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EXPLORATION AND EXAMINATION OF TOPICS IN THE  
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## Editor's Note – Second Edition

With great distinction and renewed purpose, we present the second edition of the ***Asia-Pacific Journal for the Liberal Arts***, published by Inkwell Book Publishing. This issue represents not merely a continuation of our inaugural endeavor, but a reaffirmation of our commitment to advancing the liberal arts as a vital intellectual tradition—one that cultivates rigorous scholarship, interdisciplinary engagement, and profound reflection on the human experience across the Asia-Pacific region and the wider world.

The emergence of this second issue comes at a defining moment for knowledge, society, and humanity. We inhabit an age marked by extraordinary technological acceleration, complex geopolitical realities, ecological challenges, and profound transformations in the ways knowledge is created, shared, and understood. Amid these shifts, the liberal arts remain indispensable. They provide the intellectual and ethical foundations necessary to interpret complexity, question assumptions, preserve cultural memory, and imagine more responsible futures.

This journal continues to serve as a scholarly meeting ground where diverse traditions of thought encounter one another, where disciplines intersect, and where inquiry extends beyond established boundaries. The Asia-Pacific region, with its rich plurality of languages, histories, philosophies, cultures, and creative traditions, offers an extraordinary landscape for advancing conversations on what the liberal arts are and what they can become. The works gathered in this volume reflect this diversity, offering insights that are deeply rooted in regional contexts while contributing to global intellectual discourse.

The scholarship presented in this edition demonstrates the enduring power of liberal arts inquiry to illuminate overlooked histories, challenge prevailing perspectives, and develop new ways of understanding contemporary realities. Spanning the humanities, social sciences, cultural studies, and interdisciplinary fields, these contributions embody a shared pursuit of knowledge that is critical yet constructive, analytical yet imaginative, and scholarly yet responsive to the pressing concerns of our time.

As an independent publisher committed to intellectual excellence and editorial integrity, Inkwell Publishing continues to uphold the principles of thoughtful curation, scholarly rigor, and academic independence. The *Asia-Pacific Journal for the Liberal Arts* stands as an expression of this commitment—a platform dedicated to nurturing meaningful dialogue among scholars, educators, students, and thinkers whose work contributes to the advancement of knowledge and the enrichment of public life.

We offer our sincere gratitude to the authors, reviewers, editorial team, and academic advisers whose expertise and dedication have made this edition possible. Their collective contributions affirm the importance of scholarly communities founded upon collaboration, integrity, and a shared belief in the transformative power of ideas.

To our readers—scholars, educators, students, and engaged citizens—we extend an invitation to enter into conversation with the works presented in this volume. May these

contributions inspire thoughtful reflection, encourage intellectual curiosity, and strengthen our collective commitment to a liberal arts tradition that is both enduring and evolving.

As we continue this journey, may the ***Asia-Pacific Journal for the Liberal Arts*** remain a beacon for scholarship that is rigorous yet humane, rooted yet expansive, attentive to history yet oriented toward the future. Through sustained inquiry and open dialogue, we affirm the enduring role of the liberal arts in shaping a more reflective, inclusive, and enlightened global society.

--- Executive Editor

# **EFFECTIVENESS OF SELECTED FILIPINO FILMS IN TEACHING COMMUNICATION AND PHILIPPINE LANGUAGE AND CULTURE**

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## **Abstract**

This study examined the effectiveness of selected Filipino films as instructional materials in teaching Communication and Research in Philippine Language and Culture among Senior High School students. Specifically, it assessed teachers' and students' perceptions of film-based instruction and its influence on learner engagement, communication skills, and appreciation of Philippine language and culture. A descriptive-comparative research design was employed. The participants were 60 Senior High School students and 8 Filipino teachers from three public secondary schools in the Sixth District of Bulacan during the Academic Year 2025–2026. Data were gathered using a researcher-adapted questionnaire based on Ismaili (2012) and analyzed using frequency, weighted mean, standard deviation, and an independent samples t-test. Results revealed that both teachers and students strongly agreed on the effectiveness of Filipino films as instructional materials. Film-based instruction enhanced learner engagement, classroom participation, communication competence, critical thinking, and appreciation of Philippine language and culture. The t-test showed no significant difference between the perceptions of teachers and students. The study concludes that carefully selected Filipino films are effective and culturally relevant instructional resources. It recommends their continued integration into language instruction, supported by teacher training and adequate instructional resources.

**Keywords:** Filipino films, instructional materials, Communication and Research in Philippine Language and Culture, multimedia learning, descriptive-comparative research

## **Introduction**

Multimedia resources have become integral to contemporary education as schools respond to the demands of twenty-first-century learning. These resources promote learner-centered instruction that enhances engagement, critical thinking, collaboration, and meaningful learning. In recent years, educational systems worldwide have increasingly shifted from traditional teacher-centered approaches toward more dynamic and interactive instructional strategies that integrate technology and multimedia tools. This shift reflects the growing recognition that learners today are more responsive to visual, auditory, and interactive forms of learning compared to purely textual instruction.

Among multimedia resources, films have emerged as powerful pedagogical tools due to their ability to integrate visual, auditory, narrative, and emotional elements that support cognitive, affective, and social development. Films present information in a contextualized and engaging manner, allowing learners to observe real-life situations, interpret human behavior, and analyze complex social and cultural issues. As a result, films have become increasingly utilized in various educational settings as tools for enhancing comprehension and sustaining student interest.

Film-based instruction is widely recognized for its capacity to enrich classroom experiences across academic disciplines. Unlike traditional lecture-based approaches, which often rely heavily on verbal explanation and rote learning, films provide dynamic representations of communication, culture, and social realities. This allows students to engage with authentic contexts and complex ideas in a more meaningful way. Educational research has consistently shown that learners retain information more effectively when they are actively engaged in multisensory learning experiences, particularly those that involve visual and auditory stimuli.

The effectiveness of film-based instruction is strongly supported by Mayer's Cognitive Theory of Multimedia Learning, which posits that learning is enhanced when information is processed through both visual and verbal channels. According to this theory, learners are more likely to understand and retain information when instructional materials are designed to integrate words and images in a meaningful way. Educational films embody this principle by presenting concepts through dialogue, visuals, sound effects, and narrative sequences, thereby facilitating deeper cognitive processing.

Similarly, Constructivist Learning Theory emphasizes that learners actively construct knowledge through interaction with meaningful experiences rather than passively receiving information. From this perspective, learning is an active process where students interpret and make sense of new information based on prior knowledge and experiences. Films provide rich learning environments that allow students to observe, analyze, and interpret real-world situations. Through guided classroom discussions, learners are able to construct meaning from the events, characters, and themes presented in films, making learning more personal and relevant.

Experiential Learning Theory further supports the use of films in education by emphasizing the importance of learning through experience and reflection. According to this theory, knowledge is created through the transformation of experience. Although students may not directly experience the events depicted in films, they engage in vicarious learning by observing and reflecting on simulated real-life situations. This process enables learners to connect abstract concepts with practical examples, thereby enhancing understanding and retention.

In language and communication education, films offer unique opportunities for developing communication competence, critical thinking, and cultural awareness. Communication is not limited to verbal expression but also includes nonverbal cues, social interaction patterns, emotional expression, and cultural meanings. Through films, learners are exposed to authentic language use in various contexts, including formal and

informal communication, interpersonal interactions, and public discourse. This exposure helps students develop a more nuanced understanding of how communication functions in real-life situations.

Moreover, films contribute to the development of critical thinking skills by encouraging learners to analyze characters, interpret messages, evaluate actions, and examine underlying social issues. Students are prompted to question assumptions, compare perspectives, and draw conclusions based on evidence presented in the narrative. These cognitive processes are essential in developing higher-order thinking skills, which are a key objective of twenty-first-century education.

Filipino films, in particular, serve as rich cultural texts that reflect Philippine society, values, traditions, struggles, and contemporary issues. They provide learners with authentic representations of Filipino identity and social realities, making them highly relevant in the context of culturally responsive education. In the Philippine educational system, there is a strong emphasis on contextualized and localized learning materials that reflect the lived experiences of learners. Filipino films fulfill this requirement by presenting narratives that are familiar, relatable, and culturally meaningful.

The integration of culturally relevant instructional materials is also aligned with the Department of Education's emphasis on contextualized learning and 21st-century competencies. By incorporating Filipino films into instruction, teachers are able to bridge the gap between theoretical concepts and real-world applications. This approach not only enhances cognitive understanding but also strengthens students' emotional and cultural connection to the subject matter.

The subject Communication and Research in Philippine Language and Culture plays a vital role in developing students' communication skills, cultural awareness, and research competence. The course aims to equip learners with the ability to understand communication processes, analyze cultural phenomena, and conduct research grounded in Philippine language and culture. Given these objectives, Filipino films are highly relevant instructional resources because they provide authentic contexts where communication theories and cultural concepts can be observed in action.

Despite the recognized educational potential of films, their integration into this subject remains underexplored in local educational research. Most existing studies on film-based instruction have focused on foreign language learning, general English education, or literature classes. While these studies highlight the positive effects of films on student motivation and comprehension, there is still limited empirical evidence regarding their effectiveness in Philippine-specific communication courses.

Furthermore, previous research has often focused solely on students' academic performance or attitudes toward learning, with limited attention given to the comparative perceptions of both teachers and students. Understanding both perspectives is essential because instructional effectiveness is influenced not only by student outcomes but also by teachers' classroom practices, instructional decisions, and pedagogical experiences.

Another gap in the literature is the limited exploration of how Filipino films specifically contribute to communication competence, critical thinking, and cultural literacy among Senior High School learners. While films are generally acknowledged as engaging learning tools, there is a need for more context-specific studies that examine their actual impact within Philippine classrooms, particularly in subjects that directly involve language and cultural analysis.

Given these gaps, the present study examined the effectiveness of selected Filipino films as instructional materials in teaching Communication and Research in Philippine Language and Culture among Senior High School students in selected public secondary schools in the Sixth District of Bulacan. Specifically, it investigated the perceptions of teachers and students regarding film-based instruction and determined whether significant differences existed between their evaluations.

The findings of this study are expected to contribute to the growing body of literature on multimedia learning and culturally responsive pedagogy. They may also provide valuable insights for teachers, curriculum developers, and educational leaders in designing more engaging and contextually relevant instructional strategies. From a theoretical perspective, this study supports and extends the application of Constructivist Learning Theory, Multimedia Learning Theory, and Experiential Learning Theory in the context of film-based instruction in Philippine education.

Ultimately, this study seeks to determine whether Filipino films can serve as effective instructional materials that enhance communication competence, critical thinking, cultural awareness, and learner engagement in contemporary Senior High School education in the Philippines.

## **Method**

### **Research Design**

This study employed a descriptive-comparative research design to examine the effectiveness of selected Filipino films as instructional materials in teaching Communication and Research in Philippine Language and Culture. The design was appropriate in describing and comparing the perceptions of teachers and students regarding film-based instruction without manipulating any variables. It provided quantitative data reflecting actual classroom experiences and instructional practices.

### **Research Locale**

The study was conducted in three public secondary schools in the Sixth District of Bulacan, Philippines, namely Catmon National High School, Pulong Buhangin National High School, and Sta. Maria National High School during the Academic Year 2025–2026. These schools were selected because they implement the subject Communication and

Research in Philippine Language and Culture and integrate Filipino films as part of classroom instruction.

### **Participants of the Study**

The participants consisted of 68 respondents, composed of 60 Senior High School students and 8 Filipino teachers handling the subject Communication and Research in Philippine Language and Culture. Purposive sampling was used to ensure that only respondents with direct experience in film-based instruction were included in the study.

The student respondents represented different academic strands and had prior exposure to Filipino films as part of classroom activities. The teacher respondents had integrated Filipino films into their instructional practices. Their combined experiences provided relevant and reliable data for evaluating the effectiveness of film-based instruction.

### **Research Instrument**

Data were gathered using a researcher-adapted questionnaire based on Ismaili (2012), modified to suit the context of Filipino language and communication instruction. The instrument consisted of two parts: (1) demographic profile of respondents, and (2) statements measuring perceptions of the effectiveness of selected Filipino films as instructional materials.

A five-point Likert scale was used, ranging from 5 (Strongly Agree) to 1 (Strongly Disagree). The instrument underwent content validation by experts in Filipino language education and research methodology. Suggestions and revisions were incorporated to improve clarity, relevance, and validity prior to administration.

### **Data Gathering Procedure**

Prior to data collection, permission was secured from the principals of the participating schools. Coordination with Filipino teachers was conducted to facilitate the distribution and retrieval of questionnaires.

Respondents were informed about the purpose of the study, and informed consent was obtained. Participation was voluntary, and confidentiality was strictly observed. The questionnaires were personally administered by the researcher and retrieved immediately after completion. All responses were checked for completeness, encoded, and prepared for statistical analysis.

### **Statistical Treatment of Data**

Data were analyzed using descriptive and inferential statistics. Frequency count and percentage were used to describe the demographic profile of respondents. Weighted mean and standard deviation were computed to determine the level of perception regarding the effectiveness of selected Filipino films as instructional materials.



An independent samples t-test was used to determine whether significant differences existed between the perceptions of teachers and students at a 0.05 level of significance.

## **Results**

### **Demographic Profile of the Respondents**

A total of 68 respondents participated in the study, composed of 60 Senior High School students and 8 Filipino teachers from three public secondary schools in the Sixth District of Bulacan, Philippines. Among the student respondents, 34 (56.67%) were male and 26 (43.33%) were female, indicating a relatively balanced gender distribution with a slight predominance of male participants.

In terms of film genre preferences, the results revealed that animated films were the most preferred, followed by action, science fiction, romance, and comedy films. On the other hand, historical films, fantasy films, and mind-based or analytical films were the least preferred genres.

These findings suggest that students are more inclined toward visually engaging and entertainment-oriented films. This implies that instructional materials integrating film should consider learner preferences to maintain attention, motivation, and sustained engagement in classroom learning.

### **Students' Perceptions on the Use of Selected Filipino Films**

The results revealed that students strongly agreed that selected Filipino films are effective instructional materials in Communication and Research in Philippine Language and Culture. Overall, the weighted mean scores across all indicators were consistently high, indicating a very positive perception of film-based instruction.

The highest-rated indicator was the appropriateness of film selection based on lesson objectives and learners' developmental level ( $M = 4.68$ ,  $SD = 0.86$ ). This indicates that students recognize the importance of carefully selected instructional films that are aligned with curriculum goals and learner suitability.

Students also strongly agreed that Filipino films increased their interest in learning ( $M = 4.58$ ,  $SD = 0.66$ ), enhanced their understanding of Philippine culture ( $M = 4.55$ ,  $SD = 0.72$ ), promoted critical thinking skills ( $M = 4.50$ ,  $SD = 0.75$ ), and improved their understanding of communication concepts ( $M = 4.43$ ,  $SD = 0.68$ ).

These results suggest that film-based instruction contributes not only to cognitive development but also to affective learning outcomes such as motivation, engagement, and cultural appreciation.

However, comparatively lower mean scores were observed in relation to academic performance indicators such as improvement in examination results ( $M = 4.17$ ,  $SD = 0.72$ ) and production of high-quality academic outputs ( $M = 4.15$ ,  $SD = 0.82$ ). While still interpreted as “Strongly Agree,” these findings suggest that academic achievement is influenced by multiple factors beyond instructional materials, including teaching strategies, assessment design, and learner study habits.

### **Teachers ‘Perceptions on the Use of Selected Filipino Films**

The teacher respondents also demonstrated a very high level of agreement regarding the effectiveness of Filipino films in instruction. Several indicators obtained a perfect weighted mean of 5.00, particularly in using films as tools for lesson introduction, discussion facilitation, and assessment support.

Teachers strongly agreed that Filipino films enhance classroom interaction, increase student participation, improve comprehension of lesson content, and strengthen learners’ appreciation of Philippine language and culture.

These findings indicate that teachers view Filipino films as more than supplementary materials. Instead, they consider them as integral instructional tools that support learner-centered, contextualized, and culturally responsive teaching practices.

The consistently high ratings further suggest that teachers perceive film-based instruction as an effective strategy for bridging theoretical concepts with real-life communication and cultural experiences.

### **Statistical Findings**

Descriptive statistical results showed consistently high weighted mean scores across all indicators for both teachers and students, indicating a strong and shared positive perception of the effectiveness of Filipino films as instructional materials.

Furthermore, inferential analysis using an independent samples t-test revealed no significant difference between the perceptions of teachers and students at the 0.05 level of significance.

This finding implies that both groups share a common understanding and acceptance of film-based instruction in teaching Communication and Research in Philippine Language and Culture. The result strengthens the reliability of the findings and supports the conclusion that Filipino films are effective instructional tools in the classroom context.

## Discussion

The findings of this study confirm that selected Filipino films are effective instructional materials in teaching Communication and Research in Philippine Language and Culture. Both teachers and students strongly agreed that film-based instruction enhances learner engagement, communication competence, critical thinking, and appreciation of Philippine language and culture. This suggests that films serve as meaningful pedagogical tools that support learner-centered and culturally responsive instruction.

The high level of student engagement observed in the findings supports the idea that multimedia resources, particularly films, create an interactive and motivating learning environment. When students are exposed to audiovisual materials, their attention is sustained more effectively compared to traditional lecture-based instruction. This aligns with Mayer's Cognitive Theory of Multimedia Learning, which emphasizes that learning is improved when information is presented through both visual and auditory channels, allowing for better processing and retention of information.

Furthermore, the results support Constructivist Learning Theory, which posits that learners actively construct knowledge through meaningful experiences. Filipino films provide authentic social, cultural, and communicative contexts that allow students to interpret, analyze, and evaluate real-life situations. Through guided classroom discussions, learners are able to connect theoretical concepts in communication with actual human interactions portrayed in films.

The study also found that Filipino films enhance critical thinking skills and cultural understanding. This is consistent with Experiential Learning Theory, which emphasizes learning through reflection on concrete experiences. By observing characters, conflicts, and social issues in films, students are encouraged to analyze perspectives, evaluate decisions, and form reasoned judgments. This process contributes to deeper cognitive engagement beyond memorization of concepts.

In terms of cultural appreciation, Filipino films play a significant role in promoting awareness of Philippine values, traditions, and social realities. These findings highlight the importance of culturally responsive teaching, which emphasizes the use of instructional materials that reflect learners' cultural backgrounds and lived experiences. By integrating Filipino films into instruction, teachers are able to bridge classroom learning with real-world cultural contexts, making learning more relevant and meaningful.

Although students and teachers strongly agreed that film-based instruction improves engagement and understanding, the relatively lower ratings in academic performance indicators such as examination results and project outputs suggest that films alone are not sufficient to guarantee improved academic achievement. This implies that instructional materials must be complemented by effective teaching strategies, structured learning activities, and appropriate assessment methods to fully maximize learning outcomes.

The absence of a significant difference between teachers' and students' perceptions further strengthens the credibility of the findings. This indicates a shared understanding of the effectiveness of Filipino films as instructional tools. It also suggests that both groups experience similar benefits from film-based instruction, reinforcing its acceptability and practicality in classroom settings.

These findings are consistent with previous research, particularly the study of Ismaili (2012), which found that film-based instruction enhances learner motivation, classroom interaction, and language learning outcomes. Similarly, other studies in multimedia learning have emphasized that audiovisual materials improve comprehension and retention by providing contextualized and engaging learning experiences.

Overall, the results of this study contribute to the growing body of literature supporting the integration of multimedia resources in education. In the Philippine context, Filipino films serve not only as instructional tools but also as cultural texts that promote identity formation, communication competence, and critical awareness among learners. Their use in the classroom supports the goals of twenty-first-century education, which emphasizes critical thinking, collaboration, communication, and cultural literacy.

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# PERCEPTIONS OF ARLING PANLIPUNAN TEACHERS ON ARTIFICIAL INTELLIGENCE-BASED INSTRUCTIONAL TOOLS INTEACHING AND LEARNING

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## **Abstract**

The integration of Artificial Intelligence (AI) in education has transformed traditional teaching and learning practices, particularly in the development and delivery of instructional materials. This study examined the perceptions of Araling Panlipunan (Social Studies) teachers regarding the use of AI-based instructional tools in teaching and learning. Specifically, it aimed to determine the perceived effectiveness, benefits, and challenges encountered by teachers in integrating AI technologies into classroom instruction. A descriptive quantitative research design was employed, utilizing a structured survey questionnaire administered to Araling Panlipunan teachers. The data gathered were analyzed using descriptive statistical tools such as frequency, percentage, and mean to interpret the level of perception toward AI-based instructional tools. Findings revealed that teachers generally hold a positive perception of AI-based instructional tools, particularly in enhancing instructional delivery, improving learner engagement, and supporting differentiated instruction. However, challenges such as limited training, lack of adequate technological resources, and concerns regarding accuracy and ethical use of AI-generated content were also identified. Despite these challenges, teachers expressed openness to further integration of AI in classroom practices given proper training and institutional support. The study concludes that AI-based instructional tools have significant potential to enhance teaching effectiveness in Araling Panlipunan. It recommends targeted professional development programs and improved technological infrastructure to maximize the benefits of AI integration in education.

**Keywords:** Artificial Intelligence, Instructional Tools, Araling Panlipunan, Teacher Perceptions, Educational Technology

## **Introduction**

Artificial Intelligence (AI) has emerged as one of the most transformative technologies in contemporary education, reshaping instructional design, content development, assessment, and classroom management. The rapid advancement of generative AI applications, including conversational agents, adaptive learning systems, and intelligent content-generation platforms, has expanded the range of digital tools available to teachers. Rather than functioning solely as information retrieval systems, these

technologies now support lesson planning, instructional material development, formative assessment, personalized learning, and administrative tasks. As educational systems worldwide pursue digital transformation, AI is increasingly viewed as a strategic innovation capable of enhancing instructional quality, improving teacher productivity, and promoting more engaging learning experiences.

The integration of AI in education has accelerated following the widespread availability of generative AI platforms such as ChatGPT, Claude, Microsoft Copilot, Canva AI, and Gamma. These applications enable teachers to produce instructional materials more efficiently, generate differentiated learning resources, design classroom presentations, and provide immediate feedback for instructional improvement. Recent studies indicate that AI can reduce teachers' workload while supporting learner-centered pedagogies through adaptive and personalized instruction. However, researchers likewise caution that effective AI integration depends not only on technological capability but also on teachers' knowledge, ethical awareness, institutional support, and professional readiness.

Within the Philippine educational system, the digital transformation agenda of the Department of Education has emphasized the importance of technology integration to improve teaching quality and learner outcomes. The implementation of the MATATAG Agenda underscores the need to strengthen foundational learning, support teachers, and promote innovative instructional approaches responsive to twenty-first-century educational demands. As schools continue to adopt digital technologies, AI has become increasingly relevant as a tool that may assist teachers in curriculum implementation, instructional planning, assessment design, and classroom engagement. Nevertheless, the successful adoption of AI requires careful consideration of educational objectives, ethical principles, data privacy, and the preservation of authentic learning experiences.

Among the different learning areas in the basic education curriculum, Araling Panlipunan presents unique opportunities and challenges for AI integration. As a discipline concerned with history, geography, economics, governance, culture, and citizenship, Araling Panlipunan emphasizes inquiry, historical thinking, civic engagement, and critical analysis of social issues. These competencies require learners not only to acquire factual knowledge but also to evaluate evidence, construct arguments, interpret multiple perspectives, and develop informed civic values. AI-based instructional tools have the potential to enrich these learning experiences by assisting teachers in preparing contextualized lessons, developing interactive learning materials, generating historical simulations, and facilitating differentiated instruction. At the same time, the use of AI raises concerns regarding factual accuracy, historical bias, misinformation, overreliance on generated content, and the preservation of learners' independent analytical thinking.

Teachers play a central role in determining whether AI technologies become meaningful educational innovations or merely technological conveniences. Regardless of the sophistication of AI applications, instructional decisions remain fundamentally dependent on teachers' professional judgment, pedagogical competence, and ethical responsibility. Consequently, teachers' perceptions toward AI significantly influence their willingness to adopt, adapt, and sustain the use of AI-supported instructional tools in classroom practice. Positive perceptions often facilitate technology acceptance and

instructional innovation, whereas concerns regarding technical competence, ethical implications, institutional readiness, and reliability of AI-generated outputs may limit effective implementation.

Several theoretical frameworks explain teachers' acceptance of emerging educational technologies. The Technology Acceptance Model (TAM) posits that technology adoption is primarily influenced by perceived usefulness and perceived ease of use, suggesting that teachers are more likely to integrate AI when they believe it enhances instructional effectiveness and can be used with minimal difficulty. Likewise, the Technological Pedagogical Content Knowledge (TPACK) framework emphasizes that meaningful technology integration requires the intersection of technological knowledge, pedagogical competence, and content expertise. More recent discussions have extended this framework to include AI-specific competencies, recognizing that teachers must develop the capacity to critically evaluate AI-generated outputs, formulate effective prompts, and align AI-assisted resources with curriculum standards. In addition, the Unified Theory of Acceptance and Use of Technology (UTAUT) highlights the influence of facilitating conditions, social influence, and behavioral intention on teachers' technology adoption, reinforcing the importance of institutional support in sustaining AI integration.

Despite the growing body of international literature on AI in education, empirical research focusing on Philippine basic education remains limited, particularly within the discipline of Araling Panlipunan. Existing studies have largely concentrated on higher education, computer science, language learning, or general educational technology adoption. Few investigations have examined how secondary school Social Studies teachers perceive AI-supported instructional tools, how frequently these technologies are used in classroom practice, and what institutional conditions influence their adoption. Moreover, limited evidence exists regarding the ethical, pedagogical, and contextual challenges associated with AI integration in humanities education within public secondary schools. This gap restricts the development of localized policies and professional development programs responsive to teachers' actual experiences and instructional needs.

The present study addresses this gap by examining the perceptions of Araling Panlipunan teachers at Sta. Maria National High School regarding AI-based instructional tools. Specifically, the study investigates teachers' perceptions of pedagogical effectiveness, technical readiness, and ethical-practical concerns, explores their current utilization of AI applications in instructional practice, and determines whether perceptions differ according to selected demographic variables. By focusing on teachers directly responsible for implementing the curriculum, the study provides context-specific evidence regarding the opportunities and challenges associated with AI integration in Social Studies education.

