of programs, and employees' appreciation is evident with rho-values ranging from 0.418 to 0.556 and p-values less than 0.001. This reinforces the conclusion of a highly substantial correlation between emotional engagement and employee development programs. Emotionally engaged employees are seen to have deeply connected to their learning experiences in the organization; leading to better retention of the knowledge and skills imposed by the program (Hajjar & Alkhanaizi, 2018). The enthusiasm and commitment of the employees instigates them to actively participate and learn in training and development programs. Emotionally engaged employees are seen to be more motivated to be updated and proficient in their roles (Wassem, et al., 2019).

Employees who perceive that the organization is committed to their long-term career growth and development are likely to reciprocate with higher levels of work engagement (Mrunali & Pathak, 2021). This commitment nurtures a positive work environment and establishes a mutual relationship wherein engaged employees contribute meaningfully to the organization's success. This entails that employee development programs align with individual employee career goals; employees are more likely to be engaged in their work (Dawson, Knight, & Patterson, 2019).

Table 15 presents the findings related to the relationship between organizational commitment and employee development programs. The analysis result suggests that there is a positive and substantial connection between organizational commitment and participation in employee development programs. The computed rho-values ranging from 0.456 to 0.710 show a moderate to strong direct connection among the sub-variables of organizational commitment and employee's development programs. The statistically significant relationships seen through its p-values being less than 0.01, confirming a strong connection between organizational commitment and employee development programs. This reiterates that employee development programs are a crucial component in fostering commitment and sense of loyalty with an organization's employees (Jehanzeb & Mohanty, 2018). This implies that when organizations invest in the personal and professional growth of their employees, the message that they value and support their staff is clear.

For affective commitment, the dimensions considered are knowledge and skills retention, significance of programs, and employees' appreciation with their rho-values range from 0.658 to 0.710 and with all p-values less than 0.001. This suggests a highly significant connection. Employees who are emotionally attached to their organization are

more likely to participate in and appreciate the organization's programs. Employees with a strong sense of affective commitment are seen to be more invested in their learning programs and retention of knowledge and skills (Bai & Liu, 2018). The employees'' emotional commitment to the organization propels them to actively participate with development programs and apply new skills proficiently.

In the case of normative commitment, similar dimensions are examined. The rho-values range from 0.481 to 0.621 with p-values less than 0.001 which signifies a highly significant relationship. This suggests a positive correlation between normative commitment and employee development programs. Lastly, Continuance commitment shows strong correlations with knowledge and skills retention, significance of programs, and employees' appreciation, with the rho-values ranging from 0.456 to 0.538 and p-values less than 0.001. This suggests that employees who perceive high costs associated with leaving the organization are more likely to partake in the development programs of the organization. Employee development programs can foster in job satisfaction with the employees in an organization (Mrunali & Pathak, 2021). As employees obtain new skills and knowledge, they may experience increased job satisfaction and a perception of growth. This can lead to higher levels of affective commitment. Investing in employee development shows that the organization values its employees and is willing to support their professional advancement (Yedama, et al., 2021).

Organizations that prioritize employee development are seen to have higher retention rates. Employees who perceive that their organization is actively investing in their growth are more likely to stay with the organization longer. This nurtures continuance commitment, where employees remain with the organization because of the perceived costs associated with leaving (Bhanudas, 2021).

Conclusions

Based on the findings of the study, the researcher came up with the following conclusions:

1. There is strong evidence on the organizations work engagement in terms of physical, emotional, and cognitive aspects.
2. The employees manifested strong organizational commitment in terms of affective, normative, and continuance aspects.
3. The employee development programs are seen to have moderate evidence on its effect considering employee retention programs in terms of Knowledge and Skills Retention, Significance, and Employees' Appreciation.
4. The is a significant relationship among work engagement, organizational commitment, and employee development programs.
5. An employee retention framework was developed for Research and Development Companies. There is a strong positive correlation among each variable which contributes to a positive work environment. The amalgamation of dynamic engagement, robust commitment, and continuous development opportunities

creates a workplace where employees are motivated to stay, reducing employee turnover.