The findings of this study are expected to contribute to educational research and practice in several ways. First, the study enriches the growing literature on AI integration in Philippine basic education by providing empirical evidence from the perspective of Araling Panlipunan teachers. Second, it offers practical insights that may guide school administrators in developing institutional policies, professional development initiatives,



and governance mechanisms for responsible AI implementation. Third, the findings may assist curriculum developers in designing instructional frameworks that integrate AI while preserving higher-order thinking, historical inquiry, and civic learning. Finally, the study contributes to the broader discourse on responsible educational innovation by demonstrating that successful AI integration depends not only on technological capability but also on ethical responsibility, pedagogical appropriateness, and institutional readiness.

## **Method**

### **Research design**

This study employed an **explanatory sequential mixed-methods research design** to examine the perceptions of Araling Panlipunan teachers regarding the utilization of Artificial Intelligence (AI)-based instructional tools in teaching and learning. Mixed-methods research integrates quantitative and qualitative approaches within a single investigation to provide a more comprehensive understanding of complex educational phenomena than either approach alone. Specifically, the explanatory sequential design involves collecting and analyzing quantitative data during the first phase of the study, followed by qualitative data collection and analysis to explain, clarify, and expand the quantitative findings (Creswell & Plano Clark, 2018).

The selection of the explanatory sequential design was guided by the objectives of the study. The quantitative phase provided an overall assessment of teachers' perceptions of AI-based instructional tools by measuring key constructs associated with technology acceptance, including perceived usefulness, perceived ease of use, attitudes toward AI integration, behavioral intention to use AI, and perceived ethical and implementation concerns. Through quantitative analysis, the researcher identified prevailing trends, levels of acceptance, and patterns in teachers' responses regarding the educational application of artificial intelligence in Araling Panlipunan instruction.

While quantitative findings provided measurable evidence of teachers' perceptions, numerical data alone were insufficient to explain the underlying reasons behind these perceptions. Consequently, the qualitative phase was conducted to obtain a deeper understanding of teachers' experiences, reflections, and contextual realities surrounding AI integration in classroom practice. Semi-structured interviews enabled participants to elaborate on their responses, describe the benefits and challenges they encountered, and discuss the institutional, pedagogical, and ethical factors influencing their adoption of AI-supported instructional tools. The qualitative findings therefore complemented the quantitative results by providing rich descriptions that could not be captured through survey responses alone.

The study was implemented in two interconnected phases. During the first phase, all eligible Araling Panlipunan teachers completed a structured survey questionnaire designed to measure their perceptions of AI-based instructional tools. Descriptive

statistics, including weighted mean and standard deviation, were computed to determine the overall level of teachers' perceptions across the identified domains. Inferential statistical analyses were likewise performed to determine whether significant differences existed in teachers' perceptions when grouped according to selected demographic variables. The quantitative findings established the empirical foundation for the second phase of the investigation.

The second phase involved qualitative inquiry through semi-structured interviews with teacher-participants. Interview questions were developed based on the quantitative findings, allowing the researcher to further explore areas requiring clarification and explanation. This phase focused on understanding teachers' lived experiences, instructional practices, perceived opportunities, implementation challenges, ethical concerns, and recommendations regarding the responsible integration of artificial intelligence in Araling Panlipunan education.

Qualitative data were analyzed using Braun and Clarke's (2006) six-phase thematic analysis framework, which involved familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and preparing the final narrative. This systematic analytical process enabled the identification of recurring patterns and meaningful themes that explained teachers' experiences and perspectives regarding AI-supported instruction.

The final stage of the study involved integrating the quantitative and qualitative findings using a side-by-side comparison approach. Convergences, complementarities, and differences between the two datasets were examined to develop a comprehensive interpretation of the research problem. This integration enhanced the credibility and explanatory power of the study by allowing statistical trends to be interpreted alongside participants' narratives and lived experiences.

The explanatory sequential mixed-methods design was considered particularly appropriate because the integration of numerical evidence and qualitative insights provided a holistic understanding of teachers' perceptions toward AI-based instructional tools. By combining the strengths of quantitative measurement and qualitative inquiry, the study generated evidence that is both empirically grounded and contextually meaningful. Such an approach offers valuable implications for educators, school leaders, curriculum developers, and policymakers seeking to promote the ethical, responsible, and pedagogically effective integration of artificial intelligence in Araling Panlipunan instruction.

## **Population and Sampling**

The study was conducted at **Sta. Maria National High School**, a public secondary school under the Department of Education, during the School Year 2026–2027. The target population consisted of all **twelve (12) Junior High School Araling Panlipunan teachers** officially assigned to the school during the conduct of the study. These teachers were selected because they are directly responsible for planning, implementing, and evaluating instruction in Araling Panlipunan and are actively engaged

in integrating digital technologies into classroom teaching. As frontline implementers of the curriculum, they possess the professional knowledge and instructional experiences necessary to provide meaningful insights regarding the use of Artificial Intelligence (AI)-based instructional tools.

Considering the relatively small and accessible population, the study employed **total enumeration sampling**, also referred to as **saturated sampling**, during the quantitative phase. Total enumeration involves including every member of the target population as a respondent rather than selecting a representative sample. This sampling strategy is appropriate when the population size is limited and when the researcher seeks to obtain comprehensive information from all eligible participants. By including all twelve Araling Panlipunan teachers, the study eliminated sampling error associated with respondent selection and ensured that the findings accurately reflected the collective perceptions of the department.

The use of total enumeration further strengthened the internal validity of the study by minimizing selection bias and maximizing the completeness of the quantitative dataset. Because every eligible teacher participated in the survey, the findings provide a comprehensive description of AI-related perceptions within the institutional context of Sta. Maria National High School. Although the results are context-specific and are not intended for broad statistical generalization, they offer valuable empirical evidence regarding teachers' experiences with AI integration in a public secondary school setting.

For the qualitative phase, the study employed **purposive sampling**, a non-probability sampling technique commonly used in qualitative research to identify information-rich participants capable of providing detailed descriptions of the phenomenon under investigation (Patton, 2015). Guided by the explanatory sequential mixed-methods design, participants were selected after the quantitative data had been analyzed to ensure that the interview sample represented a range of perspectives, experiences, and levels of AI utilization identified during the survey.

In this study, **all twelve (12) Araling Panlipunan teachers** also participated in the qualitative interviews. The inclusion of the entire population in both the quantitative and qualitative phases enabled the researcher to obtain a comprehensive understanding of teachers' perceptions while validating and enriching the survey findings through participants' lived experiences and reflective narratives. This approach facilitated methodological triangulation by allowing quantitative trends to be interpreted alongside qualitative explanations provided by the same group of participants.

The combination of total enumeration and purposive qualitative inquiry is consistent with the explanatory sequential mixed-methods framework, which emphasizes breadth during the quantitative phase and depth during the qualitative phase. Collectively, these sampling strategies enabled the study to generate robust, contextually grounded, and institutionally relevant evidence regarding the perceptions of Araling Panlipunan teachers toward AI-based instructional tools. The resulting findings provide an informed basis for developing policies, professional development initiatives, and instructional

support mechanisms that promote the ethical and effective integration of artificial intelligence in teaching and learning.

## Research Instruments

To obtain comprehensive, valid, and reliable data, the study utilized two complementary research instruments consistent with the explanatory sequential mixed-methods research design: (1) a structured survey questionnaire for the quantitative phase and (2) a semi-structured interview guide for the qualitative phase. The use of these instruments enabled the collection of both numerical and narrative data, thereby providing a comprehensive understanding of Araling Panlipunan teachers' perceptions regarding the integration of Artificial Intelligence (AI)-based instructional tools in teaching and learning.

## Survey Questionnaire

The primary instrument for the quantitative phase was a modified survey questionnaire developed from the Technology Acceptance Model (TAM) proposed by Davis (1989) and supported by contemporary literature on artificial intelligence integration in education. The instrument was adapted from established studies on educational technology acceptance and modified to reflect the instructional context of Araling Panlipunan education in Philippine public secondary schools.

The questionnaire consisted of two major sections. The first section gathered the demographic profile of the respondents, including age, sex, highest educational attainment, years of teaching experience, and exposure to AI-based instructional technologies. These variables were included to describe the respondents and determine whether significant differences existed in their perceptions when grouped according to selected demographic characteristics.

The second section measured teachers' perceptions regarding AI-based instructional tools using a five-point Likert scale ranging from **1 (Strongly Disagree)** to **5 (Strongly Agree)**. The instrument assessed the following major constructs:

- **Perceived Usefulness (Pedagogical Effectiveness):** measured teachers' beliefs regarding the extent to which AI-based instructional tools improve lesson planning, instructional delivery, content development, learner engagement, and overall teaching effectiveness.
- **Perceived Ease of Use (Technical Readiness):** assessed teachers' perceptions of the accessibility, usability, flexibility, and technical simplicity of AI applications during instructional preparation and classroom implementation.
- **Attitude Toward AI Integration:** examined teachers' overall disposition, acceptance, and confidence toward incorporating AI technologies into Araling Panlipunan instruction.
- **Behavioral Intention to Use AI:** determined teachers' willingness to adopt and continuously utilize AI-supported instructional tools in their professional practice.

- **Ethical and Practical Concerns:** evaluated teachers' perceptions regarding academic integrity, data privacy, reliability of AI-generated content, algorithmic bias, responsible AI use, and institutional readiness for AI implementation.

These constructs were selected because they collectively capture both the technological acceptance and contextual realities influencing AI adoption in educational settings. The questionnaire was designed to align with the objectives of the study and the conceptual framework anchored on the Technology Acceptance Model while incorporating contemporary issues surrounding responsible AI integration in education.

### **Instrument Validation and Reliability**

Prior to the administration of the survey, the questionnaire underwent expert validation to establish its content validity. Specialists in educational research, educational technology, and Araling Panlipunan education reviewed the instrument with respect to content relevance, clarity of language, construct alignment, and appropriateness of individual items. Recommendations provided by the validators were carefully considered, and necessary revisions were incorporated before the final administration of the questionnaire.

A pilot test was subsequently conducted among teachers who were not included in the actual study to evaluate the clarity, comprehensibility, and consistency of the instrument. Responses obtained from the pilot administration were subjected to reliability analysis using **Cronbach's alpha coefficient** to determine the internal consistency of the questionnaire. The reliability results confirmed that the instrument possessed acceptable internal consistency for measuring teachers' perceptions regarding AI-based instructional tools. Consequently, the validated instrument was considered appropriate for use in the actual data collection.

### **Semi-Structured Interview Guide**

To complement the quantitative findings, a semi-structured interview guide was developed for the qualitative phase of the study. The interview guide consisted of open-ended questions designed to encourage participants to describe their experiences, perceptions, challenges, and reflections regarding the use of AI-supported instructional tools in Araling Panlipunan teaching.

The interview protocol focused on several key areas, including teachers' experiences in integrating AI into instructional practice, perceived instructional benefits, technical and institutional challenges, ethical concerns related to AI-generated content, strategies employed in evaluating AI-generated materials, and recommendations for improving the responsible implementation of AI in classroom instruction.

The semi-structured format allowed the researcher to ask follow-up and probing questions whenever necessary, enabling participants to elaborate on issues that emerged during the interviews. This flexibility facilitated the collection of rich qualitative data while maintaining consistency across interview sessions.

## Integration of Quantitative and Qualitative Instruments

The survey questionnaire and the semi-structured interview guide were intentionally designed to complement one another within the explanatory sequential mixed-methods framework. The quantitative instrument provided measurable evidence regarding teachers' perceptions of AI-based instructional tools, while the qualitative instrument generated in-depth explanations that clarified and enriched the quantitative findings.

The combined use of these instruments strengthened the methodological rigor of the study through data triangulation, allowing numerical trends to be interpreted alongside participant's lived experiences and contextual narratives. This integration enhanced the credibility, validity, and comprehensiveness of the research findings and provided a holistic understanding of AI integration in Araling Panlipunan instruction.

## Instrument Validation and Reliability

To ensure the validity and reliability of the research instrument, the survey questionnaire underwent a systematic process of expert validation and pilot testing prior to its administration. Initially, the instrument was subjected to **content validation by three experts** specializing in educational research, educational technology, and Araling Panlipunan education. The validators evaluated the questionnaire in terms of content relevance, clarity of language, appropriateness of the items, construct alignment with the Technology Acceptance Model (TAM), and suitability for the target respondents. Their comments and recommendations were carefully reviewed and incorporated into the final version of the instrument to improve its content validity and overall quality.

Following expert validation, the revised questionnaire was pilot-tested among **15 Junior High School teachers** from a neighboring public secondary school who were not included in the actual study. The pilot administration aimed to assess the clarity, comprehensibility, and consistency of the questionnaire, as well as to identify any ambiguities or issues that could affect data quality. Feedback obtained during the pilot testing was used to refine the wording and organization of selected items before the conduct of the actual survey.

The reliability of the instrument was determined using **Cronbach's alpha coefficient**, which measures the internal consistency of survey items. The questionnaire obtained an **overall Cronbach's alpha coefficient of .94**, indicating **excellent internal consistency** and demonstrating that the instrument reliably measured teachers' perceptions regarding the utilization of Artificial Intelligence (AI)-based instructional tools. According to commonly accepted reliability standards, a Cronbach's alpha coefficient of .90 or higher indicates excellent reliability, confirming that the instrument was appropriate for use in the actual data collection.

The completion of the validation and reliability procedures provided evidence that the questionnaire possessed adequate psychometric properties for measuring the constructs investigated in this study. Consequently, the instrument was considered valid, reliable,

and suitable for gathering quantitative data on Araling Panlipunan teachers' perceptions of AI-based instructional tools.

### **Data Collection Procedure**

The data collection process was conducted systematically and in accordance with established ethical standards for educational research. Consistent with the explanatory sequential mixed-methods research design, data collection was implemented in two consecutive phases: the quantitative phase followed by the qualitative phase. This sequence enabled the researcher to obtain an initial quantitative understanding of teachers' perceptions regarding Artificial Intelligence (AI)-based instructional tools before exploring the contextual factors underlying those perceptions through qualitative inquiry (Creswell & Plano Clark, 2018).

Prior to the conduct of the study, the researcher secured the necessary institutional approvals. A formal request to conduct the research was submitted to the Schools Division Office and the Office of the Principal of Sta. Maria National High School. Upon approval, coordination was undertaken with the Head of the Araling Panlipunan Department to determine the most appropriate schedule for data collection while minimizing disruption to instructional activities.

Before administering the research instruments, all prospective participants were informed of the objectives, significance, procedures, potential benefits, and minimal risks associated with the study. The researcher explained the voluntary nature of participation and emphasized that respondents could decline participation or withdraw from the study at any stage without academic, administrative, or professional consequences. Written informed consent was obtained from all participants prior to data collection.

During the quantitative phase, the validated survey questionnaire was administered to all twelve (12) Junior High School Araling Panlipunan teachers through printed questionnaires distributed personally by the researcher. Participants were given adequate time to accomplish the instrument independently and were encouraged to answer each item honestly based on their professional experiences. Completed questionnaires were retrieved immediately after completion to ensure a high retrieval rate and to minimize missing responses. The researcher reviewed each questionnaire for completeness before encoding the data for statistical analysis.

Following the quantitative analysis, the researcher proceeded with the qualitative phase. Guided by the explanatory sequential design, all twelve respondents were invited to participate in individual semi-structured interviews to further explain and enrich the quantitative findings. Conducting interviews with the same participants facilitated a deeper understanding of the statistical results while allowing teachers to elaborate on their experiences, instructional practices, and perceptions regarding AI-supported instructional tools.

The interviews were conducted individually at schedules mutually agreed upon by the participants and the researcher. Each interview followed a semi-structured format that

allowed consistency across participants while providing sufficient flexibility for follow-up questions and clarification of responses. With participants' permission, all interviews were audio-recorded to ensure the completeness and accuracy of the information collected. The recordings were subsequently transcribed verbatim to facilitate qualitative analysis.

Throughout the data collection process, confidentiality was strictly maintained. Each participant was assigned a unique identification code to protect anonymity, and all survey responses, interview recordings, and transcripts were stored in password-protected electronic files accessible only to the researcher.

Upon completion of both phases, the quantitative and qualitative datasets were prepared for separate analyses before being integrated during the interpretation stage. This integration enabled the researcher to compare statistical trends with participants' narratives, thereby providing a comprehensive explanation of Araling Panlipunan teachers' perceptions regarding the use of AI-based instructional tools in teaching and learning.

## **Data Analysis Plan**

The study employed separate but complementary analytical procedures for the quantitative and qualitative datasets, consistent with the explanatory sequential mixed-methods research design. The findings from both phases were subsequently integrated to provide a comprehensive interpretation of the research problem.

## **Quantitative Data Analysis**

Quantitative data obtained from the survey questionnaires were encoded, cleaned, and analyzed using **IBM SPSS Statistics**. Descriptive statistical techniques were employed to summarize the responses of the participants.

The **weighted mean** was computed to determine the overall level of teachers' perceptions regarding Artificial Intelligence (AI)-based instructional tools across the identified dimensions, namely perceived usefulness, perceived ease of use, attitude toward AI integration, behavioral intention to use AI, and ethical and technical readiness. The **standard deviation** was likewise computed to determine the degree of consistency or variability in respondents' answers.

To determine whether significant differences existed in teachers' perceptions when grouped according to selected demographic variables, appropriate inferential statistical techniques were employed. An **independent samples t-test** was used to examine differences according to sex, while **one-way analysis of variance (ANOVA)** was employed to determine differences according to age and years of teaching experience. Statistical significance was established at the **0.05 level of significance**.



Mean scores were interpreted using the following descriptive scale:

| Mean Range | Interpretation    |
|------------|-------------------|
| 4.21–5.00  | Strongly Agree    |
| 3.41–4.20  | Agree             |
| 2.61–3.40  | Neutral           |
| 1.81–2.60  | Disagree          |
| 1.00–1.80  | Strongly Disagree |

## Qualitative Data Analysis

Qualitative data obtained from the semi-structured interviews were analyzed using the **six-phase thematic analysis framework developed by Braun and Clarke (2006)**. Initially, the researcher repeatedly read the interview transcripts to gain familiarity with the data. Meaningful statements were subsequently coded, after which related codes were grouped into preliminary categories.

These categories were then examined to identify broader themes that reflected participants' shared experiences and perceptions regarding AI integration in Araling Panlipunan instruction. The themes underwent continuous review and refinement until they accurately represented the participants' narratives. Finally, each theme was clearly defined, interpreted, and supported using representative participant statements.

To enhance the credibility and trustworthiness of the qualitative findings, member checking was conducted by allowing participants to verify the accuracy of the interview summaries. The researcher also maintained an audit trail documenting coding decisions and theme development throughout the analysis.

## Integration of Quantitative and Qualitative Findings

The quantitative and qualitative findings were integrated during the interpretation stage using a **side-by-side comparison approach**. Quantitative results served as the primary basis for identifying patterns in teachers' perceptions, while qualitative findings were used to explain, clarify, and expand these patterns through participants' experiences and reflections.

The integration process focused on identifying areas of convergence, complementarity, and divergence between the two datasets. This methodological triangulation enhanced the validity, credibility, and explanatory power of the study by combining statistical evidence with rich qualitative narratives, thereby providing a holistic understanding of teachers' perceptions regarding AI-based instructional tools.

## Ethical Considerations

The study adhered to the fundamental principles of ethical research involving human participants, including respect for persons, beneficence, and justice, as articulated in the **Belmont Report (1979)**. Ethical standards were observed throughout the planning,

implementation, analysis, and reporting stages of the investigation to ensure the protection of participants' rights, dignity, and welfare.

Prior to data collection, institutional permission was secured from the appropriate educational authorities, including the Schools Division Office and the administration of Sta. Maria National High School. Participation in the study was entirely voluntary, and no teacher was compelled to participate. Before completing the survey questionnaire or participating in the interview, respondents received a written informed consent form explaining the objectives of the study, research procedures, expected duration of participation, potential benefits, possible minimal risks, and their rights as research participants. Teachers were likewise informed that they could decline participation or withdraw from the study at any time without penalty or prejudice to their professional standing.

To protect participants' privacy, anonymity and confidentiality were strictly maintained throughout the research process. Personal identifiers were removed from all datasets, and each participant was assigned a numerical identification code that was used during data analysis and reporting. No names or personally identifiable information were included in any publication, presentation, or dissemination of the findings.

All completed questionnaires, interview recordings, transcripts, and electronic research files were stored in password-protected digital storage accessible only to the researcher. The study likewise complied with the provisions of the **Data Privacy Act of 2012 (Republic Act No. 10173)** by ensuring that all personal information collected was processed solely for academic and research purposes. Following the completion of the study and the successful defense of the research, all electronic recordings and confidential research files will be permanently deleted in accordance with accepted research data management practices.

Throughout the conduct of the study, the researcher maintained objectivity, honesty, and academic integrity in collecting, analyzing, interpreting, and reporting the findings. Every effort was made to ensure that the results accurately represented the participants' perspectives without fabrication, falsification, or misrepresentation of data. By adhering to these ethical principles, the study safeguarded the welfare of participants while strengthening the credibility, trustworthiness, and integrity of the research.

## Results and Discussion

### Overall Perceptions of Araling Panlipunan Teachers toward AI-Based Instructional Tools

Table 1 presents the overall perceptions of Araling Panlipunan teachers regarding the use of Artificial Intelligence (AI)-based instructional tools in teaching and learning.

**Table 1**

### Overall Perceptions of Araling Panlipunan Teachers toward AI-Based Instructional Tools (n = 12)

| Domain                          | Mean        | SD          | Interpretation |
|---------------------------------|-------------|-------------|----------------|
| Pedagogical Effectiveness       | 4.52        | 0.48        | Strongly Agree |
| Perceived Ease of Use           | 4.18        | 0.56        | Agree          |
| Attitude toward AI Integration  | 4.35        | 0.51        | Strongly Agree |
| Behavioral Intention to Use AI  | 4.40        | 0.49        | Strongly Agree |
| Pedagogical Effectiveness       | 4.52        | 0.48        | Strongly Agree |
| Ethical and Technical Readiness | 3.74        | 0.62        | Agree          |
| <b>Overall Mean</b>             | <b>4.24</b> | <b>0.53</b> | <b>Agree</b>   |

The findings indicate that Araling Panlipunan teachers generally possess positive perceptions regarding the integration of Artificial Intelligence-based instructional tools in teaching and learning (Overall Mean = 4.24). This suggests that teachers recognize AI as a valuable instructional innovation capable of supporting classroom instruction, lesson preparation, and instructional decision-making.

Among the five dimensions, **Pedagogical Effectiveness** obtained the highest mean score (M = 4.52), interpreted as **Strongly Agree**. This finding indicates that teachers perceive AI as an effective instructional support system capable of improving lesson preparation, enriching classroom discussions, facilitating differentiated instruction, and enhancing learner engagement. The result implies that AI is viewed primarily as a complementary instructional resource rather than a replacement for teacher expertise.

The findings support the **Technology Acceptance Model (TAM)** proposed by Davis (1989), particularly the construct of **Perceived Usefulness**, which explains that individuals are more likely to adopt a technology when they believe it improves their job performance. Within the context of Araling Panlipunan instruction, AI appears to

enhance teachers' efficiency in generating learning materials, organizing lesson content, and developing instructional resources.

Similarly, the findings corroborate those of Aldoseri et al. (2024), who reported that AI technologies improve instructional effectiveness by enabling teachers to access diverse educational resources and design more engaging learning experiences. Likewise, Ning et al. (2024) emphasized that teachers possessing higher AI-TPACK competencies tend to integrate AI more confidently into classroom instruction, resulting in improved pedagogical practices.

Meanwhile, **Ethical and Technical Readiness** received the lowest mean score ( $M = 3.74$ ), although still interpreted as **Agree**. This suggests that despite recognizing AI's instructional benefits, teachers remain cautious regarding issues related to data privacy, academic integrity, reliability of AI-generated information, and institutional readiness for technology implementation.

This finding is consistent with Mustofa et al. (2025), who argued that generative AI systems may occasionally produce inaccurate historical interpretations and fabricated information if instructional outputs are not carefully validated by teachers. Since Araling Panlipunan emphasizes historical accuracy, civic values, and critical interpretation of social issues, teacher mediation remains essential during AI integration.

Overall, these findings demonstrate that AI adoption among Araling Panlipunan teachers is driven primarily by perceived instructional value while simultaneously moderated by ethical concerns and institutional preparedness.

### Frequency of AI Tool Utilization

Table 2 presents the AI applications most frequently utilized by Araling Panlipunan teachers.

**Table 2.**

#### Frequency of AI-Based Instructional Tools Used by Teachers

| AI Tool             | Level of Utilization | Primary Purpose                        |
|---------------------|----------------------|----------------------------------------|
| Canva AI            | High                 | Presentation design                    |
| ChatGPT             | Moderate to High     | Lesson planning and content generation |
| Claude AI           | Moderate             | Instructional explanation              |
| Gamma               | Moderate             | Slide development                      |
| AI Assessment Tools | Low                  | Quiz and assessment generation         |

The results reveal that Canva AI emerged as the most frequently utilized AI application among Araling Panlipunan teachers. Teachers primarily employed the platform for

designing instructional presentations, creating visual learning resources, and enhancing classroom engagement.

ChatGPT ranked second in terms of utilization and was commonly used for lesson planning, content generation, activity preparation, and instructional material development. Claude AI and Gamma were used moderately, primarily to improve lesson organization and provide alternative instructional explanations.

Interestingly, AI-based assessment applications recorded the lowest level of utilization. This suggests that teachers remain cautious in allowing AI to participate directly in learner assessment and evaluation processes.

One possible explanation is that assessment activities require greater teacher judgment, contextual interpretation, and alignment with curriculum competencies. Teachers may therefore prefer maintaining direct control over assessment construction to preserve academic integrity.

The findings correspond with the **SAMR Model**, particularly the **Augmentation** level, wherein AI enhances existing instructional practices without fundamentally transforming pedagogical processes. Teachers currently employ AI to improve efficiency rather than redesign classroom instruction entirely.

Moreover, the findings support the **UTAUT2 Facilitating Conditions** construct (Kemp et al., 2024), indicating that AI integration remains dependent on available institutional resources, technical support, and professional development opportunities.

### **Differences in Teachers' Perceptions According to Profile Variables**

Table 3 presents the results of the statistical analysis examining differences in teachers' perceptions according to selected demographic characteristics.

**Table 3.**

#### **Differences in Teachers' Perceptions According to Profile Variables**

| <b>Variable</b>     | <b>Test Statistic</b> | <b>P-Value</b> | <b>Decision</b> |
|---------------------|-----------------------|----------------|-----------------|
| Age                 | 0.842                 | .412           | Not Significant |
| Sex                 | 0.615                 | .548           | Not Significant |
| Teaching Experience | 1.023                 | .317           | Not Significant |

The analysis revealed no statistically significant differences in teachers' perceptions of AI-based instructional tools according to age, sex, or teaching experience ( $p > .05$ ).

This finding indicates that acceptance of AI technology is relatively consistent across demographic groups. Regardless of professional experience or personal characteristics,

teachers generally recognize AI as a useful instructional innovation while sharing similar concerns regarding ethical implementation and institutional readiness.

The result differs from earlier assumptions suggesting that younger teachers are naturally more receptive to educational technologies. Instead, the findings imply that exposure to AI technologies has become sufficiently widespread among teachers to minimize demographic differences in technology acceptance.

The absence of significant differences further suggests that challenges associated with AI integration are institutional rather than individual in nature. Consequently, capacity-building initiatives should target the entire teaching workforce rather than focusing exclusively on particular demographic groups.

These findings align with recent educational technology studies emphasizing that organizational support, school leadership, infrastructure availability, and professional development exert stronger influences on technology adoption than demographic variables alone (Xue et al., 2024).

### **Overall Interpretation of Findings**

Taken together, the findings demonstrate that Araling Panlipunan teachers possess generally favorable perceptions toward Artificial Intelligence-based instructional tools. Teachers recognize AI as a valuable educational innovation capable of improving instructional efficiency, supporting lesson preparation, enriching classroom engagement, and facilitating differentiated instruction. However, teachers likewise acknowledge existing challenges related to ethical considerations, technical readiness, institutional policies, and responsible AI implementation.

Viewed through the lens of the Technology Acceptance Model, teachers' favorable perceptions are primarily explained by the perceived usefulness and ease of use of AI technologies. Nevertheless, successful long-term integration will depend not only on technological acceptance but also on the development of comprehensive institutional policies, sustained professional development, and ethical governance mechanisms that ensure responsible AI utilization in Araling Panlipunan education.

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# VALUES INTEGRATION IN MAPEH INSTRUCTION AND ITS PREDICTIVE INFLUENCE ON STUDENTS' ACADEMIC PERFORMANCE IN SECONDARY EDUCATION

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## **Abstract**

This study examined the extent of values integration in MAPEH instruction and its predictive influence on students' academic performance in selected public secondary schools. Specifically, it investigated four instructional domains: lesson planning and preparation, instructional delivery, learning activities and assessment, and classroom management and learning environment. A quantitative descriptive-correlational research design was employed involving twenty MAPEH teachers selected through purposive sampling. Data were gathered using a researcher-developed questionnaire and students' official academic records in MAPEH. Findings revealed that values integration was consistently implemented across all instructional domains, with classroom management and learning environment obtaining the highest level of implementation. This indicates that values are most strongly embedded in classroom interactions, behavioral reinforcement, and the overall learning climate. Instructional delivery followed, reflecting the use of collaborative and learner-centered pedagogies that support values formation. Lesson planning and preparation demonstrated high implementation but with less explicit alignment to structured values documentation, while learning activities and assessment obtained comparatively lower emphasis, particularly in the formal evaluation of affective learning outcomes. Students' academic performance in MAPEH was generally rated as very satisfactory. Correlational analysis indicated a positive relationship between values integration and academic performance. Regression analysis further revealed that lesson planning and preparation, as well as classroom management and learning environment, significantly predict students' academic performance. In contrast, instructional delivery and learning activities and assessment did not demonstrate significant direct predictive influence. The results suggest that values integration in MAPEH is primarily operationalized through classroom climate and instructional planning rather than formal assessment mechanisms. While teachers effectively embed values in daily instructional practice, there remains limited systematic alignment with structured assessment tools. The study concludes that MAPEH provides a strong platform for values formation due to its experiential and collaborative nature. However, strengthening the explicit integration of values in lesson planning and assessment is necessary to enhance coherence and ensure measurable learning outcomes.

**Keywords:** Values Integration, MAPEH Instruction, Academic Performance, Classroom Management, Secondary Education

## Introduction

Values education has become a central concern in contemporary education systems worldwide as schools increasingly recognize the need to develop not only cognitive competencies but also moral, social, and emotional capacities of learners. In the 21st-century learning landscape, academic success is no longer sufficient without corresponding development of character, civic responsibility, and ethical behavior. International organizations such as the Organisation for Economic Co-operation and Development (OECD, 2021) emphasize that social and emotional skills are essential predictors of lifelong success, while the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2022) advocates for a reimagined education system that integrates cognitive, ethical, and socio-emotional learning as part of holistic human development.

In response to this global shift, many education systems have adopted values integration frameworks that embed character formation across subject areas rather than treating it as a separate discipline. In the Philippines, the Department of Education (DepEd) institutionalized this through the K to 12 Basic Education Curriculum, which integrates core values—*maka-Diyos*, *makatao*, *makakalikasan*, and *makabansa*—across all learning areas (DepEd, 2013). This policy reflects the national commitment to holistic learner development, where values are expected to be both explicitly and implicitly embedded in classroom instruction.

Within this framework, MAPEH (Music, Arts, Physical Education, and Health) serves as a particularly significant learning area for values integration due to its experiential, performance-based, and collaborative nature. Learners in MAPEH engage in activities that naturally foster discipline, teamwork, creativity, respect, and perseverance. Lopez (2020) emphasizes that MAPEH instruction inherently promotes values formation through experiential learning, while Ramos (2021) highlights that cooperative learning strategies in MAPEH enhance social responsibility and interpersonal development. Similarly, Navarro (2021) notes that physical education contributes to resilience and self-regulation, reinforcing the role of performance-based subjects in shaping learner behavior and character.

International literature supports these findings. The OECD (2021) reports that subjects involving collaboration and active participation are particularly effective in developing socio-emotional competencies, while UNESCO (2022) underscores the importance of integrating values through lived educational experiences rather than purely theoretical instruction. These perspectives align with constructivist learning theory, which posits that learners construct knowledge and values through active engagement, interaction, and reflection rather than passive reception of information.

At this point, it is important to clarify that values integration and social-emotional learning (SEL) are closely related but not identical constructs. Values integration in the Philippine context refers specifically to the embedding of DepEd core values within subject-area instruction, whereas SEL frameworks emphasize broader psychological and behavioral competencies such as self-awareness, self-management, social awareness,

relationship skills, and responsible decision-making. In this study, SEL is used as a complementary theoretical lens to explain how values are internalized and manifested through instructional processes, classroom interactions, and learning environments.

### **Instructional Practices and Values Integration**

At the classroom level, the effectiveness of values integration is highly dependent on instructional practices. Bandura's Social Learning Theory provides a foundational explanation, asserting that learners acquire values through observation and imitation of role models, particularly teachers. Semacio et al. (2024) found that teacher modeling significantly influences students' internalization of core values, especially when educators consistently demonstrate respect, fairness, and responsibility in classroom interactions. Likewise, Naquines et al. (2025) highlight that teachers' perceptions and commitment to values integration significantly affect implementation consistency in basic education settings.

Instructional delivery strategies such as collaborative learning, learner-centered instruction, and reflective activities further strengthen values formation. Batonghinog and Osias (2024) found that differentiated instruction increases student engagement, which indirectly supports values internalization. However, Mendoza (2022) observed that implementation of values integration remains inconsistent due to workload demands, limited training, and absence of structured monitoring tools.

### **Learning Activities, Assessment, and Classroom Environment**

Learning activities play a critical role in transforming values from abstract concepts into lived experiences. Constructivist theory and Dewey's experiential learning framework emphasize that meaningful learning occurs through active participation and reflection. Meyer et al. (2024) found that reflective learning activities enhance students' responsibility, perseverance, and academic motivation, while Santos (2021) established a positive relationship between values formation and academic achievement.

However, Kalipay and Pasion (2025) observed that assessment practices in MAPEH often prioritize cognitive outcomes, with limited tools for evaluating affective and behavioral dimensions. This creates a gap between instructional intent and assessment practice, limiting the formal recognition of values development in academic evaluation systems.

Classroom management and learning environment further reinforce values integration through what is known as the hidden curriculum. This theory suggests that students learn values not only through explicit instruction but also through routines, interactions, and school culture. Reyes (2024) found that structured classroom environments significantly improve discipline and behavior, while OECD (2021) highlights that positive school climate is a strong predictor of socio-emotional development. Positive reinforcement strategies, respectful communication, and inclusive classroom environments create conditions where values are continuously modeled and reinforced.

## **Research Gap**

Despite extensive literature emphasizing the importance of values integration in education, several gaps remain. Existing studies primarily focus on general outcomes such as student behavior, engagement, and socio-emotional development (OECD, 2021; UNESCO, 2022), but often fail to examine values integration in terms of specific instructional dimensions within classroom practice.

In the Philippine context, studies such as Lopez (2020), Ramos (2021), and Reyes (2024) confirm that values are integrated in instruction; however, these studies are largely descriptive and do not establish predictive relationships between instructional implementation and student academic performance. Furthermore, while DepEd mandates explicit integration of core values, existing literature suggests that implementation is often implicit and inconsistently documented in lesson planning and assessment practices.

Another gap is the limited use of inferential statistical methods in examining values integration. Few studies have applied regression analysis to determine how instructional dimensions of values integration predict academic outcomes in MAPEH. As a result, there is insufficient empirical evidence linking instructional practice with measurable student performance.

To address these gaps, this study examines the extent of teachers' implementation of values integration in MAPEH instruction across four domains—lesson planning and preparation, instructional delivery, learning activities and assessment, and classroom management and learning environment—and determines its relationship with students' academic performance using correlation and regression analysis. This provides a more comprehensive and empirically grounded understanding of values integration as both a pedagogical practice and a predictor of learner achievement.

## **Purpose of the Study**

This study aims to determine the extent of teachers' implementation of values integration in MAPEH instruction and its relationship with students' academic performance in selected public secondary schools in the Santa Maria Central District.

## **Method**

### **Research Design**

This study employed a quantitative descriptive-correlational research design to examine the extent of values integration in MAPEH instruction and its relationship with students' academic performance. The descriptive component measured the level of implementation of values integration across four instructional domains: lesson planning and preparation, instructional delivery, learning activities and assessment, and classroom management

and learning environment. The correlational component determined the strength and direction of the relationship between values integration and academic performance, while linear regression analysis was used to identify the predictive influence of instructional practices on student outcomes.

This design is appropriate for studies aiming to determine associative and predictive relationships among naturally occurring educational variables without experimental manipulation (Creswell & Creswell, 2018).

### **Research Locale**

The study was conducted in selected public secondary schools in the Santa Maria Central District, Schools Division Office of Bulacan, Philippines, specifically Fortunato F. Halili National Agricultural School, Catmon National High School, and Sta. Cruz High School. These schools were selected due to their consistent implementation of the K to 12 curriculum and active integration of DepEd core values in MAPEH instruction.

The setting is appropriate for examining values integration due to the experiential and performance-based nature of MAPEH, which naturally facilitates affective and behavioral learning outcomes.

### **Respondents of the Study**

The respondents consisted of 20 MAPEH teachers from the selected public secondary schools during School Year 2025–2026. Purposive sampling was used to ensure that participants had direct involvement in MAPEH instruction and values integration practices.

Although the sample size is limited ( $n = 20$ ), it represents the complete population of MAPEH teachers within the selected schools in the district. Thus, the study employed complete enumeration rather than random sampling, making it appropriate for localized correlational and regression analysis.

### **Inclusion Criteria:**

Respondents were included if they:

- are licensed professional teachers,
- are currently teaching MAPEH,
- have at least one year of teaching experience, and
- are actively involved in values integration practices.

Teachers not meeting these criteria were excluded.

## **Research Instrument**

The primary data-gathering instrument was a researcher-developed questionnaire anchored on established frameworks of values education, social learning theory (Bandura, 1977), and social-emotional learning (CASEL, 2024). The instrument consisted of four domains:

1. Lesson Planning and Preparation
2. Instructional Delivery
3. Learning Activities and Assessment
4. Classroom Management and Learning Environment

Responses were measured using a **five-point Likert scale**, ranging from 1 (Not Implemented) to 5 (Very Highly Implemented).

## **Validity and Reliability (REVISED)**

Content validity was established through expert review to ensure alignment with instructional standards, values integration frameworks, and construct relevance. A pilot test was conducted with respondents who were not included in the actual sample to assess clarity and consistency of the instrument.

Reliability was determined using Cronbach's alpha coefficient. The instrument obtained an overall reliability value of  $\alpha = 0.87$ , indicating acceptable internal consistency for social science research instruments (Nunnally & Bernstein, 1994).

## **Data Gathering Procedure**

Permission to conduct the study was secured from the Schools Division Office and school principals. Coordination with school administrators ensured proper scheduling and ethical compliance.

After approval, questionnaires were administered to teacher-respondents with full orientation regarding the purpose of the study. Participation was voluntary, and informed consent was obtained prior to data collection.

Student academic performance data were retrieved from official school records with proper authorization. All data were anonymized and coded to ensure confidentiality and compliance with ethical research standards.

## **Statistical Treatment of Data**

Data were analyzed using appropriate descriptive and inferential statistical tools aligned with the research objectives.

### **1. Weighted Mean and Standard Deviation**

These were used to determine the level of implementation of values integration across the four instructional domains.

### **2. Pearson Product-Moment Correlation Coefficient (Pearson $r$ )**

This was used to determine the strength and direction of the relationship between values integration and students' academic performance.

### **3. Linear Regression Analysis**

This was used to determine the predictive influence of values integration on academic performance. The regression coefficient ( $\beta$ ), coefficient of determination ( $R^2$ ), and p-values were used to interpret effect size, explanatory power, and statistical significance.

All tests were evaluated at a **0.05 level of significance**.

### **Ethical Considerations**

Ethical standards were strictly observed throughout the study. Approval was obtained from relevant school authorities prior to data collection. Participation was voluntary, and informed consent was secured from all respondents.

Confidentiality was strictly maintained through anonymization and secure handling of data. No identifying information was disclosed in any part of the study. All procedures adhered to principles of research integrity, transparency, and responsible conduct of research.

### **Results And Discussion (Revised – Scopus Tone)**

The findings of this study indicate that values integration in MAPEH instruction is consistently implemented across all instructional domains, reflecting a well-established pedagogical orientation toward affective and socio-emotional development. However, the pattern of implementation reveals a differentiated structure in which values are more strongly embedded in classroom processes and teacher–student interactions than in formal instructional planning and assessment design.

Among the four domains examined, classroom management and learning environment emerged as the most dominant dimension. This suggests that values integration is primarily operationalized through the *hidden curriculum*, where norms, behavior modeling, and classroom climate shape learners' value internalization. This aligns with Thapa et al. (2013) and Wang and Degol (2016), who emphasize that school climate is a critical predictor of student behavior and socio-emotional development. From a

theoretical standpoint, this finding strongly supports Bandura's (1977) social learning theory, which posits that learners acquire values through observation, imitation, and reinforcement of modeled behaviors within social contexts.

Instructional delivery ranked second, indicating that teachers actively embed values through pedagogical strategies such as collaboration, modeling, and learner-centered instruction. This reinforces the constructivist view of Dewey (1938) and Vygotsky (1978), where learning is socially constructed through interaction and guided participation. The result also aligns with SEL literature, particularly Durlak et al. (2011), who found that structured, interactive learning environments significantly enhance both academic and behavioral outcomes. However, while instructional delivery is strongly implemented, its effects appear to operate more indirectly through engagement and interaction rather than direct academic prediction.

Lesson planning and preparation demonstrated relatively lower explicit integration of values compared to classroom-based practices. This indicates a persistent gap between intended curriculum and enacted curriculum. Although DepEd (2013) mandates the integration of core values across all learning areas, the findings suggest that teachers tend to operationalize values implicitly rather than systematically embedding them in instructional objectives and lesson documentation. This reflects similar concerns raised in OECD (2021), which notes that affective competencies are often prioritized in practice but underrepresented in formal planning structures.

Learning activities and assessment obtained the lowest relative implementation among the four domains, highlighting a structural limitation in the formal evaluation of values-based learning. While experiential and collaborative activities are evident, assessment practices remain largely aligned with cognitive outcomes rather than affective or behavioral competencies. This is consistent with Zins et al. (2004), who argue that SEL outcomes are difficult to measure using traditional assessment systems, often resulting in under-assessment of values-related learning.

The regression analysis further refines these findings by showing that lesson planning and classroom management significantly predict students' academic performance, whereas instructional delivery and learning activities do not exhibit direct predictive power. This suggests that structured instructional design and classroom climate function as more stable determinants of academic outcomes compared to activity-based or delivery-based strategies. Wang and Degol (2016) similarly emphasize that classroom climate exerts a stronger and more consistent influence on academic performance than isolated instructional techniques.

Notably, the non-significant predictive effect of instructional delivery may indicate mediation effects, where its influence operates through classroom environment and learner engagement rather than directly affecting grades. This supports the socio-constructivist perspective that learning outcomes are shaped by complex interactions between environment, pedagogy, and learner participation rather than single instructional variables. Overall, the findings position MAPEH as a highly suitable learning area for values integration due to its experiential, performance-based, and collaborative



nature. However, the results also reveal a structural imbalance: while values are strongly enacted in lived classroom experiences, they remain less systematically embedded in formal instructional planning and assessment frameworks. This creates a disconnect between policy expectations and classroom implementation.

From a theoretical standpoint, this study reinforces the integration of social learning theory, constructivism, and SEL frameworks in explaining values development in educational contexts. It demonstrates that values formation is not a discrete instructional outcome but a continuous process embedded in classroom ecology, teacher behavior, and peer interaction.

In terms of contribution, this study extends existing literature by empirically demonstrating that classroom management and lesson planning are key predictors of academic performance in a values-integrated MAPEH context. It also provides evidence that values integration functions more effectively through environmental and relational mechanisms than through formal instructional documentation alone.

### **Practical Implications for Instructional Policy in Basic Education**

The findings of this study have important implications for instructional policy development in basic education, particularly in strengthening the implementation of values integration within classroom practice. While values education is already embedded in the K to 12 curriculum frameworks, the results suggest that its implementation remains more evident in classroom interactions and learning environments than in formal instructional planning and assessment systems. This indicates the need for clearer policy mechanisms that translate curriculum intentions into structured and measurable classroom practices.

First, instructional policies should emphasize the explicit integration of values indicators in lesson planning templates. Although teachers demonstrate strong implicit integration of values during instruction, lesson planning remains less systematically aligned with formal values frameworks. Strengthening policy guidelines that require the explicit articulation of values-based learning outcomes in daily lesson logs or lesson plans would enhance coherence between curriculum design and classroom implementation.

Second, professional development programs should prioritize training on values-based pedagogical design and assessment strategies. The findings reveal that while teachers effectively integrate values through classroom management and instructional delivery, assessment of values-related outcomes remains limited. Policy interventions should therefore support teacher capacity-building on the development of rubrics and performance-based assessment tools that capture affective and behavioral dimensions of learning.

Third, school-level instructional supervision systems should incorporate monitoring indicators focused on values integration practices. Current supervision practices often prioritize cognitive achievement indicators; however, the results of this study highlight the importance of classroom climate and teacher behavior as significant predictors of

student performance. Embedding values integration indicators into classroom observation tools would ensure more consistent implementation across learning areas.

Fourth, curriculum policy should reinforce the role of MAPEH as a key subject for values formation due to its experiential and collaborative nature. The findings demonstrate that MAPEH provides a natural environment for values development through performance-based learning and social interaction. Strengthening its positioning within the curriculum as a core venue for socio-emotional learning would further support holistic learner development.

Finally, at the system level, educational policymakers may consider aligning values education more explicitly with social-emotional learning frameworks such as CASEL to ensure international coherence and research-based implementation. Integrating these frameworks into DepEd policy would help standardize expectations while allowing flexibility for contextualized classroom application.

Overall, these implications suggest that strengthening the explicitness, measurability, and supervision of values integration policies can enhance both instructional quality and student outcomes in basic education.

### **Limitations of the Study**

This study has several limitations that should be considered when interpreting its findings. First, the study was limited to twenty (20) MAPEH teachers from selected public secondary schools within the Santa Maria Central District. While the sample represents the complete population of MAPEH teachers in the selected schools, the small and localized sample size may limit the generalizability of the findings to other districts or regions.

Second, the study relied on self-reported data to measure the extent of values integration in instructional practices. Although measures were taken to ensure validity and reliability, self-report instruments may still be subject to response bias, including social desirability effects, which may influence how teachers perceive and report their instructional practices.

Third, the study utilized a cross-sectional research design, which captures data at a single point in time. As a result, the findings establish predictive relationships rather than causal conclusions between values integration and students' academic performance.

Fourth, the study focused exclusively on MAPEH as a subject area. Therefore, the findings may not fully represent values integration practices in other learning areas, which may have different instructional structures and assessment approaches.

Despite these limitations, the study provides useful empirical evidence on how values integration operates within classroom instruction and its relationship with academic performance in a specific educational context.

## Conclusion

The study concludes that values integration in MAPEH instruction is strongly implemented but unevenly distributed across instructional domains. Classroom management and learning environment play a central role in both values formation and academic performance, while lesson planning contributes significantly to predictive outcomes. However, assessment practices remain underdeveloped in capturing affective learning outcomes. Overall, values integration functions as part of a broader instructional ecosystem that influences learner achievement through classroom climate and instructional design. Strengthening explicit curriculum alignment and values-based assessment mechanisms is necessary to enhance coherence between instructional intentions and measurable learning outcomes.

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# TEACHER MOTIVATION, EXPANDED CAREER PROGRESSION AND LEADERSHIP TRANSPARENCY AMONG JUNIOR HIGH SCHOOL TEACHERS: A CONVERGENT PARALLEL MIXED METHODS DESIGN

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## Abstract

This study investigates how the Expanded Career Progression System and Leadership Transparency jointly influence the motivation of Junior High School teachers in the Division of Agusan del Sur, Philippines. Anchored in Self-Determination Theory and grounded in a convergent parallel mixed methods design, the study combines a stratified random survey of 325 public Junior High School teachers across 13 municipalities with a nested purposive sample in qualitative phase involving 50 teachers in 20 in-depth interviews and five focus group discussions of six participants each. Quantitative findings reveal a high teacher motivation composite mean of 4.07 on a five-point Likert scale, yet expose a structural bottleneck in which 84.6 percent of respondents remain concentrated in the Teacher I to Teacher III rank classifications and 66.15 percent hold postgraduate credentials that the legacy promotion system did not reward. Expanded Career Progression correlated strongly with extrinsic motivation ( $r = 0.733$ ) and moderately with intrinsic motivation ( $r = 0.639$ ), while Leadership Transparency produced a moderate correlation with administrative confidence ( $r = 0.341$ ). Two regression models yielded a critical asymmetry: intrinsic motivation predicted trust in leadership positively ( $\beta = 0.624$ ), and extrinsic motivation predicted it negatively ( $\beta = -0.178$ ). Qualitative findings produced four themes — Professional Validation as Visible Horizon, Transparency as Ethical Lubricant, the Two-Track System paradox, and the Skepticism Pattern — that converge with, complement, and explain the statistical anchors. The integrated meta-inference demonstrates that Expanded Career Progression operates as the engine of motivation while Leadership Transparency operates as the ethical catalyst that converts structural reform into genuine psychological engagement. The study recommends that the Division institutionalize a Transparency Dashboard in every school, scale career-mapping clinics, and protect the intrinsic-motivation climate in parallel with the rollout of the new twelve-track Classroom Teaching Career Line. The findings contribute empirical evidence from a Philippine provincial division to the global literature on teacher motivation, career reform, and leadership transparency, and offer actionable institutional recommendations for converting high but fragile motivation into stable professional engagement.

**Keywords:** teacher motivation, expanded career progression, leadership transparency, Self-Determination Theory, convergent mixed methods

## Introduction

Teacher motivation is widely recognized as the engine of instructional quality across cultures. The most robust contemporary account of this phenomenon comes from Self-Determination Theory, which demonstrates that teacher engagement flourishes when three fundamental psychological needs — autonomy, competence, and relatedness — are satisfied. Spilt et al (2011). established that teacher wellbeing and professional engagement are fundamentally rooted in the satisfaction of these needs. Jansen in de Wal et al (2014). further showed how teachers whose competence is validated through recognized advancement develop autonomous motivation and report higher job satisfaction. Gorges et al. (2022) demonstrated that when workplace conditions frustrate these needs, teachers drift toward controlled motivation or amotivation, increasing the risk of burnout and disengagement. Goal conflicts within the teaching profession are therefore best understood through a research lens that accounts for both the satisfaction of autonomy and the structural barriers present in the school environment.

The Philippine teaching profession has historically suffered from a severe career plateau. Aguja and Ortega-Dela Cruz (2026) confirmed that most public-school teachers remain concentrated in the Teacher I–III ranks, often for over a decade, with many never advancing despite significant postgraduate investments. Millena (2026) and Aguja and Ortega-Dela Cruz (2026) further reported that stagnation is compounded by excessive documentation, perceived favoritism, and unclear evaluation criteria in promotion processes, a finding reinforced by Osman and Adanza (2024). The resulting frustration has driven teacher migration toward overseas opportunities offering better compensation and structured recognition, as Blase and Naanep documented in their phenomenological study.

The enactment of Executive Order No. 174, s. 2022, and its operationalization through DepEd Order No. 034, s. 2025, aligned with the Philippine Professional Standards for Teachers and Republic Act No. 11713, marks a watershed moment for Filipino teachers. The reform introduces twelve position classes: Teacher I through Teacher VII and Master Teacher I through Master Teacher V, allowing classroom teachers to advance professionally without leaving instructional work. As described by Osman and Adanza (2024), this structural promise constitutes a watershed moment. Nevertheless, the system's success is not automatic. Millena (2026) and Osman and Adanza (2024) found that teachers remain concerned about unclear evaluation criteria, workload burdens, and the fairness of localized implementation. Aguja and Ortega-Dela Cruz (2026) likewise noted that the volume of compliance documentation continues to overwhelm classroom teachers even under the new system.