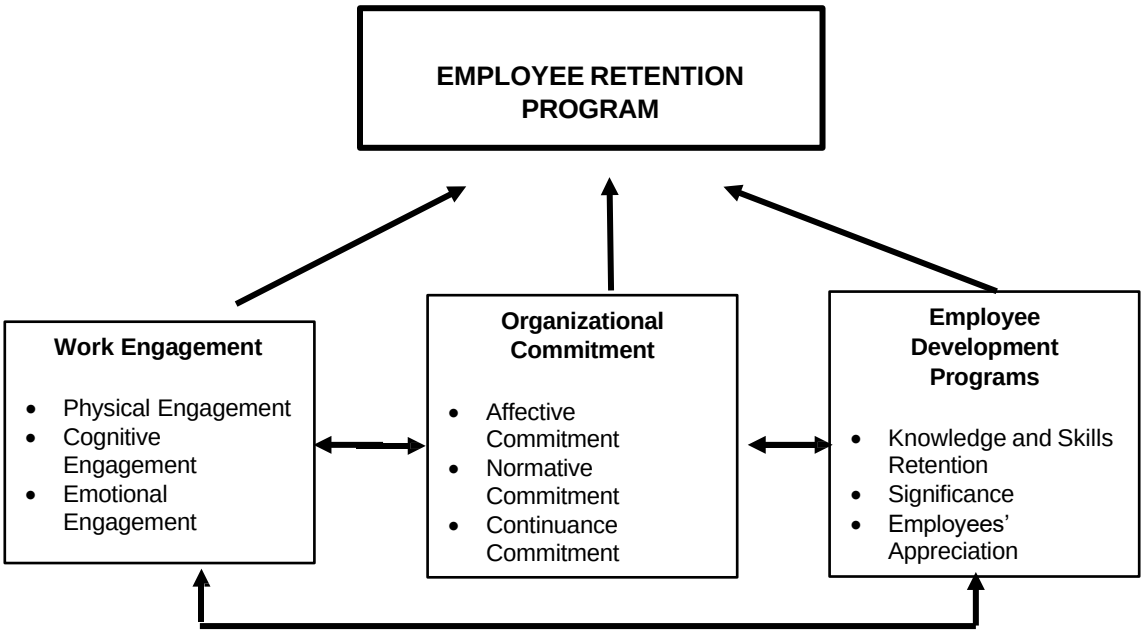


Figure 1. Proposed Framework for an Effective Employee Retention Program for Research and Development Companies specifically Pharmaceutical Companies engaged in the field

Based on the conclusions of the study, the researcher came up with the following recommendations:

1. The pharmaceutical companies through their Research and Development Departments may strengthen the rewards and recognition system of the organizations to encourage their employees to perform their duties in a more enthusiastic manner.
2. The companies may implement programs that promote a sense of community and connection within the organization.
3. Policymakers and leaders may continue to encourage their employees to participate in planning and decision-making in pertinent processes that affect the employees' work within the organization to foster in inclusivity.
4. The Human Resource department may improve the programs and institute amore future proof programs addressing the needs of the employees.
5. The organizations' human resource departments or organization leaders may use the proposed employee retention framework to improve the employee retention at research and development companies especially within the pharmaceutical industry

6. Future researchers may use other variables that could have similar effects on the work engagement, organizational commitment, and employee development and training programs of research and development companies especially within the pharmaceutical industry.

Compliance with Ethical Standards

Permissions from the three host institutions were requested before initiating this study. Ethical considerations were observed during the conduct of the research work to ensure that all information that were collected were used for research purposes only to maintain the quality and integrity of the research. At the request of the three host institutions, they were not named through this study to protect their privacy.

The researcher properly cited the adopted questionnaires. The researcher ensured the confidentiality and anonymity of the respondents by not seeking their names, when they answer the questionnaires.