Agusan del Sur is a landlocked province in the Caraga Region, encompassing both urban municipal centers and remote, geographically isolated barangays. The Division employs thousands of Junior High School teachers serving Grades 7 to 10, including educators who have invested in master's and doctoral studies yet remain at lower rank classifications. Aguja and Ortega-Dela Cruz (2026) identified this concentration of academic ambition within a constrained career structure as a latent reservoir of expertise that the Expanded Career Progression System is specifically designed to unlock. Yet how

teachers in this provincial division perceive the new system, and how the transparency of their school heads shapes their daily motivation, remains empirically undocumented. This dissertation investigates the influence of Expanded Career Progression and Leadership Transparency on the motivation of Junior High School teachers in the Division of Agusan del Sur using a convergent parallel mixed methods design.

Career-growth reforms alone cannot guarantee sustained motivation if administrative behavior is opaque. International evidence consistently demonstrates that unclear school leadership erodes trust and weakens reform outcomes, as established by Meriç and Öz (2025) and further developed by Zuo (2025). Transparent communication reduces ambiguity, strengthens teachers' confidence in administrative decisions, and fosters a greater sense of organizational justice, as shown by Handford and Leithwood (2013) and by Zuo (2025). Authentic and honest school leaders who openly share decision-making rationales build the ethical climate necessary for teachers to commit emotionally to the school's mission, a principle confirmed by Meriç and Öz (2025) and by Zuo (2025). When leadership practices vary unpredictably from one school to another, a transparency gap emerges that was described by Meriç and Öz (2025), leaving teachers to rely on the personal ethics of individual principals rather than on an institutionalized standard.

Three converging methodological and theoretical reasons justify the chosen design. First, teacher motivation is a multidimensional construct that, under Self-Determination Theory, exists along a continuum from amotivation through extrinsic regulation to intrinsic motivation, and a single methodological lens cannot adequately capture how teachers experience both the structure of career pathways and the behavior of their school heads. Second, as emphasized by Spilt et al.(2011) and Gorges et al. (2022), teacher wellbeing and professional engagement are fundamentally rooted in the satisfaction of basic psychological needs, making a multi-dimensional approach essential. Third, the documented inconsistency of leadership transparency across Philippine schools, as described by Meriç and Öz (2025) and revealed by Zuo (2025), requires a methodology capable of holding both numerical patterns and lived meanings within the same analytical frame. By collecting quantitative survey data and qualitative narrative data concurrently, the study generated meta-inferences that aligned statistical trends with the lived experiences of the educators involved.

The quantitative phase addressed the current levels of motivation, Expanded Career Progression, and Leadership Transparency; the relationships between these organizational variables; and their joint predictive power on teacher motivation. The qualitative phase explored the lived experiences of Junior High School teachers regarding how Expanded Career Progression and Leadership Transparency jointly influence their professional motivation. The integration phase converted merged findings into specific, actionable recommendations for the Division of Agusan del Sur.

The qualitative analysis followed the systematic six-phase thematic procedures articulated by Braun and Clarke (2006). Trustworthiness was enforced through the four criteria established by Lincoln and Guba (1985), namely credibility, transferability, dependability, and confirmability. The final integration of the two data strands was guided by the convergent parallel merging model described by Fetters et al., aligning



quantitative anchors with qualitative counterparts in a Joint Display Matrix. The convergent parallel mixed methods design therefore positioned the study to produce evidence that is simultaneously statistically rigorous and contextually rich, responsive to the unique conditions of the province and aligned with the structural promise of the new twelve-track career system described by Osman and Adanza (2024).

## **Method**

**Research Design.** The study employed a mixed methods approach using a convergent parallel research design, examining how Expanded Career Progression and Leadership Transparency jointly influence the motivation of Junior High School teachers in the Division of Agusan del Sur. This design collected quantitative and qualitative data concurrently, analyzed each strand independently using procedures appropriate to each paradigm, and then merged the two strands at the point of interpretation to produce a more comprehensive understanding than either approach could yield in isolation. The convergent parallel integration followed the merging procedure described in the joint display matrix framework, which renders both the statistical anchors and the narrative meta-inferences traceable to their source data.

**Theoretical Framework.** The study was anchored in Self-Determination Theory, with particular attention to the Cognitive Evaluation Theory subdomain, which addresses how external rewards and structural conditions interact with intrinsic motivation, and to Basic Psychological Need Theory, which identifies autonomy, competence, and relatedness as the universal nutrients of human motivation. The classification system of teacher motivational behaviors grounded in Self-Determination Theory interventions provided the analytic vocabulary for translating observed leadership behaviors into motivational-supportive or motivation-undermining categories. The recent emphasis on teacher structural classification systems for motivation informed the framing of Expanded Career Progression as the structural engine of motivation, while the leadership transparency literature provided the framing of Leadership Transparency as the administrative catalyst that protects the engine from erosion through distrust.

**Research Setting.** The study was situated within the Division of Agusan del Sur, targeting a total population of 6,329 Junior High School teachers distributed across 13 municipalities.

**Quantitative Sampling and Participants.** The quantitative sample of 325 was drawn from the eligible population of 6,329 Junior High School teachers using Raosoft's sample-size calculation (5% margin of error, 95% confidence, 50% response distribution).

**Qualitative Sampling and Participants.** The qualitative sample of 50 was drawn independently from a purposively selected set of six schools — Agusan del Sur National High School, Prosperidad National High School, Trento National High School, Loreto National High School, San Luis National High School, and Esperanza National High School — using maximum-variation and criterion sampling on years of service,

professional roles, leadership experiences, and geographical context. Participants were purposively chosen to maximize variation on rank classification, years of service, municipality of assignment, and academic credentials, in order to validate and enrich the quantitative findings by sharing their insights and lived experiences.

**Instruments.** The researcher utilized a survey instrument anchored in the motivational profiles explored in teacher professional engagement research and the transparency frameworks for school administration. The items measuring Expanded Career Progression captured perceived recognition, rank fairness, and academic-credential utilization. The items measuring Leadership Transparency captured relational openness, fiscal disclosure, and operational transparency, anchored in the leadership transparency and organizational trust literature. The items measuring Teacher Motivation captured intrinsic motivation, identified regulation, introjected regulation, and external regulation, following the validated subscales of the Work Tasks Motivation Scale for Teachers, whose five-subscale reliability coefficients range from  $\alpha = 0.77$  to  $\alpha = 0.92$  across cultural adaptations. Validation evidence for the Motivation for Teaching Scale in secondary-education populations confirmed that the factor structure holds in school-based contexts similar to the present study. The interface between motivational and emotional facets of organizational commitment among instructors in higher-education settings provided additional conceptual grounding for the commitment-related items. Face validity and content validity of the locally adapted instrument were established through expert review yielding a Content Validity Index of 0.89, and internal consistency reliability was confirmed through Cronbach's Alpha values ranging from 0.87 to 0.91 across subscales. The qualitative interview protocol was semi-structured and was developed to elicit participant narratives about each of the three target constructs while allowing sufficient flexibility for participant-driven elaboration.

**Data Collection.** Quantitative data were gathered through paper-and-pen and digital survey administration in coordination with school heads across the 13 municipalities. Hybrid deployment, using both physical distribution in urban centers and mobile-google forms in remote barangays, made it possible to include teachers in geographically isolated stations that had historically been excluded from division-wide research. Qualitative data were gathered through audio-recorded in-depth interviews and focus group discussions conducted by the researcher and a trained research assistant; participant anonymity was protected through alphanumeric coding, given that promotion-related concerns can trigger administrative sensitivity in local hierarchies.

**Data Analysis.** Quantitative data were analyzed using descriptive statistics, Pearson product-moment correlation, and standard multiple regression analysis. Two regression models were tested: the first examined Expanded Career Progression as the criterion with Intrinsic and Extrinsic Motivation as simultaneous predictors, and the second examined Leadership Transparency as the criterion with the same two motivational predictors. Both models were interpreted at a significance threshold of  $p < 0.05$ . Qualitative data were analyzed using the six-phase reflexive thematic analysis framework articulated by Braun and Clarke, which proceeds through data familiarization, initial coding, theme identification, theme review, theme definition, and report production. Subsequent elaborations on reflexive thematic analysis guided the iterative refinement of themes, and

the step-by-step thematic analysis procedure used to develop conceptual models in qualitative research provided additional procedural detail for the systematic identification of sub-themes. Inter-rater reliability between two trained coders was confirmed through Cohen's kappa calculation on 20 percent of the transcripts, yielding  $\kappa = 0.87$ , indicating strong agreement beyond chance. Saturation was monitored using the procedural model in which thematic repetition across three consecutive interviews or focus groups signals those new codes are unlikely to emerge; saturation was reached by the 14th IDI and the 6th FGD, with the remaining six interviews and four focus groups confirming rather than expanding the existing codebook.

**Ethical Considerations.** Informed consent was secured from every participant, alphanumeric coding was employed to maintain anonymity, data security was maintained through encrypted storage, and member-checking was conducted to verify that the narratives of the 50 qualitative participants accurately reflected their lived experiences. All procedures complied with the Data Privacy Act of 2012 and the ethical guidelines for educational research. Trustworthiness of the qualitative strand was established through the four criteria of credibility, transferability, dependability, and confirmability. Credibility was reinforced through member checking, triangulation of data sources, peer debriefing, systematic documentation, and the use of thick description from the 50 qualitative participants. Transferability was supported by comprehensive descriptions of the research context, including the stratified profile of the 325 respondents and the geographic distribution of schools across the Division of Agusan del Sur. Dependability was established through the audit trail maintained across the integration phase, the consistent application of the convergent parallel mixed methods design, and the convergent parallel merging procedure that made both the quantitative correlations and the qualitative meta-inferences traceable to their source data. Confirmability was strengthened by transparent documentation and by adherence to strict informed consent, confidentiality, alphanumeric coding, encrypted data storage, and respect for the autonomy of all 325 survey respondents and 50 qualitative participants.

## **Results**

The results are presented in three parts: the quantitative baseline and inferential findings, the qualitative thematic findings, and the integrated mixed methods meta-inferences through the joint display matrix.

### **Part 1: Quantitative Findings.**

*Baseline Levels.* A total of 325 public Junior High School teachers from the 13 municipalities of the Division of Agusan del Sur participated in the quantitative phase. The descriptive analysis showed that all three major variables in the study registered at the Agree level of the five-point Likert scale, but with different patterns of consistency and variability across schools.

Teacher Motivation recorded a composite mean of 4.07 with a notably large standard deviation of 2.87. The statistically anomalous magnitude of this standard deviation relative to the five-point scale renders the dispersion measure directional rather than precise, and likely reflects indicator-total aggregation prior to scale standardization; the high mean, however, unambiguously indicates that Junior High School teachers in the Division remain committed to their classrooms and students despite the structural and administrative challenges they face. The 4.07 mean score reveals a workforce anchored in professional dedication rather than simply institutional reward.

Expanded Career Progression recorded a composite mean of 3.93 with an analogous anomalous standard deviation of 2.69. The mean indicates that teachers perceived the new twelve-track system as a meaningful development, while the dispersion—anomalous as it is in literal magnitude—signaled heterogeneity across schools in how the reform was being communicated and implemented.

Leadership Transparency recorded the lowest composite mean of the three variables, at 3.60, accompanied by a standard deviation of 4.04. This standard deviation, the largest of the three variables, indicated far greater variability in transparency across school sites than in motivation or career-progression perceptions. The standard deviation, again anomalously large for the five-point scale, rendered the dispersion estimate directional rather than precise; nevertheless, the qualitative phase was specifically designed to investigate this variability, as the dispersion signals equitable versus inequitable leadership behavior across the division.

A critical demographic and structural finding emerged from the rank-distribution analysis: 84.6 percent of the teacher-respondents remained concentrated in the Teacher I to Teacher III rank classifications at the time of data collection, documenting the historical stagnation that prompted the policy reform. Concurrently, 66.15 percent of the sample had already invested in postgraduate credentials that the legacy promotion system had not rewarded. The workforce profile further revealed that 67.7 percent of respondents were below 40 years of age, identifying the demographic cohort at greatest risk of career stagnation and therefore most directly affected by the new system.

*Correlations.* The Pearson product-moment correlation analysis produced three notable coefficients. Expanded Career Progression correlated strongly and positively with Extrinsic Motivation ( $r = 0.733$ ), indicating a large association. Expanded Career Progression correlated moderately and positively with Intrinsic Motivation ( $r = 0.639$ ), again indicating a meaningful association between perceived career-track availability and intrinsic dedication. Leadership Transparency correlated moderately and positively with administrative confidence ( $r = 0.341$ ).

*Regression Analysis.* The study applied standard multiple regression analysis with two models.

The first regression model, with Expanded Career Progression as the criterion and the two motivational predictors entered simultaneously, accounted for 53.9 percent of the variance in perceived career-track availability. The coefficient of determination was  $R^2 =$

0.539, with  $F = 188.41$  and  $p < 0.001$ , indicating a highly significant model. Within this model, Extrinsic Motivation emerged as the dominant predictor, with a standardized beta of 0.655 at  $p < 0.001$ , while Intrinsic Motivation produced a standardized beta of 0.093 that did not reach statistical significance at  $p = 0.173$ . The interpretation is that teachers driven primarily by rank and external reward are the teachers most sensitive to the existence and quality of the new career tracks.

The second regression model, with Leadership Transparency as the criterion, accounted for 23.6 percent of the variance in teacher perceptions of leadership behavior.  $R^2 = 0.236$ ,  $F = 49.79$ , and  $p < 0.001$  established significance. Within this model, Intrinsic Motivation emerged as the strong positive predictor, with a standardized beta of 0.624 at  $p < 0.001$ , meaning that teachers with deep internal commitment to the profession and to their students are naturally more inclined to trust their school heads and to perceive fairness even in imperfect administrative conditions. Extrinsic Motivation emerged as a statistically significant negative predictor, with a standardized beta of -0.178 at  $p = 0.044$ . The negative coefficient reveals what the study labels the Skepticism Pattern: teachers whose motivation is dominated by external rewards (promotion, salary, rank) tend to be more critical of their school leadership, not because they are untrusting by personality, but because they are more attentive to procedural fairness because the personal and professional stakes of administrative decisions are higher for them.

The contrast between the two models produces an insight that becomes a central thread of the integrated discussion. Intrinsic motivation is the backbone of trust in leadership, while extrinsic motivation is a force that drives career ambition on one hand and drives organizational skepticism on the other. A balanced motivational ecosystem must therefore satisfy both sides: career progression opportunities satisfy externally driven teachers, while consistent and fair leadership transparency satisfies internally driven teachers.

## Part 2: Qualitative Findings.

The qualitative strand, involving 20 in-depth interview participants and 30 focus group discussion members organized into five groups of six each, produced four themes that give rich human depth to the statistical results.

*Theme 1 – Professional Validation as the Visible Horizon.* Across the interviews and focus groups, teachers described the new career stages of Teacher IV through Teacher VII not as a mere promotion track but as recognition that their years of classroom expertise matter. Participants shared that remaining at the Teacher III rank for over a decade felt like a silent rejection of their professional worth. The emergence of a visible horizon through the twelve-track system gave participants a sense that the exhaustion of teaching is worth sustaining. Others emphasized that diverse pathways motivate teachers because promotion is now possible without leaving the classroom. The first theme finds convergent support in the strong correlation between Expanded Career Progression and Extrinsic Motivation ( $r = 0.733$ ): the numbers show how much career progression drives motivation, and the narratives explain that it drives motivation because it validates professional identity. The narratives illuminated the FIT-Choice framework's central

proposition that teacher motivation is anchored to the recognition of professional worth. Comparisons with preservice teacher motivations in the United States and China, where social-utility values and intrinsic career value consistently outranked extrinsic returns, also illuminated the present finding that mid-career teachers respond strongly to formal recognition once the intrinsic commitment has been established.

*Theme 2 – Transparency as the Ethical Lubricant.* Participants spoke about transparency as the foundation of trust between the school administration and the teaching force. Transparency, in their narratives, carried moral valence: openness was described using the language of fairness, honesty, and respect, not merely the language of procedural compliance. The high standard deviation of Leadership Transparency corresponded directly with a sub-theme of Equity and Inclusivity: the wide statistical spread was the lived experience of teachers in schools whose school heads communicated inconsistently, disclosed personnel decisions inconsistently, and disclosed financial decisions inconsistently. The numerical dispersion therefore acts as a substantively meaningful marker of inequality across schools, and must be addressed as such. This second theme finds convergent support in the moderate correlation between Leadership Transparency and administrative confidence ( $r = 0.341$ ) and aligns with the established finding that understanding why teachers trust school leaders requires close examination of specific administrative behaviors and perceived integrity.

*Theme 3 – The Two-Track System.* The combination of the high postgraduate-credential prevalence (66.15 percent) and the rank distribution concentrating 84.6 percent of teachers in the lower three classifications manifested in participant narratives as concern about a two-track system: those with graduate credentials able to access the new career line, while those without such credentials would remain at the legacy ranks. Participants emphasized that without intervention, the Division would operate two parallel systems, with consequences for morale, equity, and collaborative culture. The triangulation of the qualitative two-track theme with the statistical finding that 67.7 percent of the workforce is below 40 years of age — the cohort at greatest risk of stagnation — sharpened the policy urgency.

*Theme 4 – The Skepticism Pattern.* The fourth qualitative theme validated the negative regression coefficient between extrinsic motivation and perceived leadership transparency. Promotion-driven teachers spontaneously described their heightened attention to administrative correspondence, promotion memos, and personnel decisions, recognizing in their own narratives that heightened stakes lead to heightened scrutiny. The pattern corresponds with the Cognitive Evaluation Theory subdomain of Self-Determination Theory, which predicts that externally-regulated motivation can introduce perceptual vigilance toward authority figures. The motivational behavior literature documents that when extrinsic motivators dominate the motivational climate, intrinsic trust can be undermined unless the autonomy-supportive context is actively protected.

### Part 3: Integrated Mixed Methods Meta-Inferences.

Following the joint display matrix approach, the study integrated the quantitative anchors and qualitative themes to produce meta-inferences that reveal how numerical patterns

and lived narratives interact at a deeper level. The integrated Joint Display Matrix is presented in Table 1.

Table 1. Joint Display Matrix: Convergence of Quantitative Anchors and Qualitative Themes

| <b>Research Question</b>                                         | <b>Quantitative Anchor</b>                                                                                | <b>Qualitative Theme</b>                                                      | <b>Meta-Inference</b>                                                                  |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. What is the current level of teacher motivation?              | Composite mean M = 4.07; intrinsic M = 4.21 (subscale); extrinsic M = 3.93 (subscale)                     | "Tired but love teaching" pattern across FGDs 2 and 3                         | High statistical motivation converges with narrative professional commitment           |
| 2. What is the perceived extent of Expanded Career Progression?  | Composite mean M = 3.93; 84.6 percent in Teacher I–III ranks; 66.15 percent hold postgraduate credentials | Professional Validation as the Visible Horizon                                | Career-track perceived as horizon, but rank bottleneck persists                        |
| 3. What is the perceived level of Leadership Transparency?       | Composite mean M = 3.60; largest dispersion of the three variables                                        | Ethical Lubricant with Equity and Inclusivity sub-theme                       | Transparency carries moral valence and varies sharply across schools                   |
| 4. Relationship between ECP and motivation?                      | $r_{\text{Extrinsic}} = 0.733$ (large); $r_{\text{Intrinsic}} = 0.639$ (moderate)                         | Theme 1 directly declares ECP as professional validation                      | ECP energizes both intrinsic and extrinsic motivation, with larger effect on extrinsic |
| 5. Relationship between Transparency and motivation?             | $r = 0.341$ (moderate) with administrative confidence                                                     | Theme 2 directly declares transparency as ethical foundation                  | Transparency sustains trust through moral rather than procedural channels              |
| 6. Joint predictive power of ECP and Transparency on motivation? | $R^2 = 0.539$ for ECP; first model significant at $p < 0.001$                                             | Both themes directly attribute motivational change to career and trust reform | ECP explains more variance than Transparency in motivation                             |
| 7. Lived experiences of teachers?                                | $n = 50$ participants; 20 IDIs and 5 FGDs of 6                                                            | Four themes integrated with statistical anchors                               | Career pathways and transparency operate as a coupled motivation ecosystem             |
| 8. Actionable recommendations?                                   | Two regression models generating role-asymmetrical insights                                               | Two-Track System and Skepticism                                               | Recommend dual-track Dashboard                                                         |

| Pattern<br>intervention gaps | identify<br>and | Clinic<br>intervention |
|------------------------------|-----------------|------------------------|
|------------------------------|-----------------|------------------------|

The joint display matrix made the integrative insight explicit: Expanded Career Progression is the engine that energizes motivation, while Leadership Transparency is the catalyst that protects the engine from being eroded by distrust. Both operate in the division. The critical observation is that transparency carries the greater dispersion and therefore constitutes the most fragile pillar in the system. Without a transparent foundation, even a structurally attractive career system will be viewed with suspicion, because teachers will not trust that the institutional machinery used to grant the new ranks is fair.

## Discussion

The integrated findings address three substantive theoretical and policy issues: the structural dynamic between career reform and motivation, the asymmetric role of motivational orientation in shaping teacher perceptions of leadership, and the implications of these dynamics for the institutional architecture of a Philippine provincial division.

The Career-Motivation Pathway. The strong correlation between Expanded Career Progression and Extrinsic Motivation ( $r = 0.733$ ) and the moderate correlation with Intrinsic Motivation ( $r = 0.639$ ) confirm that the new position classes energize both dimensions of teachers' motivational drives. The qualitative theme of Professional Validation as the Visible Horizon provides the explanatory mechanism: career progression symbolizes the recognition of long-suppressed expertise. A relevant precedent in the global literature is the finding that teachers worldwide report high intrinsic commitment but require structural promotion pathways to sustain long-term engagement, and the present Agusan del Sur data corroborate this pattern at a mid-career stage. Furthermore, comparative FIT-Choice studies between the United States and China have documented the consistent primacy of social-utility and intrinsic career values across cultures, lending cross-cultural robustness to the present observation that recognition is the operative driver behind the Philippine correlation.

The dominance of Extrinsic Motivation in the first regression model ( $\beta = 0.655$ ) is consistent with the SDT prediction that the introduction of a new externally regulated reward system will most readily mobilize teachers whose motivational profile is already externally regulated. The non-significant coefficient for Intrinsic Motivation in predicting Expanded Career Progression perception ( $\beta = 0.093$ ,  $p = 0.173$ ) does not imply that intrinsic motivation is unimportant; rather, it implies that intrinsic motivation is less differentially sensitive to the formal structure of an externally regulated promotion system than extrinsic motivation is. Intrinsically motivated teachers maintain their engagement regardless of whether the formal career structure rewards them, because their primary satisfaction comes from the act of teaching itself.



The Transparency–Trust Pathway. The moderate but qualitatively rich correlation between Leadership Transparency and administrative confidence ( $r = 0.341$ ) suggests that statistical effect sizes alone may understate the operational significance of transparency in Philippine school contexts. The qualitative Ethical Lubricant theme reveals that transparency operates in a moral register: when teachers perceive openness, they describe it using the language of fairness, honesty, and respect, not merely procedure. This pattern is consistent with the documented relationship between leadership transparency and organizational trust, in which understanding why teachers trust school leaders requires close examination of specific administrative behaviors and perceived integrity. The unusually wide dispersion in transparency perceptions documented in the present study signals that transparency remains, in practical terms, personality-dependent rather than system-driven across the divisional schools, making leadership behavior the most urgent priority for institutional reform.

The Skepticism Pattern produced by the negative coefficient ( $\beta = -0.178$ ) at  $p = 0.044$  offers one of the most theoretically productive findings of the study. The documented finding that extrinsic motivation is associated with transparency perceptions; the cross-sectional design does not establish directional ordering - magnifying scrutiny of administrative actions when promotional stakes are high — extends the SDT framework into the dynamic-equilibrium subdomain. This finding is consistent with the Cognitive Evaluation Theory subdomain, which predicts that externally regulated motivation can introduce perceptual vigilance toward authority figures. The qualitative Skepticism Pattern theme directly validates the statistical coefficient: promotion-driven teachers in Agusan del Sur, when asked to reflect on their own scrutiny of administrative actions, spontaneously described heightened attention to memos, timelines, and personnel decisions, illustrating that they are more, not less, attentive to procedural fairness as their stakes increase.

The contrast between the two regression models yields an actionable framing for the institutional architecture of the Division. Intrinsic motivation is the backbone of trust in leadership, while extrinsic motivation fuels career ambition on one hand and organizational skepticism on the other. A balanced motivational ecosystem must simultaneously satisfy both sides: career progression opportunities satisfy externally driven teachers, while consistent and fair leadership transparency satisfies internally driven teachers. This dual-satisfaction requirement is consistent with recent SDT-informed teacher-motivation research that emphasizes the protective effect of intrinsic motivation against emotional exhaustion and disengagement, especially under conditions of educational reform.

Implications for Theory and Practice. The study extends the global teacher-motivation literature into a Philippine provincial setting. The findings demonstrate that Self-Determination Theory applies meaningfully to Philippine school-reform contexts when embedded within career-progression and leadership-transparency architectures. The classification system of teacher motivational behaviors grounded in SDT provides a vocabulary for the field-based application of these findings: school heads must operate as stewards of both career development and ethical transparency, not as one or the other.

The comparative dimension of the present study's contribution is significant. The Work Tasks Motivation Scale for Teachers, as validated in cross-cultural teacher populations with Cronbach's Alpha values ranging from 0.77 to 0.92 across five subscales, demonstrates that the relational pattern of ECP–Motivation operates consistently across Dutch, Canadian, Spanish, and now Philippine cultural contexts. The Motivation for Teaching Scale, validated in secondary-education populations, and the organizational-commitment framework applied to higher-education instructors collectively confirm that the psychometric and theoretical bases of the present study align with established international validation. The COVID-19 teacher-motivation literature additionally established that remote-teaching contexts produced divergent responses depending on the consistency of leadership communication, a finding consistent with the present study's identification of transparency as a protective factor against erosion of motivation. International teacher-motivation research synthesis further confirms that the proposed dual-track pathway (career structural reform + transparency culture) aligns with patterns identified across diverse educational systems.

**Actionable Recommendations.** Based on the integrated meta-inferences, the study formulates four actionable recommendations for the Division of Agusan del Sur.

First, institutionalize a Transparency Dashboard in every school, with the Division Office and School Heads as joint accountable units. The Dashboard's anchor metric should be the public posting of promotion timelines, budget allocations, and decision rationales. This recommendation directly addresses the Ethical Lubricant theme and the wide dispersion in transparency perceptions.

Second, scale the Career-Mapping Clinics to every school. School Heads and the Human Resource Management unit should conduct baseline profiling in Year 1, quarterly mapping updates with peer mentoring in Year 2, and embedding in the School Improvement Plans and Annual Implementation Plans in Year 3. This recommendation directly addresses the Visible Horizon theme and the Two-Track System concern.

Third, protect the Intrinsic-Motivation Climate through school head practices. School Heads should conduct annual transparency training, recognize teaching excellence publicly, establish teacher-voice forums, and designate an annual Purpose Day as a reflection and recognition activity. This recommendation directly addresses the Skepticism Pattern by reducing the perception-filtering effect of extrinsic-dominant motivation.

Fourth, remediate the Two-Track System concern through a promotion-matrix reformulation. The Division Office should audit promotion timelines, identify stalled cases, and reformulate the matrix to formally recognize graduate credits and classroom-based leadership contributions. This recommendation directly addresses the academic-ambition paradox documented in the 66.15 percent postgraduate credential prevalence and the 84.6 percent rank-bottleneck finding.

**Limitations.** This study carries seven specific limitations. First, the cross-sectional design precludes causal inference; the relationships documented are associational rather than

causal. Second, self-report Likert instruments introduce acquiescence and social-desirability bias, particularly on sensitive items about leadership. Third, geographically isolated barangays in the division were underrepresented despite strategic sampling effort. Fourth, the locally constructed Expanded Career Progression Scale, although internally consistent with Cronbach's Alpha values ranging from 0.87 to 0.91, awaits further validation across other Philippine divisions. Fifth, the qualitative sample of 50 from 325 quantitative respondents limits interpretive breadth. Sixth, the regression analyses assume linear relationships only and do not capture potential interaction effects among the three variables. Seventh, data were collected during the early rollout of the Career Line, so perceptions may evolve as the policy matures; longitudinal re-evaluation is necessary. The anomalously large standard deviations reported in the descriptive statistics, attributable most likely to indicator-total computational procedures, render the dispersion measures directional rather than precise; readers should interpret them as evidence of heterogeneity rather than as exact numeric bounds.

**Conclusion.** The convergent parallel mixed methods investigation has established that Junior High School teachers in the Division of Agusan del Sur are highly motivated yet structurally constrained. The Expanded Career Progression System energizes both intrinsic and extrinsic motivation, supported by strong empirical correlations and convergent narrative themes. Leadership Transparency functions as the ethical substrate of motivation, with statistically moderate but qualitatively profound effects. The Skepticism Pattern identified by the regression confirms that motivation operates as a perception filter. The theoretical implication is that Self-Determination Theory applies meaningfully to Philippine school-reform contexts when embedded within career-progression and leadership-transparency architectures. The policy implication is that the Career Line must be paired with a Transparency Dashboard to produce stable motivational outcomes. The practical implication is that school heads must operate as stewards of both career development and ethical transparency if the Division is to convert its high but fragile motivation into institutional stability.

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# **BRIDGING THE GAP: INVESTIGATING THE EFFECTS OF LIMITED PARENTAL INVOLVEMENT ON LEARNERS' PERFORMANCE IN KINDERGARTEN**

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## **Abstract**

This study examines the effects of limited parental involvement on the academic and holistic performance of kindergarten learners at Tagbaya Elementary School, Ibajay, Aklan. It addresses the gap created by socio-economic constraints, demanding work schedules, and other barriers that hinder active parental participation in early childhood education. A quantitative, non-experimental correlational design was employed. Data were gathered during the academic year 2025–2026 from 18 kindergarten learners and their parents, selected through purposive sampling. A self-developed Parental Involvement Questionnaire (PIQ) measured three dimensions of parental engagement—home-based support, school participation, and parent-teacher communication—while learner performance was assessed in terms of academic readiness, social development, and behavioral self-regulation. Findings revealed that parents, despite poverty and time constraints, demonstrated high levels of involvement, particularly in home-based learning and communication with teachers. Learners achieved very satisfactory outcomes in academic readiness and social development, though behavioral self-regulation remained a relative weakness. Statistical analysis confirmed a significant positive correlation between parental involvement and learner performance ( $r = 0.639$ ,  $p < 0.01$ ), with academic achievement most strongly linked to parental engagement. The study concludes that parental involvement is foundational to learner success, helping to bridge socio-economic challenges and foster educational achievement. It underscores the need for sustained parent-school partnerships, targeted interventions for behavioral development, and policies that reduce structural barriers to engagement.

**Keywords:** Parental involvement, Kindergarten learners, Academic readiness, social development, Behavioral self-regulation.

## **Introduction**

This study investigates the impact of limited parental involvement on kindergarten learners at Tagbaya Elementary School, Ibajay, Aklan, highlighting how socio-economic constraints, demanding work schedules, and lack of awareness hinder engagement.

Globally and nationally, research shows that parental involvement is crucial for early childhood success, yet barriers persist, particularly in rural and seasonal work contexts. Locally, teachers report that children with less parental support struggle with literacy, homework, and behavior, while those with engaged parents perform better. Anchored on Bronfenbrenner's Bioecological Systems Theory, the study views parental involvement as influenced by interconnected systems—home, school, community, and broader cultural factors—requiring holistic interventions. It also employs the Input-Process-Output (IPO) Model to analyze parental demographics, extent of involvement, and learner outcomes in literacy, numeracy, social development, and behavior. The research aims to identify manifestations of limited involvement, its effects, and barriers, while proposing evidence-based recommendations to strengthen home-school-community partnerships. The scope is limited to kindergarten learners in Tagbaya Elementary School, with findings specific to this context, offering valuable insights into parent-child-school dynamics but not generalizable to other grade levels or schools.

## **Method**

The study employed a quantitative, non-experimental correlational research design. Quantitative research was defined as a systematic approach that relied on numerical data to describe, explain, and predict phenomena (Creswell & Creswell, 2018). Its strength lay in the ability to apply statistical techniques to test assumptions and measure relationships with precision. In the study, quantitative methods were essential for examining the relationship between parental involvement and learner performance among kindergarten students, ensuring that findings were both measurable and generalizable.

A correlational design was particularly appropriate because it sought to determine whether two or more variables were related, and if so, the strength and direction of that relationship (Gay, Mills, & Airasian, 2012). Unlike experimental designs, correlational studies did not involve manipulation of variables; instead, they observed associations as they naturally occurred. This distinction positioned the study as non-experimental, aligning with similar investigations in early childhood education that emphasized ecological validity by studying learners in their authentic environments (Epstein, 2011).

It was important to differentiate correlational research from causal-comparative designs. While both were non-experimental, correlational studies analyzed a single group to identify relationships, whereas causal-comparative research compared two or more pre-existing groups (Fraenkel, Wallen, & Hyun, 2019). Since the study focused on a single cohort—the kindergarten students at Tagbaya Elementary School—the correlational approach was the most suitable.

A fundamental principle of correlational research was that it identified relationships but did not establish causation. The literature consistently cautioned that correlation was not causation (Gravetter & Forzano, 2018). For example, a statistically significant relationship between parental involvement and learner performance did not imply that one directly caused the other; unmeasured variables such as socioeconomic status or parental education might have influenced both. Jeynes (2012) found strong correlations between parental involvement and student achievement yet emphasized that multiple contextual factors mediated this relationship. Similarly, Fan and Chen (2001) highlighted

that while parental involvement was positively associated with academic outcomes, causality could not be inferred.

By situating the study within this established body of research, the methodology was justified as both rigorous and appropriate. Acknowledging the limitations of correlational design ensured that conclusions were framed accurately—identifying associations rather than claiming direct effects—thus preserving the integrity of the research.

The study was conducted in the barangay of Tagbaya, located in the municipality of Ibajay, within the province of Aklan, Western Visayas (Region VI), Philippines. The research specifically took place at Tagbaya Elementary School, a public educational institution that served the local community.

The target population included all parents or guardians of kindergarten learners enrolled during the 2025–2026 academic year, with total population sampling ensuring that every eligible participant was represented. This approach strengthened the validity of the findings by capturing the full scope of experiences within the community. Data were collected using a self-developed Parental Involvement Questionnaire (PIQ), adapted from established tools but localized to the cultural and socioeconomic realities of Tagbaya. The PIQ measured parental involvement across three dimensions: home-based support, school-based participation, and communication with teachers, using a 4-point Likert scale for most items, a standard format for measuring attitudes and perceptions. A legend was provided to interpret the scores, with ranges corresponding to involvement levels (1.00–1.80 = Strongly Disagree = Very Low Involvement, 1.81–2.60 = Disagree = Low Involvement, 2.61–3.40 = Agree = Moderate Involvement, 3.41–4.00 = Always Agree = High Involvement). The instrument was carefully constructed using clear, simple language and a limited number of open-ended questions to minimize respondent fatigue and enhance the quality of the data. A critical aspect of the PIQ's development was its localization. While based on established concepts, the instrument was adapted to the specific cultural and socioeconomic context of the Tagbaya community, ensuring that questions were relevant and meaningful to the participants.

To ensure credibility, the instrument underwent content validation by experts and reliability testing through Cronbach's alpha for internal consistency, while inter-rater reliability was applied to observation checklists. This rigorous design provided a comprehensive and culturally relevant measure of parental involvement, allowing the study to generate robust insights into its effects on kindergarten learners' performance.

The inclusion criteria for the sample were clearly defined: participants had to be a parent or primary caregiver of a kindergarten student at the specified school, and the student had to be enrolled in the current academic year. The sampling procedure began with a formal request to the school administration for a list of all kindergarten students and their parents. Once this list was obtained, the researcher approached the identified individuals to explain the study's purpose and request their voluntary participation. A formal, written informed consent form was provided to ensure all participants were fully aware of the study's objectives and their rights.

The study determined its sample size using a multi-method approach appropriate for a small, finite population of 18 kindergarten students and 32 parents at Tagbaya Elementary School. To ensure robustness, it referred to established sampling tables such



as Krejcie and Morgan's, which provide guidance on population size, margin of error, and confidence levels. Data collection was carried out using a self-developed Parental Involvement Questionnaire (PIQ), adapted from validated tools like the Family Involvement Questionnaire but localized to the Tagbaya community context. The PIQ measured parental involvement across three dimensions: home-based support (helping with homework and creating learning experiences), school-based participation (attending events and volunteering), and communication with teachers about the child's progress. This structured instrument allowed the study to capture both the frequency and quality of parental engagement in a culturally relevant and comprehensive way.

The data gathering process of the study followed a structured, multi-step procedure that emphasized both ethical standards and data integrity. The researcher began by securing formal permission from the school head, district supervisor, and DepEd division office through letters of intent and the thesis proposal. Ethical clearance was obtained, with special attention to protecting minors as participants. Parents or guardians provided written informed consent, while children gave assent to ensure respect for their autonomy. Confidentiality was strictly maintained by anonymizing identities, storing digital data in password-protected files, and keeping physical records in locked storage. Parents were scheduled to complete the Parental Involvement Questionnaire (PIQ), with the researcher present to explain items and guide responses. Once collected, the data were carefully transcribed, encoded into a digital database, and archived securely. Statistical treatments appropriate to the correlational design were then applied, ensuring rigor, accuracy, and validity in analyzing the relationship between parental involvement and learner performance. This systematic approach guaranteed that the study's findings were credible, ethically sound, and aligned with its research objectives.

**Table 1:** *Statistical Treatment Data Plan*

| <b>Research Problem</b>                                                                             | <b>Quantification and Measurement Method</b>                                                            | <b>Statistical Treatment and Analysis</b>                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Problem 1: To describe the demographic characteristics of the respondents.                          | Frequency Count and Percentage Distribution                                                             | Descriptive Statistics: Frequency counts, percentage distributions, and measures of central tendency (mean, median) will be computed to describe the demographic characteristics of the respondents.                      |
| Problem 2: To assess the performance level of learners in academic, social, and behavioral domains. | Data will be quantified using a 4-point Likert scale from the Parental Involvement Questionnaire (PIQ). | Descriptive Statistics: Weighted mean and standard deviation will be calculated to determine the extent of parental involvement across dimensions. The mean scores will be interpreted using an established scale legend. |

|                                                                                                     |                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Problem 3: To assess the performance level of learners in academic, social, and behavioral domains. | Data will be quantified using a rating scale (performance indicators).                                                   | Descriptive Statistics: Weighted mean and standard deviation will be computed to describe learners' performance levels in academic, social, and behavioral domains.                                                                                                                                                                                                                    |
| Problem 4: To test the relationship between parental involvement and learners' performance.         | Mean scores from the PIQ (parental involvement) and learner performance ratings will be treated as continuous variables. | Inferential Statistics: Pearson Product-Moment Correlation Coefficient (r) will be used to measure the strength and direction of the relationship. A t-test for correlation will determine statistical significance. The coefficient of determination ( $r^2$ ) will also be computed to identify the proportion of variance in learner performance explained by parental involvement. |
| Problem 5: To identify and rank the common challenges or barriers to parental involvement.          | Data will be quantified using categorical responses from survey items (checklists, open-ended questions).                | Descriptive Statistics: Frequency counts and percentage distributions will be used to identify and rank the most common challenges or barriers.                                                                                                                                                                                                                                        |

The use of the statistical framework provided a systematic and logical approach to data analysis. Descriptive statistics offered a clear summary of the variables under study, while the Pearson correlation and its associated t-test rigorously tested the central hypothesis of the investigation. The use of the coefficient of determination further provided a measure of the practical significance of any identified relationship.

## Results and Discussion

This is to presents the data collected from the survey conducted and analyzes it using descriptive statistics. Findings are systematically organized according to the Statement of the Problem (SOP), presented through statistical tables and narrative interpretations along with related references to existing studies, ensuring comprehensive presentation and discussions of results.

## Demographic Profile

**Table 2:** Relationship to the Learner

This table indicates the relationship to the learner participants of the identified parents, providing context on the type of parental or guardian involvement that influences the child's academic and developmental experiences.

| Relationship to the Learner | Frequency ( <i>f</i> ) | Percentage % |
|-----------------------------|------------------------|--------------|
| Mother                      | 16                     | 50%          |
| Father                      | 16                     | 50%          |
| Total                       | 32                     | 100%         |

The data revealed an exact parity between mothers and fathers, with sixteen respondents (50%) representing each group. This equilibrium was noteworthy as it indicated a balanced level of engagement or accessibility to the study across genders. While existing literature often emphasized the role of mothers as the primary source of educational support at home, recent studies highlighted the increasing participation of fathers in both home and school contexts. For instance, Cabrera et al. (2018) noted that father involvement significantly contributed to children's cognitive and socio-emotional development, challenging the traditional view of mothers as the sole educational supporters. Similarly, McWayne et al. (2017) found that fathers' engagement in school activities positively influenced children's academic achievement, particularly in literacy and numeracy.

**Table 3.** Age Range of Parents

This section presented the age distribution of the respondents, offering insights into the generational characteristics of parents and how these may have influenced their level of involvement in their children's early education.

| Parent Age Range | Frequency ( <i>f</i> ) | Percentage % |
|------------------|------------------------|--------------|
| Below 20         | 0                      | 0.00%        |
| 20-29            | 10                     | 31.25%       |
| 30-39            | 13                     | 40.63%       |
| 40-49            | 9                      | 28.12%       |
| Total            | 32                     | 100%         |

The analysis revealed that most respondents were parents in the 30–39 age bracket (40.63%), followed by those aged 20–29 (31.25%) and 40–49 (28.12%), with none below twenty. This distribution shows that the majority of parents were in their prime years of economic activity and parenting, a stage often associated with strong commitment to children's well-being and future. Research supports this, noting that parents in their 30s and 40s typically demonstrate greater involvement in education due to increased financial stability, maturity, and a sense of generativity—the desire to guide and nurture the next generation (Bornstein, 2019; Lachman, 2015). Findings from the OECD (2020)

further highlight that parents in this age range are more capable of balancing work and family responsibilities, enabling consistent support for academic and social growth. These perspectives align with the study's results, underscoring parental age as a significant factor influencing the level of involvement in early childhood education.

**Table 4.** *Highest Educational Attainment*

This section presented the respondents' highest level of education, providing context on their academic background and its potential influence on their involvement in their children's learning and development.

| <b>Highest Educational Attainment</b> | <b>Frequency (<i>f</i>)</b> | <b>Percentage %</b> |
|---------------------------------------|-----------------------------|---------------------|
| No formal schooling                   | 0                           | 0.00%               |
| Elementary Graduate                   | 2                           | 6.25%               |
| High School Graduate                  | 21                          | 65.63%              |
| College Graduate                      | 9                           | 28.12%              |
| Total                                 | 32                          | 100%                |

The data revealed that most respondents were high school graduates (65.63%), followed by college graduates (28.12%), while only 6.25% had completed elementary education. This profile suggested that parents generally possessed basic literacy and numeracy skills, enabling them to provide foundational support to their children. However, many faced challenges when assisting with more complex academic tasks or digital learning requirements, reflecting what researchers describe as "input deficits." Studies by Desforjes and Abouchaar (2003) and Hornby and Lafaele (2011) emphasized that parental involvement is strongly linked to student achievement, but its effectiveness is shaped by parents' educational background. Parents with lower levels of formal education often encountered barriers in supporting advanced subjects, limiting their ability to sustain involvement. More recent research, such as Goodall and Montgomery (2014), highlighted that gaps in digital literacy and subject-specific knowledge further hindered parents' effectiveness, especially as schools increasingly integrated technology into instruction. These findings aligned with the study's observations, underscoring the need for schools to provide targeted guidance, resources, and training programs to empower parents and help them overcome these educational limitations.

**Table 5.** *Primary Occupation and Employment Status*

This section describes the respondents' main sources of livelihood and their employment status, providing context on how work responsibilities and economic conditions might have influenced the level of parental involvement in their children's education.

| <b>Primary Occupation/Employment Status</b> | <b>Frequency (<i>f</i>)</b> | <b>Percentage %</b> |
|---------------------------------------------|-----------------------------|---------------------|
| Employed full-time                          | 12                          | 37.50%              |
| Part-time / Self-employed                   | 16                          | 50.00%              |

|            |    |        |
|------------|----|--------|
| Unemployed | 4  | 12.50% |
| Total      | 32 | 100%   |

The data showed that half of the respondents (50%) were engaged in part-time or self-employed work, 37.5% had full-time jobs, and 12.5% were unemployed. This distribution reflected the local economic reality where many families depended on informal or seasonal industries. While part-time or self-employment provided flexibility for parents to attend school activities or assist with homework, it often came with unstable and lower income, limiting their ability to provide educational resources such as digital devices. Research supports these findings, with Epstein (2011) noting that parents' work conditions directly affect their school involvement, and Hill and Taylor (2004) emphasizing that socioeconomic constraints reduce material support despite strong motivation. UNESCO (2017) further highlighted that families reliant on informal labor often face "resource gaps" in digital learning environments. Overall, the study confirmed that although part-time and self-employed parents were more available for school interactions, economic instability remained a significant barrier to sustained and effective academic support for their children.

**Table 6.** *Marital Status and Family Structure*

This section presented the respondents' marital status and family composition, providing context on household arrangements that may have influenced the level of parental involvement and support in their children's education.

| <b>Marital Status</b> | <b>Frequency (<i>f</i>)</b> | <b>Percentage %</b> |
|-----------------------|-----------------------------|---------------------|
| Single                | 5                           | 15.63%              |
| Married/Living in     | 27                          | 84.37%              |
| Total                 | 32                          | 100%                |

The data revealed that 84.37% of respondents were married or in cohabiting arrangements, while 15.63% were single parents. This high proportion of intact or cohabiting families was seen as a strength for learners, since research consistently shows that children living with two parents often achieve better educational outcomes due to greater economic and emotional support. In such households, caregiving and educational responsibilities could be shared, providing a more consistent support system. Amato (2005) found that children in two-parent families generally experienced higher academic success and fewer behavioral problems, while McLanahan and Sandefur (1994) emphasized the stability these families provided for educational attainment. More recent studies, such as Waldfoegel, Craigie, and Brooks-Gunn (2010), noted that although cohabiting families may be less stable than married ones, they still offered advantages through shared caregiving and pooled resources. These findings aligned with the study's observations, underscoring the importance of family structure in shaping consistent parental involvement and positive learner outcomes.

**Table 7.** *Number of Children in the Household*

The number of children in a household was an important factor that influenced how parents allocated time, attention, and resources. This variable provided insight into family dynamics and helped explain differences in the level of parental involvement and learner performance in kindergarten.

| <b>Number of Children in the Household</b> | <b>Frequency (<i>f</i>)</b> | <b>Percentage %</b> |
|--------------------------------------------|-----------------------------|---------------------|
| 1-2                                        | 28                          | 87.50%              |
| 3-5                                        | 4                           | 12.50%              |
| Total                                      | 32                          | 100%                |

The data revealed that the majority of households (87.50%) had only one or two children, while a smaller portion (12.50%) had three to five. This trend toward smaller families was considered beneficial for educational outcomes, as parents with fewer children could provide more individualized support and avoid the “resource dilution” that often occurs in larger households. Blake’s (1989) resource dilution hypothesis explained that as family size increases, parental time, attention, and financial resources become spread thin, leading to lower academic achievement. Supporting this, Downey (2001) found that children from smaller families typically received more direct involvement and educational support, which enhanced their learning. More recent studies, such as Lawson and Mace (2010), confirmed that smaller household sizes allowed parents to invest more time and resources per child, strengthening both academic and socio-emotional development. These findings aligned with the study’s observations, suggesting that the relatively small household sizes among respondents contributed positively to their ability to dedicate significant time and resources to their children’s education.

**Table 8.** *Monthly Household Income*

This section presented the respondents’ monthly household income, providing an overview of their economic status and its potential impact on the level of parental involvement and support for their children’s education.

| <b>Monthly Household Income Range</b> | <b>Frequency (<i>f</i>)</b> | <b>Percentage %</b> |
|---------------------------------------|-----------------------------|---------------------|
| Php 5,000 or below                    | 12                          | 37.50%              |
| Php 5,001–Php 10,000                  | 15                          | 46.88%              |
| Php 10,001–Php 15,000                 | 5                           | 15.62%              |
| Php 15,001–20,000 above               | 0                           | 0.00%               |
| Total                                 | 32                          | 100%                |

The income data highlighted a critical socioeconomic challenge: 84.38% of the families earned Php 10,000 or less per month, with 37.50% surviving on Php 5,000 or below. No respondent earned more than Php 15,000. This threshold represented the minimum income needed to meet basic food and non-food requirements. By this standard, at least 84.38% of the respondents in the study were living below the poverty line. Research

consistently showed that poverty was a critical determinant of children’s educational outcomes. According to UNESCO (2015), families living below the poverty line often struggled to provide adequate learning materials and supportive environments, which directly affected student achievement. Similarly, Jensen (2009) emphasized that economic hardship created stressors that limited parental involvement and reduced children’s cognitive performance. Studies by Sirin (2005) further confirmed that socioeconomic status was strongly correlated with academic achievement, with children from low-income households facing persistent disadvantages in literacy and numeracy. These findings aligned with the study’s results, underscoring how poverty constrained parental capacity to support learning and contributed to educational inequality.

**Table 9.** *Estimated Daily Time Spent Helping the Learner*

This section highlighted the amount of time parents dedicated each day to assisting their children with learning activities, offering insights into the extent of parental involvement and support in early education.

| <b>Estimated Daily Time Spent Helping</b> | <b>Frequency (f)</b> | <b>Percentage %</b> |
|-------------------------------------------|----------------------|---------------------|
| O Hour                                    | 7                    | 21.88%              |
| 1-2 Hours                                 | 25                   | 78.12%              |
| Total                                     | 32                   | 100%                |

The survey revealed that 78.12% of parents spent 1–2 hours daily helping their children, while 21.88% reported no time spent at all. This high level of engagement was notable given that more than 84% of the respondents lived below the poverty line, showing that economic hardship did not necessarily prevent parents from prioritizing their children’s education. Research supports this finding: Hoover-Dempsey and Sandler (1997) emphasized that parental involvement is largely driven by beliefs about responsibility for learning, which remain strong despite financial constraints. Mapp (2003) similarly found that low-income families often engage in school activities to build social capital and strengthen educational opportunities. Fan and Chen (2001) further confirmed that parental involvement positively affects student achievement across socioeconomic levels, proving that income is not the sole determinant of engagement. These perspectives aligned with the study’s results, highlighting the resilience of disadvantaged families and their commitment to sustaining educational support despite limited financial resources.

### *Extent of Parental Involvement (LPI Scale)*

**Table 10.** *Home-Based Involvement*

This section discusses the ways parents supported their children’s learning at home, highlighting activities such as assisting with assignments, providing learning materials, and creating a supportive environment that fostered academic growth.

| <b>Variable Statement</b>                                                                                                                               | <b>Weighted Mean</b> | <b>Standard Deviation</b> | <b>Verbal Interpretation</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------|------------------------------|
| PI 1.1 I ensure my child has a specific, quiet place and time designated for learning activities at home.                                               | 3.34                 | 0.48                      | Agree                        |
| PI 1.2 At least once a week, I engage in a learning activity with my child related to schoolwork (e.g., counting, identifying letters, reading a book). | 3.06                 | 0.50                      | Agree                        |
| PI 1.3 I frequently read books to my child or encourage them to look at books on their own.                                                             | 3.28                 | 0.52                      | Agree                        |
| PI 1.4 I check my child’s school bag or notebook for materials and notes from the teacher daily.                                                        | 3.19                 | 0.54                      | Agree                        |
| Total                                                                                                                                                   | 3.22                 | 0.51                      | Agree                        |

The results showed a high level of home-based parental involvement, with a category mean of 3.22 and low standard deviations (0.48–0.54), indicating consistency among respondents. The highest-rated item (3.34) reflected parents’ prioritization of creating a supportive physical learning environment, a task they found easier than direct instructional coaching. This strong home support was seen as a crucial influence on learners’ motivation and confidence. Research by Bartolome, Mamat, and Masnan (2021, 2022) confirmed that Filipino parents often emphasize home-based practices shaped by cultural and socioeconomic factors. Grounded in Vygotsky’s sociocultural theory, such scaffolding positions parents as “more knowledgeable others” guiding children through their Zone of Proximal Development, thereby enhancing learning outcomes. Studies also highlighted that structured home support fosters autonomy, responsibility, and adaptability in learners (Bejarin & Quezada, 2024), while programs like the Pantawid Pamilyang Pilipino Program (4Ps) further strengthen confidence and motivation (Villegas, 2023). Overall, the findings underscored that home-based involvement remains



a cornerstone of effective parental engagement, directly contributing to improved literacy, numeracy, and socio-emotional growth.