REFERENCES

Abdul Kadir, N., Hoesni, S., & Nagalingam, U. (2019, August). The Mediating Role of Work Engagement in the Relationship between Emotional Intelligence and Organisational Commitment among Higher Education Institution Lecturers. International Journal of Learning, Teaching and Educational Research, 18(8), 31-53. Retrieved April 1, 2023, from https://www.ijlter.org/index.php/ijlter/article/download/1568/pdf

Abdulrahman, B., Qader, K., Jamil, D., Sabah, K., Gardi, B., & Anwer, S. (2022). Work engagement and its influence in boosting productivity. International Journal of Language, Literature and Culture (IJLLC), 2(6), 30-41. Retrieved April 1, 2023

Abellanosa, G. G., Bao, M., Garrillos, E. A., Lacubtan, I. B., Lacubatan, M. L., & Macauyag, D. S. (2020, June). ORGANIZATIONAL COMMITMENT AND WORK MOTIVATION OF GOVERNMENT EMPLOYEES. International Journal of Engineering Technology Research & Management, 02(12). Retrieved April 3, 2023

Abidin, N., Adam, S., Jah, N., & Rahmat, N. (2021). Investigating Work Engagement at the Workplace. International Journal of Asian Social Science, 11(9), 409-420.

Adewoyin, O. O., Opeke, R., Ikonne, C., & Madukoma, E. (2020, February). Affective, Continuance and Normative Organizational Commitment of Library Personnel in Nigerian Universities. Journal of Information Science, Systems and Technology, 4(1), 80-87. Retrieved April 3, 2023

Al-Harthy, B., Yusof, R., & Hamid, A. (2022). A Conceptual Paper on Compensation and Benefits, Job Security, Work-Life Balance, Employee Retention and Localization in Oman. Global Business and Management Research: An International Journal, 14(3), 688-710.

Alieto, E. O., & Rillo, R. M. (2018). Indirectness Markers in Korean and Persian English Essays: Implications for Teaching Writing to EFL Learners. The Journal of

English as an International Language, 13(2.2), 169. Retrieved April 1, 2023, from https://files.eric.ed.gov/fulltext/ED596726.pdf
Al-Jabri, B., & Ghazzawi, I. (2019). Organizational Commitment: A Review of the Conceptual and Empirical Literature and a Research Agenda. International Leadership Journa, 78-119. Retrieved April 2, 2023
Alkafafy, M., & Siddiqui, A. (2022). Employer Attraction & Employee Retention in the Pharmaceutical Industry of Egypt and Pakistan. Lund: Lund University School of Economics and Management. Retrieved September 8, 2023
Al-Rawahi, M. (2022, June). A Research Study on the Impact of Training and Development on Employee Performance during Covid-19 Pandemic. International Journal of Managerial Studies and Research (IJMSR), 1-10. Retrieved April 3, 2023, from https://www.arcjournals.org/pdfs/ijmsr/v10-i7/1.pdf
Alrowwad, A., Almajali, D., Aqqad, N., Masa'deh, R., & Obeidat, B. (2019). The Role of Organizational Commitment in Enhancing Organizational Effectiveness. 33rd International Business Information Management Association Conference, (pp. 9133-9154). Granada, Spain. Retrieved April 2, 2023
Amrollahifar, J., Ali, M., Mansor, Z., Jaharuddin, N., & Guo, Y. (2023). Cognitive, Emotional and Social Intelligence towards Job Performance: The Mediator Role of Work Engagement. International Journal of Academic Research in Business and Social Sciences, 13(7), 376-402.
Andrianto, H., & Alsada, Y. (2019). The Conceptual Framework of Employee Absorption. iJournals: International Journal of Social Relevance & Concern, 7(1), 11-14. Retrieved April 1, 2023, from http://ijournals.in/wp-content/uploads/2019/01/2.7108-Yasser-compressed.pdf
Ansari, M., Bhoje, R., Bhosale, S., & Rahim, K. (2022, July). A STUDY ON RESEARCH DESIGN AND ITS TYPES. International Research Journal of Engineering and Technology (IRJET), 09(07), 1132-1135. Retrieved April 1, 2023, from https://www.irjet.net/archives/V9/i7/IRJET-V9I7216.pdf
Arcadio, A., Diola, D. D., & Distor, J. S. (2023). Work Engagement and Organizational Commitment of Employees in Cavite, Philippines. Psychology and Education: A Multidisciplinary Journal, 8(7), 1-14.
Bai, J., & Liu, J. (2018). A Study on the Influence of Career Growth on Work Engagement among New Generation Employees. Open Journal of Business and Management, 300-317.
Basikin, B. (2007). Vigor, Dedication and Absorption: Work engagement among secondary school English. AARE 2007. Fremantle. Retrieved April 3, 2023, from https://www.aare.edu.au/data/publications/2007/bas07349.pdf
Bhanudas, D. (2021). Impact Of Training And Development On Satisfaction Level Of Employees In Manufacturing Industries. Ikogretim Online - Elementary Education Online, 20(1), 4634-4642. Retrieved April 2, 2023, from https://www.ilkogretim-online.org/fulltext/218-1641574817.pdf
Bhatt, D. (Ed.). (2020). Training and Development in Work Organizations. Mukt Shabd Journal, 9(4), 3164-3179. Retrieved April 3, 2023
Bilderback, S., & Miller, G. (2023). Importance of employee development programs in business. Journal of Management Development.