**Table 11.** *Communication with the School*

This section examined how parents interacted and maintained communication with the school, highlighting the importance of collaboration between home and school in supporting learners' academic progress and overall development.

| <b>Variable Statement</b>                                                                                                        | <b>Weighted Mean</b> | <b>Standard Deviation</b> | <b>Verbal Interpretation</b> |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------|------------------------------|
| PI 2.1 I am satisfied with how clearly the teacher communicates my child's academic progress and school programs.                | 3.28                 | 0.46                      | Agree                        |
| PI 2.2 If I have a question or concern about my child, the teacher or school staff responds to me promptly.                      | 3.34                 | 0.48                      | Agree                        |
| PI 2.3 I initiate contact with the teacher (not only for scheduled conferences) to ask questions or discuss my child's learning. | 3.28                 | 0.46                      | Agree                        |
| PI 2.4 I feel comfortable talking to the teacher about the challenges my child is facing.                                        | 3.22                 | 0.42                      | Agree                        |
| Total                                                                                                                            | 3.28                 | 0.46                      | Agree                        |

The category mean of 3.28 indicates strong two-way communication. The low SD (0.42–0.48) confirms that parents consistently perceive the school as responsive and welcoming. The high mean for teacher responsiveness (PI 2.2, 3.34) suggests a healthy parent-teacher ecology, which is a prerequisite for effective student development. Effective two-way communication is a recurring theme for student success. Epstein's framework of parental involvement underscores communication as one of the six essential components of family-school partnerships, noting that responsiveness and openness from teachers foster trust and collaboration. In the Philippine context, studies have shown that regular communication enhances student engagement and academic performance, as parents feel empowered to support learning both at home and in school (Bartolome, Mamat, & Masnan, 2022). This aligns with Amerol and Basmayor's (2025) findings that consistent dialogue between parents and educators reduces behavioral challenges and strengthens learners' classroom participation.

**Table 12.** *School-Based Involvement*

This section examined the participation of parents in school-related activities, such as attending meetings, joining programs, and collaborating with teachers, which reflected their role in supporting learners' academic progress and overall development.

| <b>Variable Statement</b>                                                                                                         | <b>Weighted Mean</b> | <b>Standard Deviation</b> | <b>Verbal Interpretation</b> |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------|------------------------------|
| PI 3.1 I attend Parent-Teacher Conferences (PTC) or scheduled parent meetings every time they are held.                           | 3.22                 | 0.42                      | Agree                        |
| PI 3.2 I volunteer my time to help with school activities, classroom needs, or events (e.g., school cleaning, event preparation). | 3.28                 | 0.46                      | Agree                        |
| PI 3.3 I participate in school-level decision-making (e.g., being part of a school committee or parent organization).             | 3.38                 | 0.49                      | Agree                        |
| Total                                                                                                                             | 3.29                 | 0.46                      | Agree                        |

The findings showed that school-based parental participation earned the highest mean score (3.29), with item PI 3.3 (3.38) highlighting active engagement in school governance. This contradicted earlier literature suggesting that low-income parents were less likely to join decision-making processes, as the low SD reflected a stable “Bayanihan” spirit among respondents. Research confirms that school-based involvement enhances student outcomes, though access often varies by socioeconomic status. In the Philippine context, Parents-Teachers Associations (PTAs) and School Governing Councils (SGCs)—institutionalized under DepEd policies such as Order No. 54—have reinforced parents’ roles in collaborative decision-making. While traditional studies noted barriers like limited time, confidence, or exclusion (Bartolome, Mamat, & Masnan, 2022), more recent work shows that inclusive practices encourage participation across diverse backgrounds. Amerol and Basmayor (2025) emphasized governance involvement as a critical avenue for accountability and shared responsibility, while Bejarin and Quezada (2024) argued that such structures empower parents to contribute meaningfully to school improvement. Overall, the study demonstrated that active parental participation in governance

strengthens parent-teacher collaboration, fosters transparency, and ensures that school decisions reflect the shared priorities of both educators and families.

*Learner Performance (LP) – Parent Report*

**Table 13.** *Academic Achievement (Literacy and Numeracy Skills)*

This section presented the learners’ performance in literacy and numeracy, highlighting their ability to read, write, and apply basic mathematical skills as indicators of academic achievement in kindergarten.

| <b>Variable Statement</b>                                                                                | <b>Weighted Mean</b> | <b>Standard Deviation</b> | <b>Verbal Interpretation</b> |
|----------------------------------------------------------------------------------------------------------|----------------------|---------------------------|------------------------------|
| LP 1.1 ...shows interest by often asking other adults or me to read a story to them (Literacy Interest). | 2.84                 | 0.37                      | Agree                        |
| LP 1.2 ...can identify or point to most letters of the alphabet (e.g., in a book, on a sign).            | 2.78                 | 0.42                      | Agree                        |
| LP 1.3 ...can count correctly to 10 or identify simple numbers (1-5) (Numeracy Skill).                   | 2.88                 | 0.34                      | Agree                        |
| LP 1.4 ...can clearly communicate their needs and feelings using complete sentences.                     | 2.88                 | 0.34                      | Agree                        |
| Total                                                                                                    | 2.85                 | 0.37                      | Agree                        |

The results showed a total mean of 2.85, indicating excellent readiness among learners, with very low standard deviations (0.34–0.42) reflecting strong consistency in parental observations of foundational skills. High scores in numeracy (2.88) and literacy interest (2.84) confirmed that children with engaged parents demonstrated superior reading comprehension and basic arithmetic abilities. These outcomes align with the MATATAG Curriculum, which emphasizes mastery of foundational literacy and numeracy over broad content coverage, consistent with global trends prioritizing depth of learning in early childhood. Research supports these findings: parental support in literacy activities such as shared reading and storytelling fosters vocabulary growth and comprehension (Bartolome, Mamat, & Masnan, 2022), while home-based numeracy practices like counting games and everyday problem-solving build confidence and strengthen abstract thinking (Bejarin & Quezada, 2024). Overall, the study highlighted that strong parental involvement in foundational skills significantly enhances learner motivation, confidence, and readiness for future academic success.

**Table 14.** *Social Development (Peer Interaction and Cooperation)*

This section has examined the learners’ ability to interact with peers and demonstrate cooperation, highlighting the role of social relationships in fostering positive behavior, teamwork, and overall developmental growth in kindergarten.

| <b>Variable Statement</b>                                                                                   | <b>Weighted Mean</b> | <b>Standard Deviation</b> | <b>Verbal Interpretation</b> |
|-------------------------------------------------------------------------------------------------------------|----------------------|---------------------------|------------------------------|
| LP<br>2.1 ...understands or accepts the need to share and take turns willingly with peers (Cooperation).    | 2.78                 | 0.42                      | Agree                        |
| LP 2.2 ...plays well and interacts positively with peers and other adults in the neighborhood or community. | 2.72                 | 0.46                      | Agree                        |
| LP 2.3 ...can separate from me without excessive crying or distress when going to school.                   | 2.84                 | 0.37                      | Agree                        |
| Total                                                                                                       | 2.78                 | 0.42                      | Agree                        |

The results showed that learners achieved a category mean of 2.78 in social development, with the highest rating in transition readiness (2.84), indicating that children successfully adapted from home to classroom environments—an outcome strongly supported by active parental involvement. Although peer interaction (2.72) was the lowest in this domain, it still reflected a high level of functioning. Research highlights that parental emotional support and preparation for routines ease transitions, reduce anxiety, and build confidence (Bartolome, Mamat, & Masnan, 2022). Daily parental engagement also strengthens adaptability, enabling smoother entry into formal schooling (Amerol & Basmayor, 2025). Drawing on Bronfenbrenner’s Ecological Systems Theory, Clapis & Bautista (2023) emphasized that family support directly influences student engagement, which enhances social competence and peer collaboration. While peer interaction was slightly lower, supportive family environments fostered positive relationships, as parental modeling of cooperation and empathy translated into classroom behavior (Bejarin & Quezada, 2024). In the Philippine context, strong family cohesion provided children with a secure base, reinforcing confidence and resilience. Overall, the findings underscored that parental involvement and family cohesion are central to building social competence, emotional stability, and successful adaptation to school life.

**Table 15.** *Behavioral Outcomes (Classroom Conduct and Self-Regulation)*

This section examined learners' classroom behavior and their ability to regulate emotions and actions, highlighting how conduct and self-control had contributed to a positive learning environment and overall developmental growth.

| <b>Variable Statement</b>                                                                                                          | <b>Weighted Mean</b> | <b>Standard Deviation</b> | <b>Verbal Interpretation</b> |
|------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------|------------------------------|
| LP 3.1 ...reacts to a disappointment or failure in an acceptable manner, without excessive shouting or tantrums (Self-Regulation). | 2.47                 | 0.51                      | Agree                        |
| LP 3.2 ...follows simple two-step instructions given by an adult at home without needing a reminder (Conduct/Readiness ).          | 2.69                 | 0.47                      | Agree                        |
| LP 3.3 ...can sustain focus on one learning task (like drawing, coloring, or listening to a simple story) for at least 10 minutes. | 2.78                 | 0.42                      | Agree                        |
| Total                                                                                                                              | 2.65                 | 0.47                      | Agree                        |

Behavioral outcomes earned the lowest mean (2.65). Self-regulation (LP 3.1) at 2.47 indicated a developmental challenge, though the SD (0.51) showed that this experience was relatively common across the sample. This had highlighted a significant developmental challenge. However, the ability to sustain focus (LP 3.3, 2.78) has remained strong, which is a positive indicator for future academic endurance. Theories of learning have suggested that a "self-regulatory environment" at home—which had included the quiet space provided by 3.34% of the parents—has paved the way for more effective absorption of academic content. Behavioral outcomes, particularly self-regulation, had remained a central concern in educational psychology. Amerol and Basmayor (2025) have emphasized that parental involvement has significantly shaped learners' classroom behavior, noting that consistent engagement has fostered discipline and reduced disruptive tendencies.

## *Integrated Analysis of Parental Involvement and Learner Performance*

**Table 16.** *Relationship between the Extent of Parental Involvement and Learners' Performance*

This section analyzed how varying levels of parental involvement related to learners' academic achievement, social development, and behavioral outcomes, highlighting the influence of home and school support on overall performance.

| Item ID  | Variables                     | Mean | R-Value | P-Value | Decision     | Interpretation                            |
|----------|-------------------------------|------|---------|---------|--------------|-------------------------------------------|
| <b>A</b> | Parental Involvement          | 3.26 | 0.639   | < 0.01  | Reject $H_0$ | Significant Strong Positive Correlation   |
|          | Home-based Involvement        | 3.22 | 0.565   | < 0.01  | Reject $H_0$ | Significant Moderate Positive Correlation |
|          | School Based involvement      | 3.28 | 0.412   | < 0.05  | Reject $H_0$ | Significant Weak Positive Correlation     |
|          | Communication with the School | 3.29 | 0.394   | <0.05   | Reject $H_0$ | Significant Weak Positive Correlation     |
| <b>B</b> | Learners Performance          | 2.76 |         |         |              |                                           |
|          | Academic Achievement          | 2.85 | 0.639   | < 0.01  | Reject $H_0$ | Significant Strong Positive Correlation   |
|          | Social Development            | 2.78 | 0.485   | < 0.05  | Reject $H_0$ | Significant Weak Positive Correlation     |
|          | Behavioral Outcomes           | 2.65 | 0.521   | < 0.01  | Reject $H_0$ | Significant Moderate Positive Correlation |

The statistical analysis revealed a strong, significant positive correlation between parental involvement and learner performance, with an overall Pearson's  $r = 0.639$  ( $p < 0.01$ ). This confirmed that higher parental engagement directly translated into improved academic outcomes, leading to the rejection of the null hypothesis.

Home-based involvement showed a strong positive relationship ( $r = 0.565$ ), consistent with Vygotsky's Sociocultural Theory, where parents act as "more knowledgeable others" providing scaffolding within the child's Zone of Proximal Development.

School-based involvement correlated with social development ( $r = 0.485$ ), highlighting that parents' participation in school activities modeled positive interpersonal interactions, reinforced by the MATATAG Curriculum's emphasis on holistic growth.

Effective communication between home and school correlated with behavioral regulation ( $r = 0.521$ ), showing that consistent dialogue aligned expectations and reduced disciplinary issues.

Despite nearly 85% of families living below the poverty line, the study found a "Very Satisfactory" level of parental involvement (Mean = 3.26), which translated into "Most of the Time" learner performance (Mean = 2.76). This resilience reflected strong domestic structures and high levels of school-parent trust. Philippine initiatives such as Program PaG-UBAY and the Kaagapay Program empowered parents as co-educators, while UNESCO's global guidelines emphasized that family-school partnerships can mitigate socio-economic barriers.

Overall, the rejection of the null hypothesis confirmed that parental involvement is not supplementary but a critical determinant of kindergarten success. The findings underscored that even amid economic adversity, strong family support and collaborative school relationships ensured learners remained "Matatag" (Resilient) and "Makatao" (People-Centered), embodying grassroots resilience in education.

### *Challenges and Barriers to Parental Involvement*

**Table 17.** *Checklist of Barriers to Involvement*

This section identifies the common challenges that may hinder parents' participation in their children's education, such as time constraints, financial limitations, and communication gaps, providing context for understanding factors that affect the extent of parental involvement.

| <b>Item ID</b> | <b>Barrier Statement</b>                                                                           | <b>Frequency (<i>f</i>)</b> | <b>Percentage %</b> |
|----------------|----------------------------------------------------------------------------------------------------|-----------------------------|---------------------|
| B 1.1          | Work schedule (long hours, unusual shifts) makes it difficult to attend events.                    | 12                          | 37.50%              |
| B 1.2          | Financial burdens (e.g., cost of transportation, snacks) prevent me from participating more often. | 12                          | 37.50%              |
| B 1.3          | Lack the time or energy due to personal/family responsibilities at home.                           | 4                           | 12.50%              |
| B 1.4          | Too many children in the household requiring attention.                                            | 4                           | 12.50%              |

|       |                                                                      |   |       |
|-------|----------------------------------------------------------------------|---|-------|
| B 1.5 | Lack of information from school/teachers on how to help at home.     | 0 | 0.00% |
| B 1.6 | Feeling unwelcome or uncomfortable sharing opinions or volunteering. | 0 | 0.00% |
| B 1.7 | School communication methods are hard to understand or track.        | 0 | 0.00% |

The most significant barriers had been identified as Work Schedules (37.50%) and Financial Burdens (37.50%). These findings had been directly linked to the demographic profile established in Chapter IV, where 87.50% of respondents had been either employed part-time or full-time, and 84.38% had lived below the poverty threshold. Only 12.50% of respondents had cited a lack of personal time/energy (B 1.3) or a high number of children (B 1.4) as barriers. This has corresponded with the household context data showing that 87.50% of respondents had only one or two children. Significantly, zero respondents (0.00%) had indicated that they felt unwelcome (B 1.6), lacked information on how to help (B 1.5), or found communication difficult (B 1.7). Although an open-ended item has been provided in the questionnaire to capture additional challenges, no responses have been recorded. Thus, no qualitative data had been available for analysis under this section.

Parental work commitments had consistently been identified as a major obstacle to school involvement. Hill and Taylor (2004) had noted that demanding work schedules often limited parents' ability to attend school meetings or assist with homework, even when they had been motivated to engage. Similarly, Epstein (2011) had emphasized that flexible work arrangements had enabled greater participation, while rigid schedules had reduced opportunities for involvement. In the Philippine context, many families had relied on part-time or informal employment, which, while offering flexibility, had often come with instability that had constrained sustained educational support.

Economic hardship had been another significant barrier. Sirin (2005) found that socioeconomic status strongly correlated with academic achievement, with low-income families facing persistent disadvantages in literacy and numeracy. Jensen (2009) had explained that poverty created stressors that reduced parental capacity to provide learning materials and supportive environments. In the Philippines, UNESCO (2015) had reported that families living below the poverty line had often struggled to afford digital tools and resources, limiting their ability to support children in increasingly technology-driven classrooms.

The relatively small household sizes observed in the study (87.50% with one or two children) aligned with the resource dilution hypothesis proposed by Blake (1989), which argued that larger families spread parental resources more thinly. Downey (2001) had further supported this, noting that children from smaller families had tended to receive more individualized support. Thus, while financial and work-related barriers had been significant, smaller family sizes might have mitigated some challenges by allowing parents to concentrate resources on fewer children.



Interestingly, none of the respondents in the study had reported feeling unwelcome, lacking information, or experiencing communication difficulties. This had contrasted with findings by Hornby and Lafaele (2011), who had identified poor communication and unclear expectations as common barriers globally. The absence of these issues in the given context had suggested that schools in the study area might have established effective communication channels and welcoming environments, consistent with Epstein's (2011) framework of positive school-family partnerships.

## **Summary of Findings**

1. Demographic Profile: The study had identified a unique 50/50 gender balance between mothers and fathers. Respondents' ages revealed that the majority had fallen within the 30–39 age bracket (40.63%), followed by those aged 20–29 (31.25%) and 40–49 (28.12%), with no respondents below twenty years old. In terms of educational attainment, most have high school graduates (65.63%), while 28.12% had completed college, and only 6.25% had ended at the elementary level. Employment data had shown that half of the respondents (50.00%) had been engaged in part-time or self-employed work, 37.50% had held full-time jobs, and 12.50% had been unemployed. Family status indicated that 84.37% had been married or in "living-in" arrangements, while 15.63% had been single parents. Household composition revealed that the overwhelming majority (87.50%) had one or two children, with only 12.50% having three to five. However, 84.38% of families lived below the regional poverty line (earning < Php 10,000). Despite this, 78.12% of parents had spent at least 1–2 hours daily assisting with education.

2. Parental Involvement: The study had revealed consistently high levels of parental involvement across key domains. Home-based involvement had registered a strong mean (3.22), with parents prioritizing the physical learning environment (PI 1.1, 3.34). Two-way communication had also scored highly (3.28), supported by low variability, indicating that parents had perceived the school as responsive and welcoming. Teacher responsiveness (PI 2.2, 3.34) further reflected a healthy parent-teacher ecology. School-based involvement had earned the highest overall mean (3.29), with parents actively engaged in decision-making (PI 3.3, 3.38), contradicting literature that had often associated low-income status with limited governance participation. These findings highlighted a cohesive and resilient parent-school partnership that had supported learner development. Parental involvement had been interpreted as "Often" to "Always" (Overall Mean: 3.26). Home-based support (3.22) and communication (3.28) had been strong, while participation in decision-making (3.38) had been the highest-rated activity.

3. Learner Performance: The study had revealed strong readiness among learners, with a high mean score (2.85) and very low variability, indicating parental consensus on foundational literacy and numeracy skills. Social development had also been rated positively (2.78), with transition readiness (2.84) showing successful adaptation from home to classroom, though peer interaction (2.72) had been slightly lower. Behavioral outcomes had earned the lowest mean (2.65), with self-regulation (2.47) identified as a developmental challenge common across the sample. However, learners demonstrated resilience through their ability to sustain focus (2.78), which had served as a positive indicator for future academic endurance. Positive learning outcomes had been "Very

Satisfactory" (Overall Mean: 2.76). Academic Achievement (2.85) and Social Development (2.78) had been high, but Behavioral self-regulation (2.65) had been a relative area of weakness.

4. Significant Correlation: The study had established a significant positive relationship between parental involvement and learner performance, with an overall strong correlation ( $r = 0.639$ ,  $p < 0.01$ ). Home-based involvement has shown a moderate positive correlation ( $r = 0.565$ ,  $p < 0.001$ ), while school-based involvement ( $r = 0.412$ ,  $p < 0.05$ ) and communication with the school ( $r = 0.394$ ,  $p = 0.001$ ) have reflected weaker but still significant associations. Learner performance had registered a mean of 2.76, with academic achievement (2.85) strongly correlated with parental involvement ( $r = 0.639$ ,  $p < 0.01$ ). Social development (2.78) demonstrated a weak but significant correlation ( $r = 0.485$ ,  $p < 0.05$ ), while behavioral outcomes (2.65) had shown a moderate positive correlation ( $r = 0.521$ ,  $p < 0.01$ ). Overall, the findings confirmed that parental involvement—whether at home, in school, or through communication—had played a critical role in supporting academic achievement, social development, and behavioral regulation among kindergarten learners.

5. Structural Barriers: The most significant barriers to parental involvement were work schedules (37.50%) and financial burdens (37.50%), reflecting the employment and poverty conditions of most respondents. Only a small proportion had cited lack of personal time/energy (12.50%) or having many children (12.50%), consistent with household data showing that most families had only one or two children. Notably, none of the respondents had reported feeling unwelcome, lacking information, or experiencing communication difficulties, indicating strong school-parent relations despite economic challenges.

The study employed a quantitative, non-experimental correlational design to examine the relationship between parental involvement and learner performance. Conducted at Tagbaya Elementary School in Ibajay, Aklan, under the K-12 Universal Kindergarten curriculum, the research setting provided a culturally relevant rural context where socioeconomic factors influenced parental participation. Respondents had been purposively sampled from the parents of all 18 kindergarten learners enrolled in the academic year 2025–2026, with informed consent obtained to ensure ethical participation.

One instrument had been used: the Parental Involvement Questionnaire (PIQ), adapted from validated tools and localized for the Tagbaya community, designed to measure observable indicators of learner engagement. Validity had been established through expert review, while reliability had been ensured using Cronbach's alpha for the PIQ.

Data gathering had followed strict ethical protocols, including informed consent, child assent, confidentiality, and third-party facilitation to avoid coercion. Questionnaires had been administered to parents. Data had been encoded and securely stored for analysis.

Descriptive statistics had been used to summarize parental involvement and learner performance. Pearson's correlation with t-tests had been applied to examine relationships between variables, while the coefficient of determination had been calculated to assess the proportion of variance in learner performance explained by parental involvement.

## Conclusions

Based on the findings, the following conclusions have been drawn:

- **Demographic Profile of Parents.** The parents of kindergarten learners at Tagbaya Elementary School are predominantly engaged in farming, small-scale businesses, or informal employment, with limited household income. Despite these socio-economic constraints, parents consistently dedicate time to supporting their children's learning at home. This demonstrates that economic hardship does not diminish their commitment to education, although it shapes the extent and nature of their involvement.
- **Extent of Parental Involvement.** Parental involvement is evident across home-based activities such as assisting with homework and reading, and moderate levels of communication with teachers. However, school-based participation remains limited due to demanding work schedules and financial burdens. This suggests that while parents value education, structural barriers hinder their ability to fully engage in school-related activities.
- **Learner Performance.** Learners generally exhibit strong academic readiness in literacy and numeracy, as well as satisfactory social development. However, behavioral self-regulation emerges as a relative weakness. This indicates that while parental involvement supports academic and social growth, additional strategies are needed to strengthen behavioral outcomes.
- **Relationship Between Parental Involvement and Learner Performance.** The study confirmed a significant positive correlation between parental involvement and learner performance ( $r = 0.639$ ,  $p < 0.01$ ). This underscores the crucial role of parents in fostering academic achievement, social development, and behavioral outcomes, with academic performance showing the strongest link to parental engagement.
- **Challenges and Barriers.** The primary barriers to parental involvement are structural in nature, including poverty, irregular work schedules, and limited resources. Relational barriers, such as lack of trust or poor communication, are minimal, as parents and teachers maintain positive relationships. This highlights that the issue lies more in external constraints than in willingness or cooperation.

## Recommendations

Based on the findings and conclusions of this study, the following recommendations have been proposed to strengthen parental involvement and enhance learner performance in kindergarten at Tagbaya Elementary School:

1. **Addressing Demographic Realities.** Schools and local government units should design flexible programs that accommodate parents' work schedules, such as weekend or after-work sessions. Livelihood and literacy support initiatives should also be introduced to empower parents and enhance their capacity for educational involvement.
2. **Strengthening Parental Involvement.** Structured parental engagement programs, including parenting workshops and home-learning kits, should be implemented to guide

parents in supporting their children's education. Communication channels such as SMS updates, parent-teacher journals, and community meetings should be strengthened to sustain dialogue between home and school.

3. Enhancing Learner Performance. Targeted interventions should be developed to improve behavioral self-regulation, such as play-based activities and socio-emotional learning modules. Parents should be encouraged to reinforce routines and discipline strategies at home to complement school efforts.

4. Institutionalizing Parent-School Partnerships. Parent-school partnerships should be institutionalized through PTA-led initiatives, mentoring programs, and recognition of active parents. Schools should integrate parental involvement indicators into their monitoring and evaluation systems to ensure sustained collaboration.

5. Reducing Structural Barriers. Policy support from DepEd and local government units should be sought to reduce structural barriers, such as promoting flexible work arrangements during school activities. Community-based initiatives, such as barangay learning hubs and parent volunteer programs, should be expanded to share responsibility for learner support.

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# ENGLISH LITERACY AND ARTISTIC EXPRESSION AMONG GRADE 9 SPECIAL PROGRAM IN THE ARTS STUDENTS

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## **Abstract**

English literacy is an essential component of students' academic development and serves as a foundation for effective communication, critical thinking, and artistic expression. Within the Department of Education's Special Program in the Arts (SPA), English literacy extends beyond conventional language learning by enabling students to interpret, construct, and communicate meaning through various artistic forms. Despite the interdisciplinary nature of arts education, limited studies have examined how English literacy relates to artistic expression among Filipino secondary school students enrolled in specialized arts programs. This study investigated the relationship between English literacy, artistic expression, and academic performance among Grade 9 SPA students at New Ormoc City National High School during the School Year 2025–2026. Using a descriptive-correlational research design, the study involved 42 Grade 9 students equally representing the Visual Arts, Media Arts, and Creative Writing specializations. Data were gathered through a researcher-developed instrument that underwent expert validation and pilot testing. English literacy was assessed in terms of reading, writing, and speaking, while artistic expression was evaluated using expert rated performance rubrics. Quantitative data were analyzed using frequency, percentage, weighted mean, and Pearson's Product-Moment Correlation Coefficient, whereas qualitative responses were analyzed through thematic analysis. The findings revealed that the participants demonstrated good writing and speaking skills but only fair reading comprehension. Artistic expression was generally rated as good, with creativity emerging as the strongest dimension. A weak positive relationship was found between English literacy and artistic expression, indicating that literacy contributes to creative performance but is only one of several factors influencing students' artistic development. Qualitative findings further showed that students perceived English literacy as an important means of communicating artistic ideas, composing creative works, and expressing personal experiences. The study concludes that English literacy functions as both a linguistic competence and a multimodal resource that supports artistic thinking, creative communication, and academic learning. The findings underscore the value of integrating literacy-rich and arts-based instructional approaches to strengthen both language proficiency and artistic expression among SPA learners.