BOI. (2017, March). Philippine Pharmaceutical Industry Profile. Philippine Board of Investments. Philippine Board of Investments (BOI). Retrieved October 2023, from https://www.insights10.com/report/philippines-pharmaceutical-market-analysis/

Candelario, L., Tindowen, D., Mendezabal, M., & Quilang, P. (2020). Organisational Commitment and Job Satisfaction among Government Employees. International Journal of Innovation, Creativity and Change, 13(10), 1627-1643. Retrieved April 3, 2023

Caredo, D. T., Pomida, A. M., Paradero, A. L., & Casinillo, L. F. (2022). Modeling Employee Retention Amidst COVID-19 Pandemic: An Econometric Approach. Recoletos Multidisciplinary Research Journal, 10(1).

Chaudhary, V. (2023). A Review of Employee Retention as a Strategy for Organizational Success. International Journal of Scientific Research in Engineering and Management (IJSREM), 7(11).

Chigeda, F., Ndofirepi, T., & Steyn, R. (2022). Continuance in organizational commitment: The role of emotional intelligence, work-life balance support, and work-related stress. Retrieved April 3, 2023, from https://onlinelibrary.wiley.com/doi/pdf/10.1002/joe.22172

Colquitt, J., LePine, J., & Wesson, M. (2021). Organizational Behavior: Improving Performance and Commitment in the Workplace (7th ed.). McGraw Hill.

Dachner, A., Ellingson, J. E., Noe, R. A., & Saxton, B. (2019). The future of employee development. CORE, 1-16. Retrieved April 2, 2023, from https://core.ac.uk/download/pdf/289197727.pdf

Das, B. L., & Baruah, M. (2013, Nov.-Dec.). Employee Retention: A Review of Literature. Journal of Business and Management, 14(2), 8-16.

Dawson, J., Knight, C., & Patterson, M. (2019). Work engagement interventions can be effective: A systematic review. European Journal of Work and Organisational Psychology, 28 (3), 348-372. Retrieved April 2, 2023

De Jesus, F. S., & Fajardo, L. L. (2022). The Benefits of Training and Development Programs for Lending Organization Personnel: Basis for Development of Training Program. IRA-International Journal of Management & Social Sciences, 18(1), 13-32. Retrieved April 2, 2023, from https://research-advances.org/index.php/RAJMSS/article/view/1688/1319

Du, H., Mo, L., & Guo, Y. (2017, October). Work engagement and job performance :the moderating role of perceived organizational support. anales de psicología, 708-713. Retrieved April 3, 2023, from https://scielo.isciii.es/pdf/ap/v33n3/psicologia_social2.pdf

Edralin, D. (2011). Human Capital Development for Innovation in Asia: Training and Development Practices and Experiences of Philippine Large Companies. Asia Pacific Business Review, 17(2), 225-239.

Fako, T. T., Nkhukhu-Orlando, E., Wilson, D. R., Forcheh, N., & Linn, J. G. (2018). Factors associated with organizational commitment of academic employees in Botswana. International Journal of Educational Administration and Policy Studies, 10(6), 56-64. Retrieved April 3, 2023, from https://files.eric.ed.gov/fulltext/EJ1183987.pdf

Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. Boston: Addison-Wesley.
Gulzar, R. (2020, June). Impact Of Affective Commitment On Employee Performance Special Reference To The Fenda Communication And It -Ksa. International Journal Of Management (Ijm), 11(6), 1440-1454.
Hajjar, S., & Alkhanaizi, M. (2018, April-June). Exploring the Factors That Affect Employee Training Effectiveness: A Case Study in Bahrain. SAGE Open, 1-12. Retrieved April 3, 2023, from https://journals.sagepub.com/doi/pdf/10.1177/2158244018783033
Huang, S. Y., Huang, C.-H., & Chang, T.-W. (2022). A New Concept of Work Engagement Theory in Cognitive Engagement, Emotional Engagement, and Physical Engagement. Frontiers in Psychology.
Ismail, F., & Owaida, N. (2023). A Key to Improve Workplaces Productivity. Jurnal Penyelidikan Sains Sosial, 6(18), 80-90.
Jehanzeb, K., & Mohanty, J. (2018). Impact of employee development on job satisfaction and organizational commitment: Person-organization fit as moderator. International Journal of Training and Development, 22(10).
Jugessur, Y. S. (2022). Reliability and Internal Consistency of data: Significance of Calculating Cronbach's Alpha Coefficient in Educational Research. International Journal of Humanities and Social Science Invention (IJHSSI), 11(4), 9-14.
Kahn, W. A. (1990). Psychological Conditions Of Personal Engagement And Disengagement At Work. Academy of Management Journal, 33(4), 692-724. Retrieved April 1, 2023, from https://cygnetinstitute.org/wp-content/uploads/2021/02/William-Kahn-Employee-Engagement.pdf
Kalitanyi, V. (2022). Role of normative commitment in fostering university employees' commitment. International Journal of Research in Business and Social Science, 11(10), 34-35.
Kasogela, O. K. (2019). The Impacts of Continuance Commitment to Job Performance;. Advance Journal of Social Science, 5(1), 93-100. Retrieved April 3, 2023
Kassaw, E., & Golga, D. (2019). Employees' Organizational Commitment in Higher Educational Setting. doi:http://dx.doi.org/10.20944/preprints201904.0029.v1
Khan, A., Bashir, F., Nasim, I., & Ahmad, R. (2021). Understanding Affective, Normative & Continuance Commitment through the Lens of Training & Development. iRASD Journal of Management, 3(2), 105-113. Retrieved April 3, 2023
Khan, H., Rehmat, M., Butt, T., Farooqi, S., & Asim, J. (2020). Impact of transformational leadership on work performance, burnout and social loafing: a mediation model. Future Business Journal. doi:https://doi.org/10.1186/s43093-020-00043-8
Khan, J. (2015). The Role of Research and Development in Economic Growth: A Review. Journal of Economics Bibliography, 2(3), 128-133.
Kim, W., Oh, J., Park, J., & Wood, J. (2020). The Relationship Between Work Engagement and Work–Life Balance in Organizations: A Review of the Empirical Research. SAGE Publications, 1-23. Retrieved April 1, 2023, from https://core.ac.uk/download/pdf/327045828.pdf
Kuhal, A., Arabi, A., Mohamad Zaid, M., & Ismawi, N. (2020, December). Relationship between Affective Commitment, Continuance Commitment and Normative

Commitment towards Job Performance. Journal of Sustainable Management Studies, 1(1), 19-27. Retrieved April 3, 2023, from https://majmuah.com/journal/index.php/jsms/article/download/69/37/

Kumar, D., & Siddika, H. (2017, December). Benefits Of Training And Development Program On Employees' Performance: A Study With Special Reference To Banking Sector In Bangladesh. International Journal Of Research - Granthaalayah, 5(12), 77-88.

Li, S., & Bunchapattanasakda, C. (2019). Employee Engagement: A Literature Review. International Journal of Human Resource Studies, 9(1), 63-80. Retrieved April 3, 2023

Magaji, N., Akpa, V. O., & Ogundiwin, I. J. (2021, September). Career Development, Job Security And Employee Retention: An Empirical Study Of Selected Private Universities In Ogun State Nigeria. International Journal of Economics, Commerce & Management, XI(9), 416-433.