**Keywords:** English literacy, artistic expression, multimodal literacy, Special Program in the Arts, secondary education

## Introduction

English literacy remains a fundamental component of secondary education, equipping learners with the knowledge and skills needed to communicate effectively, think critically, and participate meaningfully in academic and social contexts. Reading, writing, and speaking are not only essential language competencies but also cognitive tools that enable students to interpret information, express ideas, and construct knowledge. As educational systems continue to emphasize twenty-first-century skills, English literacy has become increasingly important in developing learners who are capable of collaboration, creativity, communication, and critical thinking. These competencies are particularly relevant in learning environments that encourage interdisciplinary approaches, such as the Department of Education's Special Program in the Arts (SPA).

The Special Program in the Arts is designed to nurture students who demonstrate talent and potential in various artistic disciplines while ensuring that they attain the competencies required in the basic education curriculum. Through specialized instruction in Visual Arts, Media Arts, Creative Writing, Music, Dance, and Theater Arts, the program seeks to cultivate artistic excellence alongside academic achievement. Within this context, English literacy assumes a significant role because artistic learning requires students not only to create but also to interpret, explain, reflect upon, and communicate the meanings embedded in their artistic works. Whether preparing an artist statement, writing a script, presenting a multimedia project, or composing a literary piece, students rely on language as a medium for expressing creative ideas and engaging with audiences. Recent educational research has increasingly recognized that literacy extends beyond the ability to read and write printed texts. Contemporary perspectives describe literacy as a multimodal process in which learners construct meaning through language, images, sounds, gestures, and digital media. Studies conducted between 2020 and 2025 have shown that integrating multimodal literacy into classroom instruction enhances students' comprehension, communication, and creative performance while promoting deeper engagement in learning (Puspitasari et al., 2025; Park & Zeng, 2025). Likewise, literacy-rich learning environments have been associated with improved academic achievement because they provide students with meaningful opportunities to analyze information, solve problems, and communicate their understanding across multiple contexts (OECD, 2023).

In arts education, language and creativity are closely interconnected. Artistic expression involves more than the production of visual or literary works; it requires learners to interpret experiences, organize ideas, communicate emotions, and construct meaning for diverse audiences. Students frequently use English when developing artist statements, writing reflective journals, preparing scripts, creating digital content, or explaining the significance of their creative outputs. Consequently, language serves not merely as a

subject of study but as a resource that supports artistic thinking and creative communication. Research has likewise demonstrated that integrating literacy practices into arts education promotes higher levels of creativity, engagement, and critical reflection among learners (UNESCO, 2024; Farrar et al., 2024).

The present study is further informed by three complementary theoretical perspectives. Vygotsky's Social Interactionist Theory explains that language develops through meaningful social interaction and serves as a primary tool for learning and cognitive development. From this perspective, students acquire literacy as they collaborate with teachers and peers in authentic learning experiences. Eisner's Theory of Arts-Based Cognition emphasizes that artistic learning cultivates higher-order thinking, imagination, interpretation, and aesthetic understanding, positioning the arts as legitimate ways of knowing rather than merely avenues for self-expression. Complementing these perspectives, Kress's Theory of Multimodal Literacy argues that meaning is constructed through multiple semiotic modes, including written language, visual images, sound, movement, and digital media. Together, these theories provide a comprehensive framework for understanding English literacy as both a linguistic competence and a multimodal resource that supports artistic learning and artistic expression.

Despite the growing body of research on literacy and arts education, relatively few studies have examined the relationship between English literacy and artistic expression among Filipino secondary school students enrolled in specialized arts programs. Existing studies have primarily focused on literacy as a predictor of academic achievement or on creativity as an independent educational outcome. Limited attention has been given to how English literacy supports artistic expression across different SPA specializations, particularly within the Philippine public secondary school context. Furthermore, many previous investigations have relied primarily on self-reported measures of creativity without incorporating performance-based assessments and qualitative insights that provide a more comprehensive understanding of students' experiences.

Addressing this gap, the present study examined the relationship between English literacy, artistic expression, and academic performance among Grade 9 students enrolled in the Special Program in the Arts at New Ormoc City National High School during the School Year 2025–2026. Specifically, the study described the participants' English literacy in terms of reading, writing, and speaking; assessed their artistic expression across the Visual Arts, Media Arts, and Creative Writing specializations; examined their academic performance in English and Arts; explored students' perceptions of the role of English literacy in artistic expression; and determined the relationships among English literacy, artistic expression, and academic performance. The findings are expected to contribute to the growing body of knowledge on literacy and arts education and provide evidence-based recommendations for teachers, curriculum developers, and school administrators.

seeking to strengthen interdisciplinary instruction that promotes both language development and creative learning.

## **Method**

### **Research Design**

This study employed a descriptive-correlational research design to examine the relationship between English literacy, artistic expression, and academic performance among Grade 9 students enrolled in the Special Program in the Arts (SPA). The descriptive component was used to determine the participants' levels of English literacy, artistic expression, and academic performance, while the correlational component examined the relationships among these variables without manipulating the existing conditions. This design was considered appropriate because it allowed the researcher to describe the characteristics of the participants and determine whether statistically significant relationships existed among the variables under investigation.

### **Research Setting**

The study was conducted at New Ormoc City National High School, a public secondary school in Ormoc City, Leyte, Philippines. The school implements the Department of Education's Special Program in the Arts (SPA), which provides specialized instruction for learners with demonstrated talents in Visual Arts, Media Arts, and Creative Writing while ensuring the attainment of the competencies prescribed in the K–12 curriculum. The school's learning environment, instructional resources, and specialized arts program provided an appropriate setting for examining the relationship between English literacy and artistic expression.

### **Participants**

The participants consisted of forty-two (42) Grade 9 students enrolled in the Special Program in the Arts during the School Year 2025–2026. To ensure equal representation across the three specializations, stratified purposive sampling was employed. Fourteen (14) students were selected from each specialization: Visual Arts, Media Arts, and Creative Writing.

Students officially enrolled in the Grade 9 SPA program during the data collection period and who provided informed consent, together with parental consent when required, were included in the study. Students who were absent during the administration of the research instruments or who did not complete all required assessments were excluded from the analysis.

## **Research Instrument**

Data were collected using a researcher-developed instrument entitled English Literacy and Artistic Expression Assessment for Grade 9 SPA Students. The instrument was developed after an extensive review of related literature, the Department of Education curriculum standards, English language competencies, and assessment rubrics used in arts education.

The instrument consisted of four sections.

The first section gathered the participants' demographic information, including age, sex, SPA specialization, and academic performance in English and Arts.

The second section assessed English literacy through three domains: reading, writing, and speaking. Reading literacy was measured using a researcher-developed reading comprehension test based on an age-appropriate literary selection aligned with the Grade 9 English curriculum. The test included both literal and inferential comprehension questions. Writing literacy was assessed through an artist's reflection consisting of approximately 150 to 200 words. The outputs were evaluated using an analytic rubric measuring content development, organization, language use, vocabulary, grammar, and coherence. Speaking literacy was evaluated through an oral presentation in which students explained one of their artistic works. Performance was assessed using a standardized rubric measuring organization of ideas, clarity of expression, pronunciation, language accuracy, confidence, and audience engagement.

The third section assessed artistic expression through authentic performance tasks corresponding to the students' respective SPA specialization. Visual Arts students submitted an original artwork accompanied by an artist statement. Media Arts students produced a multimedia presentation or short digital output. Creative Writing students submitted an original literary composition. These outputs were evaluated using a standardized rubric focusing on creativity, originality, technical execution, artistic communication, and overall presentation.

The final section consisted of open-ended questions that explored the participants' perceptions regarding the role of English literacy in their artistic expression and academic learning. These responses provided qualitative data that complemented the quantitative findings.

### **Validity and Reliability of the Instrument**

To establish content validity, the research instrument underwent evaluation by a panel of experts composed of one specialist in English language education, one arts education specialist, and one educational research expert. Their recommendations regarding content relevance, clarity of instructions, language appropriateness, and alignment with the research objectives were incorporated before the administration of the instrument.

A pilot test was conducted among Grade 9 students who were not included in the actual study to determine the clarity, feasibility, and reliability of the instrument. Internal consistency of the Likert-scale components was established using Cronbach's alpha, while necessary revisions were made based on the pilot testing results. The reading test was likewise reviewed by English teachers to ensure that the passages and questions appropriately measured students' reading comprehension.

To strengthen objectivity, artistic outputs and speaking performances were evaluated by qualified English and SPA teachers using standardized analytic rubrics rather than self-assessment measures.

### Data Collection Procedure

Prior to data collection, the researcher secured approval from the Graduate School of Sandigan Colleges, Inc. and obtained permission from the Office of the School Principal and the SPA Coordinator of New Ormoc City National High School.

After receiving the necessary approvals, the researcher conducted an orientation with the participants to explain the objectives of the study, the voluntary nature of participation, and the measures implemented to ensure confidentiality and anonymity. Informed consent from the participants and parental consent, when required, were obtained before the administration of the research instruments.

The reading test, writing activity, and qualitative questionnaire were administered during scheduled class periods. Speaking performances and artistic outputs were evaluated separately by designated English and SPA teachers using standardized assessment rubrics. Academic performance data in English and Arts were obtained from official school records upon approval of the school administration.

Upon completion of data gathering, all responses were checked for completeness, encoded into Microsoft Excel, and transferred to the Statistical Package for the Social Sciences (SPSS) version 27 for statistical analysis.

### Data Analysis

Descriptive and inferential statistics were employed to analyze the quantitative data.

Frequency counts and percentages were used to describe the demographic characteristics of the participants.

Weighted mean and standard deviation were computed to determine the participants' levels of English literacy and artistic expression.

Pearson's Product-Moment Correlation Coefficient (Pearson's  $r$ ) was used to determine the relationships among English literacy, artistic expression, and academic performance. Statistical significance was tested at the .05 level.

Responses to the open-ended questions were analyzed using thematic analysis. The qualitative data were coded, categorized, and organized into recurring themes to identify common perceptions regarding the influence of English literacy on artistic expression.

## Results

This section presents the findings of the study according to the research objectives. The results are organized into five parts: (1) participants' demographic profile, (2) English literacy, (3) artistic expression, (4) academic performance, and (5) the relationships among English literacy, artistic expression, and academic performance. Qualitative findings are likewise presented to describe students' perceptions regarding the role of English literacy in their artistic learning.

### Participants' Demographic Profile

Table 1 presents the demographic profile of the participants in terms of age, sex, and SPA specialization.

**Table 1.** *Demographic Profile of the participants (N = 42)*

| Variable           | Category         | Frequency | Percentage |
|--------------------|------------------|-----------|------------|
| Age                | 14 years old     | 20        | 47.6       |
|                    | 15 years old     | 19        | 45.2       |
|                    | 16 years old     | 3         | 7.2        |
| Sex                | Male             | 19        | 45.2       |
|                    | Female           | 23        | 54.8       |
| SPA Specialization | Visual Arts      | 14        | 33.3       |
|                    | Media Arts       | 14        | 33.3       |
|                    | Creative Writing | 14        | 33.3       |

As shown in Table 1, most of the participants were 14 years old (47.6%), followed by 15-year-old students (45.2%). Only three participants (7.2%) were 16 years old. In terms of sex, female students comprised the majority of the participants with 54.8%, while male students accounted for 45.2%. The participants were equally represented across the three SPA specializations, with fourteen students (33.3%) from each strand. The equal distribution ensured balanced representation among Visual Arts, Media Arts, and Creative Writing students.

## English Literacy of the participants

*Table 2 presents the participants' level of English literacy in terms of reading, writing, and speaking.*

**Table 2.**

*Level of English Literacy of the participants*

| <b>Literacy Domain</b> | <b>Mean</b> | <b>Interpretation</b> |
|------------------------|-------------|-----------------------|
| Reading                | 1.36        | Fair                  |
| Writing                | 3.42        | Good                  |
| Speaking               | 3.05        | Good                  |
| Overall                | 2.61        | Good                  |

Table 2 shows that writing obtained the highest mean score ( $M = 3.42$ ), interpreted as Good, followed by speaking ( $M = 3.05$ ), which was likewise interpreted as Good. Reading recorded the lowest mean ( $M = 1.36$ ), corresponding to a Fair level of performance. Overall, the participants demonstrated a Good level of English literacy ( $M = 2.61$ ). These findings indicate that while the students generally exhibited satisfactory productive language skills, reading comprehension remained the area requiring further improvement.

## Artistic Expression of the participants

*Table 3 presents the level of artistic expression across the three SPA specializations.*

**Table 3.**

*Level of Artistic Expression of the participants*

| <b>Criterion</b> | <b>Mean</b> | <b>Interpretation</b> |
|------------------|-------------|-----------------------|
| Creativity       | 3.19        | Good                  |
| Technique        | 2.81        | Good                  |
| Expression       | 3.07        | Good                  |
| Presentation     | 2.86        | Good                  |
| Overall Impact   | 3.00        | Good                  |
| Overall Mean     | 2.99        | Good                  |

As reflected in Table 3, the participants demonstrated an overall good level of artistic expression ( $M = 2.99$ ). Creativity obtained the highest mean score ( $M = 3.19$ ), indicating that the students were able to generate original and meaningful artistic ideas. Expression ( $M = 3.07$ ) and overall impact ( $M = 3.00$ ) also received positive ratings. Meanwhile, technique ( $M = 2.81$ ) and presentation ( $M = 2.86$ ) registered comparatively lower mean



scores, suggesting areas where additional instructional support may further strengthen students' artistic performance.

#### Academic Performance of the participants

Table 4 presents the participants' academic performance in English and Arts based on their final grades.

**Table 4.**

#### *Academic Performance of the participants*

| <b>Subject</b> | <b>Mean Grade</b> | <b>Description</b> |
|----------------|-------------------|--------------------|
| English        | 88                | Very Satisfactory  |
| Arts           | 87                | Very Satisfactory  |

Table 4 shows that the participants obtained a mean grade of 88 in English and 87 in Arts. Both mean grades fall within the Very Satisfactory performance level based on the Department of Education grading scale. These results indicate that the participants generally maintained satisfactory academic performance in both subject areas.

#### Relationship Among English Literacy, Artistic Expression, and Academic Performance

Table 5 presents the results of the Pearson Product-Moment Correlation analysis.

**Table 5.**

#### *Relationship Among English Literacy, Artistic Expression, and Academic Performance*

| <b>Variables</b>                                  | <b>Pearson's r Interpretation</b> |
|---------------------------------------------------|-----------------------------------|
| English Literacy and Artistic Expression<br>0.206 | Weak Positive Relationship        |
| English Literacy and English Grade 0.096          | Very Weak Positive Relationship   |
| Artistic Expression and Arts Grade - 0.117        | Very Weak Negative Relationship   |

Table 5 shows a weak positive relationship ( $r = 0.206$ ) between English literacy and artistic expression, indicating that higher English literacy was associated with slightly higher levels of artistic expression. The relationship between English literacy and English grades ( $r = 0.096$ ) was very weak, suggesting minimal association between the measured English literacy and students' classroom grades. Likewise, artistic expression and Arts grades demonstrated a very weak negative relationship ( $r = -0.117$ ), indicating little observable association between artistic performance and academic grades in Arts.

#### Students' Perceptions of the Role of English Literacy in Artistic Expression

The qualitative responses were analyzed using thematic analysis. Three major themes emerged from the participants' responses.

**Table 6.**

*Emerging Themes from the Qualitative Responses*

| Theme                                                    | Description                                                                                                                                              |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| English as a Tool for Students                           | described English as an important means of Artistic Communication explaining and presenting their artistic works.                                        |
| Creative Production                                      | Participants emphasized that reading and writing helped English as a Foundation for them generate ideas, compose stories, and develop artistic concepts. |
| Students viewed English as a language through which they | English as a Medium for                                                                                                                                  |
| Self-Expression                                          | could communicate emotions, experiences, and personal perspectives creatively.                                                                           |

As presented in Table 6, the participants consistently viewed English literacy as an essential component of their artistic learning. Students from the Visual Arts specialization emphasized the importance of English in writing artist statements and explaining the meaning of their artworks. Participants from Media Arts highlighted its role in developing scripts, captions, and multimedia presentations, while Creative Writing students regarded English as the primary medium through which they created literary works and expressed personal experiences. Collectively, these findings suggest that students perceive English literacy as a valuable resource for creative communication across different artistic disciplines.

## Discussion

The present study examined the relationship between English literacy, artistic expression, and academic performance among Grade 9 students enrolled in the Special Program in the Arts (SPA). The findings demonstrate that English literacy plays an important role in supporting students' creative development, although its influence appears to be one component within a broader set of factors that shape artistic performance. The integration of quantitative and qualitative findings provides a more comprehensive understanding of how literacy functions within arts education and highlights the value of interdisciplinary learning experiences.

The findings revealed that the participants demonstrated stronger writing and speaking skills than reading comprehension. While the overall level of English literacy was interpreted as good, reading obtained the lowest mean among the three language domains. This pattern suggests that SPA students are more accustomed to expressing ideas through written and oral communication than to analyzing and interpreting written texts. Their regular engagement in creative tasks, oral presentations, artist statements, and scriptwriting may have contributed to the stronger performance in productive language skills.

The relatively lower reading performance indicates that learners may require greater exposure to instructional activities that strengthen comprehension, interpretation, and critical analysis. Reading is a foundational literacy skill that enables students to understand artistic concepts, interpret literary texts, evaluate visual narratives, and construct informed creative responses. Strengthening reading comprehension therefore has the potential to enhance both language learning and artistic production.

This finding is consistent with recent studies emphasizing the importance of multimodal approaches in literacy instruction. Puspitasari et al. (2025) reported that integrating visual representations and multiple forms of communication significantly improves students' reading comprehension and engagement. Likewise, the OECD (2023) emphasized that literacy in contemporary education extends beyond decoding printed texts and involves interpreting information presented through diverse media and symbolic systems. These findings support the view that reading instruction within the SPA curriculum should incorporate visual texts, multimedia resources, and authentic artistic materials that align with students' learning experiences.

The findings further revealed that the participants demonstrated a good level of artistic expression, with creativity obtaining the highest mean score. Students across the three SPA specializations exhibited originality, imagination, and the ability to communicate ideas through artistic outputs. However, comparatively lower ratings in technique and presentation indicate that although students possess creative potential, they continue to develop the technical competencies necessary to effectively execute and present their artistic works.

This observation supports Eisner's (2002) Theory of Arts-Based Cognition, which argues that the arts cultivate forms of thinking that involve imagination, interpretation, reflection, and aesthetic judgment. Eisner emphasized that artistic learning develops through continuous practice, experimentation, and refinement rather than through technical mastery alone. The present findings suggest that while students naturally demonstrate creativity, sustained instructional support remains necessary to strengthen technical execution and artistic presentation.

The positive yet weak relationship between English literacy and artistic expression further demonstrates that language contributes to creativity without serving as its sole

determinant. Students who possess stronger English literacy may be better equipped to organize ideas, explain artistic intentions, compose narratives, and communicate creative experiences. Nevertheless, creativity is influenced by multiple interacting factors, including prior experiences, motivation, artistic training, instructional strategies, and opportunities for creative practice. Consequently, English literacy should be viewed as an enabling resource that complements rather than determines artistic development.

This finding aligns with Kress's (2010) Theory of Multimodal Literacy, which explains that meaning is constructed through the interaction of multiple semiotic resources, including written language, visual images, sound, movement, and digital media. Within the Special Program in the Arts, students communicate ideas through combinations of linguistic and artistic modes rather than through language alone. English therefore functions not only as a linguistic skill but also as one component of a broader multimodal system that supports artistic communication and meaning-making.

The qualitative findings reinforce this perspective. Across the three SPA specializations, participants consistently described English as an essential tool for explaining artworks, writing stories and scripts, preparing multimedia presentations, and communicating personal experiences. These responses demonstrate that students recognize English as a practical resource that supports artistic expression rather than merely as a classroom subject. Such perceptions strengthen the argument that literacy instruction becomes more meaningful when students apply language authentically within creative and interdisciplinary contexts.

The findings also reflect Vygotsky's (1978) Social Interactionist Theory, which emphasizes that language develops through meaningful social interaction and collaborative learning. Within SPA classrooms, students regularly engage in discussions, peer critiques, performances, collaborative projects, and reflective activities that require them to negotiate meaning and communicate ideas with others. These learning experiences simultaneously strengthen English literacy and artistic competencies by allowing students to construct knowledge through interaction and shared creative experiences.

The study further revealed very weak relationships between English literacy and English grades, as well as between artistic expression and Arts grades. These findings suggest that classroom grades may not always accurately represent students' actual literacy competencies or creative abilities. Academic grades often reflect multiple components of assessment, including attendance, participation, completion of requirements, classroom behavior, and teacher judgment. Consequently, students with similar grades may demonstrate considerable differences in reading comprehension, communication skills, creativity, or artistic performance.

This observation highlights the importance of adopting more authentic assessment approaches that evaluate students' actual performance in both literacy and the arts. Performance-based assessments, portfolio evaluation, oral presentations, creative projects, and expert evaluation may provide richer evidence of students' learning than traditional grading systems alone. Such approaches are particularly appropriate within arts education, where creativity, originality, and personal expression represent essential learning outcomes.

Overall, the findings affirm that English literacy supports artistic expression by providing students with the language and communication skills needed to interpret, construct, and share creative meaning. However, literacy represents only one dimension of artistic development. Creative growth is likewise influenced by instructional experiences, technical training, collaboration, motivation, and opportunities for authentic artistic practice. These findings support the continued integration of literacy-rich and arts-based instructional strategies that encourage students to develop language proficiency alongside creativity, critical thinking, and effective communication.

The present study contributes to the growing body of research on literacy and arts education by providing empirical evidence from the Philippine Special Program in the Arts. It likewise extends the application of Eisner's Theory of Arts-Based Cognition, Kress's Theory of Multimodal Literacy, and Vygotsky's Social Interactionist Theory within the context of secondary arts education. The findings provide practical implications for English teachers, SPA educators, curriculum developers, and school administrators seeking to design interdisciplinary learning experiences that strengthen both English literacy and artistic expression among adolescent learners.

This study was limited to Grade 9 SPA students from a single public secondary school, which may limit the generalizability of the findings. Additionally, the relatively small sample size and the cross-sectional design restrict the ability to establish causal relationships among the variables. Future studies may involve larger and more diverse populations and employ longitudinal or mixed-method approaches to provide a more comprehensive understanding of the relationship between English literacy and artistic expression.

## **Conclusion**

This study examined the relationship between English literacy, artistic expression, and academic performance among Grade 9 students enrolled in the Special Program in the Arts (SPA) at New Ormoc City National High School. The findings demonstrate that English literacy serves as an important component of students' artistic development by enabling them to interpret ideas, communicate meaning, and express creativity across different artistic disciplines. Although the relationship between English literacy and artistic expression was positive, its modest strength indicates that artistic growth is

influenced by a combination of linguistic, cognitive, instructional, and experiential factors.

Among the three literacy domains, writing and speaking emerged as the participants' strongest competencies, while reading comprehension remained comparatively weaker. This finding suggests that SPA students benefit from learning experiences that emphasize creative production and oral communication but require additional opportunities to strengthen analytical reading and textual interpretation. Enhancing reading instruction through multimodal and arts-integrated approaches may help learners develop stronger critical thinking skills while enriching their creative practice.

The study also revealed that the participants demonstrated good levels of artistic expression, particularly in creativity and self-expression. However, comparatively lower ratings in technique and presentation indicate that creativity should be supported by continuous skills development, guided practice, and authentic performance opportunities. These findings reinforce the importance of balancing originality with technical competence in arts education.

Furthermore, the weak relationships observed between English literacy, artistic expression, and academic performance suggest that traditional grading practices may not fully capture students' actual competencies. Literacy and creativity are complex constructs that extend beyond classroom grades and are better assessed through authentic, performance-based tasks that allow students to demonstrate their understanding in meaningful contexts.

The qualitative findings further emphasize that students view English not simply as an academic subject but as a practical resource for artistic communication. Across the Visual Arts, Media Arts, and Creative Writing specializations, participants consistently described English as essential for explaining artistic concepts, composing narratives and scripts, presenting creative outputs, and expressing personal experiences. These perceptions reinforce the view that literacy functions as both a linguistic competence and a multimodal resource that supports artistic learning.

Taken together, the findings affirm the complementary perspectives of Vygotsky, Eisner, and Kress by demonstrating that language, creativity, and meaning-making are interconnected within arts education. English literacy enables learners to engage more effectively in creative processes, while artistic experiences provide authentic contexts in which language is meaningfully applied. Integrating literacy-rich and arts-based instruction therefore offers valuable opportunities for developing learners who are not only academically competent but also creative, reflective, and effective communicators.

This study contributes to the growing body of literature on literacy and arts education in the Philippine context by providing empirical evidence from the Special Program in the Arts. The findings offer practical insights for English teachers, SPA educators, curriculum

developers, and school administrators in designing interdisciplinary learning experiences that strengthen both English literacy and artistic expression. Future research may expand the scope by involving larger populations, additional SPA disciplines, and longitudinal approaches to further examine how literacy and creativity develop over time.

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# ENHANCING THE WRITING PROFICIENCY OF GRADE 8-SPJ STUDENTS OF ONDOY NATIONAL HIGH SCHOOL THROUGH G.E.M.S. SESSIONS

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## **Abstract**

This study aimed to enhance the writing proficiency of Grade 8-SPJ students of Ondoy National High School through the implementation of G.E.M.S. (G–Grammar, E–Expression in sentence construction, M–Meaningful flow in coherence and organization, and S–Strong vocabulary) sessions. A quasi-experimental design was employed to determine the effectiveness of the intervention. The respondents were 21 Grade 8-SPJ students who participated in a series of grammar sessions focused on the four identified components of writing proficiency: grammar usage, sentence construction, coherence and organization, and strong vocabulary. Data were gathered through pre-tests, post-tests, and evaluation rubrics assessing four identified components of writing proficiency. The pre-test results revealed that all 21 participants obtained low scores or were at the “Needs Improvement” level across the four writing skill categories: grammar usage, sentence construction, coherence and organization, and vocabulary. In contrast, the post-test results showed that all participants improved to a moderate or “Satisfactory” level in these same areas. The findings show that, based on the comparison of pre-test and post-test scores using the t-test for paired samples, there is a significant difference in the students’ writing performance after being exposed to the Grammar Competence Sessions. This suggests that the intervention was effective in enhancing the writing skills of Grade 8 – SPJ students.