Malinao, C. M., & Agustin, J. G. (2022). Retention, Satisfaction, and Motivation Enablers of a Higher Education Institution in the Philippines amidst Teacher Migration. Puissant, 718-735.

Masadeh, M. (2012). Training, Education, Development And Learning: What Is The Difference? European Scientific Journal, 8(10), 62-68.

Mezeh, A. (2021). Job Enrichment and Employee commitment of Indigenous Oil Servicing Companies in Rivers State. American Journal of Humanities and Social Sciences Research (AJHSSR), 5(9), 9-18. Retrieved April 3, 2023, from https://www.ajhssr.com/wp-content/uploads/2021/09/B21590918.pdf

Mishra, P. (2023). The Impact Of Learning And Development On Employee Retention In Organizations. International Journal of Scientific Research in Engineering and Management, 7(5), 1-4.

Mrunali, T., & Pathak, A. (2021, May). A study on the effectiveness of training and development on employee's performance at JK Paper Ltd. International Journal of Creative Research Thoughts, 9(5), 110-125. Retrieved April 3, 2023, from https://ijcrt.org/papers/IJCRT2105860.pdf

Muda, A., & Chan, Y. (2020). Psychological Empowerment and Organisational Commitment among Academic Staff of Public Universities in Malaysia. Retrieved April 3, 2023, from https://files.eric.ed.gov/fulltext/EJ1267354.pdf

Nabhan, F., & Munajat, M. (2023). The role of work engagement and organizational commitment in improving job performance. Cogent Business & Management.

NEDA. (2023). National Development Plan 2023 - 2008. Metro Manila: National Economic and Development Authority (NEDA).

Nguyen, H., Le, Q., Tran, Q., Tran, T., Nguyen, T., & Nguyen, T. (2020). The Impact of Organizational Commitment on Employee Motivation: A Study in Vietnamese Enterprises. Journal of Asian Finance, Economics and Business, 7(6), 439-447. Retrieved April 1, 2023, from https://koreascience.kr/article/JAKO202017764018218.pdf

Nitafan, R. P. (2020, November-December). Employee Silence, Organizational Commitment, and Job Burnout of Regular Employees in Local Government Units in the Cotabato Province, Philippines: A Keystone for Intervention.

International Journal of English Literature and Social Sciences, 5(6), 1932-1948. Retrieved April 2, 2023

Nkhukhu-Orlando, E., Brown, B., Wilson, D., Forcheh, N., Linn, J. G., & Fako, T. T. (2019). The affective commitment of academics in a university in Bostwana. International Journal of Educational Administration and Policy Studies, 12(2), 12-19. Retrieved April 3, 2023, from https://files.eric.ed.gov/fulltext/EJ1212802.pdf

Noe, R. A. (2017). Employee Training and Development 7th Edition. New York City, New York: McGraw-Hill Education.

NTRC. (2014). Tax Contribution of the Philippine Pharmaceutical Industry. National Tax Research Center. Retrieved September 6, 2023, from https://serp-p.pids.gov.ph/publication/public/view?slug=tax-contribution-of-the-philippine-pharmaceutical-industry

OECD. (2015). The Impact of R&D Investment on Economic Performance: A Review of the Econometric Evidence. Paris: Organisation for Economic Co-operation and Development (OECD). Retrieved 2023, from https://one.oecd.org/document/DSTI/EAS/STP/NESTI(2015)8/en/pdf

Olaoye, I. (2021). The role of research and development (R&D) expenditure and governance on economic growth in selected African countries. African Journal of Science, Technology, Innovation and Development, 13(6), 663-670.

Oluwaseun, O. (2018, March). Employee Training And Development As A Model For Organizational Success. International Journal of Engineering Technologies and Management Research, 181-189. Retrieved April 2, 2023.pdf

Patriota, D. (2009). Employee retention: An integrative view of Supportive Human Resource Practices and Perceived Organizational Suppo. 1-45.

Rani, S., Agustiani, H., Ardiwinata, M., & Purwono, R. (2020). Work Engagement and Organizational Commitment in Private University. 3rd International Conference on Psychology in Health, Educational, Social, and Organizational Settings (ICP-HESOS 2018) - Improving Mental Health and Harmony in Global Community (pp. 464-469). SCITEPRESS – Science and Technology Publications. Retrieved April 4, 2023, from https://www.scitepress.org/Papers/2018/85909/85909.pdf

Rasdi, R., & Chen, Y. (2018, December). People Management for Managing Employees' Retention in the Organizations. International Journal of Academic Research in Business and Social, 8(12), 499-509.

Reyes, C. M., & Taguba, A. D. (2020). A Profile of the Philippine Pharmaceutical Industry. PCC Issues Paper(02). Retrieved August 5, 2023, from https://www.phcc.gov.ph/wp-content/uploads/2020/06/PCC-Issues-Paper-2020-02-A-Profile-of-the-Philippine-Pharmaceutical-Industry.pdf

Sari, D., Yudiarso, A., & Sinambela, F. (2021). Work Engagement and Innovative Work Behavior: Meta-Analysis Study. International Conference on Psychological Studies (pp. 359-366). Atlantis Press. Retrieved April 3, 2023, from https://www.atlantis-press.com/article/125955819.pdf

Selvi, J., & Aiswarya. (2023). Examining the relationship between emotional intelligence and work engagement of automobile sector employees in Chennai. Rajagiri Management Journal, 17(2), 156-169.

Shabani, A., Rajabi, S., & Ahmadi Teymourlo, A. (2022). Key Factors to Improve Pharmaceutical Industry's R&D Productivity: A Case Study of Iranian Pharmaceutical Holding. Medical Journal of the Islamic Republic of Iran. Retrieved 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9700404/

Sijabat, R. (2023). Questioning Work Engagement and Employee Engagement. International Journal of Social Science and Education Research Studies, 2405-2411.

Silva, I., Dias, Á., & Pereira, L. F. (2023). Determinants of employee intention to stay: a generational multigroup. International Journal of Organizational Analysis.

Sinha, C., & Sinha, R. (2012). Factors Affecting Employee Retention: A Comparative Analysis of two Organizations from Heavy Engineering Industry. European Journal of Business and Management, 4(3), 145-162.

Soltanisehat, L., Alizadeh, R., & Mehregan, N. (2019). Research and Development Investment and Productivity Growth in Firms with Different Levels of Technology. Iranian Economic Review, 23(4), 795-818.

Szarowská, I. (2018). Importance of R&D expenditure for economic growth in selected CEE countries. E+M Ekonomie a Management, 108-124.

Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. Res Sci Educ, 48(6), 1273–1296.

Tharanya, V., Gajenderan, V., & Nawaz, N. (2020). Impact Of Employee Engagement On Organizational Commitment And Job Performance. Journal of Critical Reviews, 7(4), 4051-4061. Retrieved April 3, 2023

Tharika, S., Iddagoda, A., & Bulinska-Stangrecka, H. (2022). Employee Engagement and its Dynamics: An Empirical Study of an Information Technology Company Sri Lanka. International Journal of Academe and Industry Research.

Varntanian, S. (2018). The role of R & D in the modern pharmaceutical industry – challenges and benefits.

Wassem, M., Baig, S., Abrar, M., Hashim, M., Zia-Ur-Rehman, M., Awan, U., . . . Nawab, Y. (2019). Impact of Capacity Building and Managerial Support on Employees' Performance: The Moderating Role of Employees' Retention. Sage Journals, 9(3). doi:https://doi.org/10.1177/215824401985995

Yedama, N. K., Kunchaparthi, S., & Surekha, G. (2021, August). Training and Development Program and its Benefits to Employee and Organization. Journal of Interdisciplinary Cycle Research, 13(8), 720-723. Retrieved April 3, 2023

APA Citation:

Ebreo, E. J. P. E. (2024). WORK ENGAGEMENT, ORGANIZATIONAL COMMITMENT, AND EMPLOYEE DEVELOPMENT PROGRAMS OF RESEARCH AND DEVELOPMENT COMPANIES IN METRO MANILA: BASIS FOR EMPLOYEE RETENTION FRAMEWORK. Ignatian International Journal for Multidisciplinary Research, 2(8), 1660–1698. https://doi.org/10.5281/zenodo.13581580

edward.jan.paul.ebreo@gmail.com