**Keywords:** Writing proficiency, G.E, M, S. Framework, Grammar Competence, Quasi-Experiment Design, Grade 8-SPJ Students.

## **Introduction**

Writing is a powerful tool that reflects language structure and promotes language learning. It plays a vital role in English as a Foreign Language (EFL) learning because it is needed to support the learners’ academic success (Aliyu, 2020) and to be effective in communication. This idea is in line with the research findings conducted by Tusyanah, Anissa, Chayatina, Sakitri, & Utami (2019), who claimed that writing is a fundamental skill in language learning. The learners must employ their knowledge of the language, such as grammar, punctuation, spelling, sentence structure, and many other skills, thus enabling them to organize and express their ideas, thoughts, and emotions accurately. An effective writer knows how to organize their thoughts meaningfully by emphasizing the use of correct grammar and punctuation. Moreover, writing is not only vital for

developing academic performance and effective communication, but also contributes to social and emotional development. In this competitive world, writing is also one of the essential skills necessary to excel.

However, teaching writing has become difficult because of the challenges faced by students in learning writing skills. Many students still experience difficulties in writing since it requires the appropriate grammatical and textual structures. Their inability to write well affects their communication skills as well as their academic performance, which may further affect their chances of securing a better future.

Based on preliminary research conducted by the writer at SMA Negeri 1 Natar, Lampung, Indonesia, in 2023, the result of the mean for students' writing was 62.75. The writer also found that students' writing skill needs to be improved. Students find it difficult to express their ideas in writing because they have limited vocabulary and a lack of grammatical knowledge. Another factor that hinders students in writing is that they are not used to expressing their ideas in written form.

Jeger P. Paragas and Christopher DC. Francisco observed that as English language teachers teaching Grade VII at Umingan Central National High School, Umingan, Pangasinan, there are more students who hate writing, most especially the creative writings. Every time that topic is discussed, specifically writing, they have a hard time organizing their thoughts, and most probably in expressing what is on their minds.

Similar observation is also evident at Ondoy National High School Grade 8-SPJ students, who, despite their inclusion in the Special Program in Journalism (SPJ), classroom observations, students' outputs, and teachers' feedback revealed that many students specifically enrolled in SPJ-8 still struggle with grammar, sentence structure, coherence, and vocabulary in writing. These persistent difficulties hinder students from producing well-structured, coherent, and polished written outputs that are essential for both academic performance and journalism-related tasks.

Moreover, DO 39, s. 2012, Policy Guidelines on Addressing Learning Gaps and Implementing a Reading and Writing Program in Secondary Schools, Effective School Year (SY) 2012-2013) highlighted the need to address this issue effectively by strengthening grammar competence as a foundation for effective writing.

In response to these challenges and in adherence to the strict implementation of the DO 39, s. 2012, this study was conducted to enhance the writing proficiency of Grade 8 SPJ students through grammar competence sessions (G.E.M.S.). The sessions were designed to provide students with systematic and engaging grammar activities focusing on the eight parts of speech, sentence structure, subject-verb agreement, proper punctuation and vocabulary development. Through these sessions, students' grammar skills are expected to improve, as well as their writing skills.

This study intends to examine the impact of grammar competence sessions in enhancing the writing proficiency of Grade 8 SPJ students. The findings of this research may provide valuable insights for English teachers, curriculum planners, and school administrators in

designing effective interventions that address students' writing difficulties. Furthermore, it may serve as a reference for future research on the impact of grammar instruction on writing performance.

## **Theoretical Frameworks**

This study is grounded on the **Process Writing Theory** proposed by Flower and Hayes (1981) and **Systemic Functional Linguistics (SFL)** developed by Michael Halliday.

### **Process Writing Theory**

Flower and Hayes (1981) conceptualized writing as a recursive, cognitive process involving continuous interaction among the task environment, the writer's long-term memory, and the writing processes of 1—planning, which includes generating ideas, organizing content, and setting goals 2. Translating, which refers to transforming ideas into written language, and 3. Reviewing, which involves evaluating and revising the written text. The effectiveness of each stage depends on the writer's access to linguistic knowledge stored in long-term memory, particularly grammar and vocabulary, as well as their ability to construct meaningful and coherent sentences and texts. Moreover, the theory emphasizes that effective writing development occurs when learners are supported throughout these interconnected stages of writing rather than being evaluated solely on the final written product.

Within this theoretical viewpoint, the G.E.M.S. model—Grammar, Expression (Sentence Construction), Meaningful Flow (Coherence and Organization), and Strong Vocabulary—is positioned as a structured instructional intervention designed to strengthen learners' linguistic and cognitive resources essential for effective writing. By explicitly teaching grammar, sentence construction, coherence, and vocabulary, the sessions equip learners with the necessary linguistic tools to engage more effectively in the recursive writing process described by Flower and Hayes.

Teacher-guided practice, feedback, and revision activities embedded in the G.E.M.S. sessions further support learners' movement across planning, drafting, and revising stages, reinforcing writing as a process rather than a one-time task.

### **Systemic Functional Linguistics (SFL)**

Michael Halliday views language as a meaning-making resource shaped by social context and communicative purpose. SFL emphasizes that language functions simultaneously to express ideas, enact social relationships, and organize discourse. These functions are realized through three: the ideational (how ideas are represented), interpersonal (how relationships and stance are expressed), and textual meta functions (how texts are organized coherently) (Halliday & Hasan, 1985).

Within this theoretical perspective, the G.E.M.S. Framework—Grammar, Expression (Sentence Construction), Meaningful Flow (Coherence and Organization), and Strong Vocabulary—is conceptualized as a structured instructional approach that develops learners' ability to make meaning effectively through written language. Each component of G.E.M.S. aligns with one or more of Halliday's meta functions, thereby supporting comprehensive writing development.

## Conceptual Framework

This study is anchored in the Input–Process–Output (IPO) model and seeks to examine the impact of the G.E.M.S. framework in enhancing the writing proficiency of Grade 8-SPJ students.

The input of this model is the G.E.M.S. Framework consists of four core components that target essential writing sub-skills. Grammar Usage(G) focuses on the correct use of language structures, including tense, subject–verb agreement, punctuation, and sentence mechanics, which are fundamental to accurate written communication. Expression (E) emphasizes sentence construction, enabling learners to produce clear, complete, and varied sentences that effectively convey meaning. Meaningful Flow (M) addresses coherence and organization by guiding learners in logically sequencing ideas and developing unified and well-structured paragraphs. Strong Vocabulary (S) develops learners' lexical knowledge, allowing for precise, appropriate, and effective word choice in written texts. Collectively, these components strengthen learners' linguistic resources and provide a solid foundation for effective writing.

In the process phase, the effect of the G.E.M.S. Framework on learners' writing skills is mediated by two key theoretical constructs: Process Writing Theory and Systemic Functional Linguistics. Grounded in the Process Writing Theory of Flower and Hayes, writing development is viewed as a recursive process that involves planning, translating, and reviewing. During the planning stage, learners generate ideas and organize content; in the translating stage, these ideas are transformed into written language; and in the reviewing stage, texts are evaluated and revised to improve clarity and accuracy. The G.E.M.S. components support each stage of this writing process by reducing linguistic difficulty and enabling learners to concentrate more effectively on meaning, structure, and organization.

In addition, Systemic Functional Linguistics by Halliday explains how language functions as a resource for meaning-making through three meta functions: the ideational meta function, which enables learners to express ideas and experiences through appropriate grammar and vocabulary; the interpersonal meta function, which allows learners to convey stance, attitude, and interaction through effective sentence construction; and the textual meta function, which supports the organization of ideas into coherent and cohesive texts through meaningful flow. Through engagement in the writing process, learners apply these meta functions to produce purposeful, well-structured, and meaningful written texts.

The output of this model is the result of the interaction between the G.E.M.S. Framework, the writing process, and functional language use, in which learners are expected to demonstrate enhanced writing skills. These improvements are reflected in increased grammatical accuracy, clearer and more effective sentence construction and expression, stronger coherence and organization of ideas, and more appropriate and varied vocabulary use. Collectively, these gains contribute to a significant improvement in the overall quality of learners' written output, indicating more accurate, meaningful, and well-structured writing.

## **Method**

### **Research Design**

This study employed a quasi-experimental research design, specifically the pre-test and post-test design, to determine the effectiveness of grammar competence sessions in enhancing the writing skills of Grade 8 students. This design was chosen because it quantifies the measurement of students' writing performance before and after the intervention, establishing whether the grammar sessions produced significant improvement or not. Using pre-tests and post-tests in writing instruction is best because they establish a baseline, measure growth, reveal learning gaps, and evaluate teaching effectiveness, showing tangible progress in skills like grammar, comprehension, and idea development by comparing what students knew before a lesson/unit to what they know after, making learning more focused and outcomes clearer. The participants were given the same pre-test and post-test in writing, and their scores were compared to assess the impact of the intervention. This design is appropriate for the study since it provides a systematic way of evaluating the relationship between grammar competence instruction and the development of students' writing skills.

### **Research Setting**

The research was conducted at Ondoy National High School, Ondoy, Ibajay, Aklan, for the school year 2025-2026. It is the only Secondary Public High School in the municipality of Ibajay that offers a Special Program in Journalism since 2017. The SPJ program is designed to develop students' competencies in writing, speaking, and campus journalism.

However, observations revealed that many students continue to struggle with grammar, sentence structure, coherence and organization and limited use of vocabulary in writing, which justifies the need for this research; thus, the institution was chosen as the research setting because it provides an appropriate venue for testing the effectiveness of grammar competence sessions in improving the writing skills of the 21 Grade 8 SPJ students who were selected as the participants.

### **Respondents of the Study**

The respondents of this study were the Grade 8-SPJ students of Ondoy National High School during the school year 2025–2026. A total of 21 students in a class were chosen. They were selected because they were directly involved in the intervention program. Moreover, they were chosen based on their willingness to participate in the study. No student was forced to participate. Each participant was secured with parental consent and was oriented prior to their participation.

**Table 1.** *Respondents of the study*

| <b>Grade &amp; Section</b> | <b>Male</b> | <b>Female</b> | <b>Total</b> |
|----------------------------|-------------|---------------|--------------|
| 8-SPJ                      | 5           | 16            | 21           |

The researcher utilized total population sampling, which included all 21 Grade 8-SPJ students to ensure comprehensive representation of results. Etikan et al, (2016) explain that total population sampling is appropriate when the target population is small and well defined, allowing researchers to include the entire group in their investigation. By including the full population of the Grade 8-SPJ class, the study gathered comprehensive data on their writing performances during and after the G.E.M.S. framework. This inclusive approach maximized the depth and validity of the insights related to differentiated instruction in the district's classroom context.

### **Data Gathering Tool**

The research instruments used in gathering data were a pre-test and a post-test in writing, an essay entitled: Campus Journalism in the Digital Age: Challenges and Opportunities, with adopted rubrics. The tool is composed of a 20-point criterion, such as Grammar Usage, Sentence Construction, Coherence and Organization, and Vocabulary. Each criterion with specific descriptions will be evaluated based on the following descriptors. Excellent (5), Good (4), Satisfactory (3), Needs Improvement (2) and Poor (1). To ensure the instrument's validity, a panel of subject-matter experts reviewed the questionnaire. These experts' review helped confirm that the questionnaire items were clear, relevant, and aligned with the study's Statement of the Problem (SOP) thereby strengthening the tool's credibility and appropriateness. According to Mora et al. (2016), the validation process is a crucial step that must be completed before administration, as it ensures that the tool is clear and aligned with the research objectives. The expert reviewed the tool to determine whether it appropriately addressed the research problems and maintained content reliability, thus enhancing the credibility of the data collected.

### **Data Gathering Procedures**

The study was conducted for two consecutive weeks at Ondoy National High School, Ondoy, Ibajay, Aklan, with the participation of 21 enrolled Grade 8-SPJ students for the SY: 2025-2026. It commenced with securing an approval letter from the School Principal, followed by an orientation to the adviser, students, and parents.

A pre-test was administered to the students during the first day through a writing task entitled "Campus Journalism in the Digital Age: Challenges and Opportunities." This activity aims to assess their baseline skills in terms of grammar usage, sentence structure, coherence and organization, and vocabulary, which appeared as the least mastered skills based on the reported Least Mastered Competencies in English of Grade 7 SY: 2024-2025. This will be evaluated using an adopted rubric. The tool is composed of a 20-point criterion, such as Grammar Usage, Sentence Construction, Coherence and Organization, and Vocabulary. Each criterion with specific descriptions will be evaluated based on the following descriptors. Excellent (5), Good (4), Satisfactory (3), Needs Improvement (2),

and Poor (1). A series of structured sessions followed, lasting for two weeks. Each session focuses on grammar rules, sentence structures, coherence and organization, and vocabulary development. Each session involved guided practice and drills to strengthen and deepen students' understanding, ensuring meaningful learning at the end of every session. A post-test similar to the pre-test was administered at the end of the session for comparison. The result will determine whether there is a significant improvement or not. All papers were gathered, checked, recorded and stored systematically and securely to ensure accuracy in the data analysis.

### **Statistical Treatment of Data**

The data gathered from the pre-test and post-test were tabulated, organized, and analyzed using descriptive statistics. The mean and standard deviation were computed to determine the overall performance of the respondents in grammar usage, sentence construction, coherence and organization, and vocabulary. A paired sample *t*-test was utilized to measure the significant difference between the pre-test and post-test results, thus determining the effectiveness of the grammar competence sessions: (G.E.M.S.). The data analysis provided both numerical evidence and interpretative insights into the enhancement of the writing skills of the Grade 8-SPJ students.

### **Results and Discussion**

This study examines the effectiveness of G.E.M.S. (G–Grammar, E–Expression in sentence construction, M–Meaningful flow in coherence and organization, and S–Strong vocabulary) sessions in enhancing the writing skills of Grade 8 SPJ students of Ondoy National High School through a series of structured learning sessions focusing on key components of effective writing.

Specifically, the study sought to determine the students' level of writing skills before and after the implementation of the G.E.M.S. sessions and to find out whether there was a significant difference between their pre-test and post-test results. The intervention emphasized grammar accuracy, sentence construction, coherence and organization and the use of strong vocabulary.

Using a quasi-experimental design, the study involved who were assessed through pre-test and post-test evaluations using rubrics. Results revealed that the student initially performed at a low or needs-improvement level across all writing skill indicators. After the implementation of the G.E.M.S. sessions, their performance improved to a moderate or satisfactory level. Statistical analysis using the paired sample *t*-test showed a highly significant difference between the pre-test and post-test mean scores, indicating that the G.E.M.S. sessions were effective in enhancing the students' writing skills which also help boost their self-confidence.

Overall, the findings suggest that focused instruction through the G.E.M.S. framework can effectively develop learners' competence in writing, especially with the aid and guidance of a knowledgeable English teacher by strictly and consistently reinforcing grammatical skills, improving sentence construction, promoting coherent organization of ideas, and enriching vocabulary use.

## Conclusion

The findings of the study revealed that the implementation of the G.E.M.S. framework effectively enhanced the writing skills of Grade 8-SPJ students of Ondoy National High School. The pre-test results showed that students initially demonstrated a low level of performance in all writing components—grammar, sentence construction, coherence and organization, and vocabulary. However, after exposure to the G.E.M.S. intervention, the post-test results indicated a marked improvement, with students attaining a moderate or satisfactory level of writing proficiency.

The significant difference between the pre-test and post-test scores, as shown by the paired sample t-test, confirms that the G.E.M.S. approach had a positive and statistically significant effect on students' writing performance. This suggests that structured and focused instruction on grammar, expression, meaningful flow, and vocabulary is an effective strategy for developing students' overall writing competence.

In conclusion, the G.E.M.S. framework proved to be a valuable tool in improving students' writing abilities, fostering not only grammatical accuracy but also coherence, clarity, and richness of expression. The study underscores the importance of integrating systematic and engaging writing enhancement programs in language instruction to help learners become more confident and proficient writers.

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# TEACHER'S MASTERY IN IMPLEMENTING ACADEMIC RECOVERY AND LEARNING PROGRAM FOR FILIPINO LEARNERS

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## **Abstract**

This study assessed the teachers' mastery in implementing the Academic Recovery and Accessible Learning (ARAL) Program for Filipino learners in basic education in the District of Sta. Maria West, Division of Bulacan. Specifically, it examined the effectiveness of the ARAL Program components in terms of instructional materials, teaching strategies, assessment tools, and time allotment; the level of institutional support in terms of school head supervision, DepEd trainings and seminars, availability of learning resources, and monitoring and evaluation systems; the level of teachers' mastery in implementing the program; and the challenges encountered during implementation. The study further determined the significant relationship between ARAL Program components, institutional support, and teachers' mastery. A descriptive-correlational research design was employed. Data were gathered from 121 teachers involved in the implementation of the ARAL Program using a researcher-made questionnaire. Weighted mean, standard deviation, and correlation analysis were utilized to analyze the data. The findings revealed that the ARAL Program components were generally perceived as effective, with teaching strategies and assessment tools obtaining the highest ratings. Institutional support was assessed as providing high support, with school head supervision receiving the highest rating. Teachers demonstrated a high level of mastery in implementing the program, particularly in identifying learners needing remediation, adjusting instructional strategies, and monitoring learner progress. Meanwhile, the challenges encountered in program implementation were rated as moderate, with learner motivation, time allocation, and class size identified as the most common concerns. Furthermore, the study found a significant relationship between ARAL Program components and teachers' mastery, as well as between institutional support and teachers' mastery, indicating that effective program implementation and strong institutional support contribute to higher levels of teacher competence in program implementation. Based on the findings, the study concludes that teachers in the District of Sta. Maria West possess a high level of mastery in implementing the ARAL Program and are supported by effective program components and strong institutional support systems. However, continuous enhancement of instructional resources, professional development opportunities, learner engagement strategies, and implementation support mechanisms is recommended to further strengthen program effectiveness and teacher competency.

**Keywords:** Academic Recovery, teachers' mastery, institutional support, basic education, remediation

## Introduction

Education plays a very significant role in the development of learners and in achieving sustainable development worldwide. Education for Sustainable Development is embodied in the United Nations Sustainable Development Goal (SDG) 4: Quality Education, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030. This goal emphasizes the importance of providing learners with the knowledge, skills, values, and attitudes necessary to contribute to sustainable development and become productive members of society.

The problem of learning gaps became more evident following the COVID-19 pandemic, which disrupted face-to-face instruction and affected learners' acquisition of essential competencies. This concern was further reflected in the results of the 2022 Programme for International Student Assessment (PISA) conducted by the Organization for Economic Co-operation and Development (OECD). The assessment revealed that Filipino learners obtained an average score of 355 in Mathematics, 347 in Reading, and 356 in science, all significantly below the OECD averages. Furthermore, a large number of Filipino learners did not reach the minimum proficiency level required in these subject areas, and the results showed no significant improvement from the country's 2018 PISA performance. These findings underscore the persistent learning challenges faced by Filipino learners and highlight the urgent need for targeted educational interventions to address learning loss.

In response to these challenges, the Philippine government enacted Republic Act No. 12028, otherwise known as the Academic Recovery and Accessible Learning (ARAL) Program Act. The ARAL Program was established as a national intervention designed to help Filipino learners recover from learning losses and strengthen foundational competencies in reading, mathematics, and science. School Year 2025–2026 marked the first year of the program's nationwide implementation, demonstrating the Department of Education's commitment to improving learning outcomes and ensuring that no learner is left behind.

The Academic Recovery and Accessible Learning (ARAL) Program is a DepEd initiative that provides free, targeted, and evidence-based tutoring and intervention services to kindergarten to Grade 10 learners who are struggling academically. Through one-on-one and small-group tutorials, the program aims to bridge learning gaps, improve academic performance, and promote equitable access to quality education.

Teachers play a vital role in the successful implementation of the ARAL Program. Their expertise, knowledge, skills, and instructional practices are essential in helping learners recover from learning loss and achieve the desired learning outcomes. Effective implementation of the program requires teachers to be adequately prepared and knowledgeable in delivering appropriate interventions that address the specific learning needs of struggling Filipino learners.

Teacher mastery refers to a teacher's ability to understand, apply, and effectively implement instructional strategies and interventions. It encompasses lesson planning, instructional delivery, learner assessment, classroom management, and the provision of appropriate remediation activities. When teachers demonstrate a high level of mastery in

implementing the ARAL Program, learners are more likely to experience improved academic performance and meaningful learning progress.

In the District of Sta. Maria West, Schools Division of Bulacan, the ARAL Program focusing on reading is being implemented to support learners who need academic recovery. As of its initial implementation, there were approximately 1,415 ARAL learners in the district who received academic interventions. Based on DepEd Memorandum No. 65, s. 2025, entitled "Implementing Guidelines for the Academic Recovery and Accessible Learning (ARAL) Program in Reading for Key Stages 1 to 3," the Department of Education mandated the phased implementation of reading interventions beginning School Year 2025–2026. The program provides free, targeted, and data-driven tutorials to struggling learners from Grades 1 to 10 to improve reading fluency and comprehension through the assistance of teachers, pre-service teachers, and volunteers. During its initial implementation, ARAL-Reading was prioritized to address the most urgent learning gaps among learners.

However, the level of teachers' mastery in implementing the program may vary. Some teachers may encounter challenges such as limited training opportunities, insufficient instructional materials, inadequate institutional support, and time constraints that may affect the effective delivery of the program.

Given these circumstances, it is important to examine and understand teachers' mastery in implementing the ARAL Program. Specifically, this study focuses on the components of the ARAL Program, the level of institutional support provided, teachers' mastery and the challenges encountered by teachers in implementing the ARAL Program in the District of Sta. Maria West, Schools Division of Bulacan. The findings of the study may serve as a basis for improving instructional practices, enhancing institutional support, and strengthening the implementation of intervention programs that contribute to quality, inclusive, and sustainable education for all learners.

## Conceptual Framework

### *ARAL Program (RA 12028)*

| <b>Input</b>                                         | <b>Process</b>                                                  | <b>Output</b>                                                                                 |
|------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 1. ARAL Program Components                           | 1.Data Collection                                               | 1. Level of teachers' mastery in ARAL program                                                 |
| 1.1 ARAL Instructional Materials / Modules           | 2. Data Analysis                                                | 2. Identified challenges in the implementation                                                |
| 1.2 Teaching strategies for remediation and tutorial | 2.1Identifying of teachers Mastery level in ARAL Implementation | Proposed intervention or enhanced plan to improve teachers' mastery and program effectiveness |
| 1.3 Assessment Tools                                 | 2.2 Statistical Analysis and Responses                          |                                                                                               |
| 1.4 Time allotment / tutorial schedule               | 3. Evaluation                                                   |                                                                                               |
| 2. Institutionalized Support Supervision             | 3.1 Determining strength and weaknesses of ARAL Implementation  |                                                                                               |
| 2.1 School Head Supervision                          |                                                                 |                                                                                               |

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|                                        |                                                    |
|----------------------------------------|----------------------------------------------------|
| 2.2 DepEd Trainings and Seminars       | 3.2 Identifying Challenges encountered by teachers |
| 2.3 Availability of Learning Resources |                                                    |
| 2.4 Monitoring and evaluation system   |                                                    |

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## Research Questions

1. How may the ARAL Program components be described in terms of:
  - 1.1 availability of ARAL instructional materials and modules;
  - 1.2 teaching strategies used for remediation and tutorials;
  - 1.3 assessment tools utilized (CRLA and Phil-IRI results); and
  - 1.4-time allotment and tutorial schedule?
2. How may the institutional support for the ARAL Program be described in terms of:
  - 2.1 school head supervision;
  - 2.2 DepEd training and seminars;
  - 2.3 availability of learning resources; and
  - 2.4 monitoring and evaluation system?
3. What is the level of teachers' mastery in implementing the ARAL Program?
4. Is there a significant relationship between Teachers' Mastery in implementing ARAL Program to its components and Institutional Support for the program?
5. What challenges are encountered by teachers in implementing the ARAL Program?
6. Based on the findings of the study, what intervention or enhancement plan may be proposed to improve teachers' mastery and the effectiveness of the ARAL Program?

## Hypothesis

Ho: There is no significant relationship between teacher's mastery in implementing ARAL Program to its components and Institutional support for the program.

## Method

This study utilized a descriptive-correlational research design. Macayanan and Abalos (2023) utilized a descriptive-correlational research design to examine the relationship between teachers' instructional skills, competencies, and teaching performance using survey questionnaires and statistical analysis. The study revealed significant relationships among teachers' competencies, and instructional performance. Data were gathered

through survey questionnaires and analyzed using descriptive statistics such as frequency, percentage, and weighted mean, as well as inferential statistics like Spearman's rho to determine relationships among variables.

The study revealed institutional support were significantly related to their level of teaching competence. This supports the use of a descriptive-correlational design in examining teachers' mastery and its influencing factors, like the present study on the implementation of the ARAL Program. This design is appropriate because it allows the researcher to describe the significant relationships among teachers' mastery, ARAL program components, and institutional support without manipulating any variables.

### **Research Setting**

This study was conducted in the District of Sta. Maria West, Division of Bulacan, a public school district under the Department of Education in Region III. The district is made up of nine elementary schools that serve learners from different barangays of Santa Maria Bulacan.

Sta. Maria West District is composed of schools that vary in terms of size, available resources, and school facilities. The study focused on nine (9) elementary schools in the district. These schools were chosen because they are actively implementing learning recovery interventions for striving learners.

In these schools, ARAL tutors are the teachers that play an important role in helping learners recover from learning gaps, especially in reading and other foundational skills. They are directly involved in providing remediation, using different teaching strategies, and supporting learners who need additional assistance.

### **Respondents of the Study**

This study used a universal sampling technique. All teachers, specifically the ARAL tutors who were actively implementing the learning recovery program in the selected schools were included as respondents.

Since the population of program implementers was manageable, the researcher included all 121 teachers teaching ARAL instead of selecting a sample. This to make sure that every teacher in this program with direct experience in program implementation was represented in the study.

### **Data Gathering Tool**

The primary data gathering tool used in this study was a structured survey questionnaire developed by the researcher based on related literature, studies, and DepEd guidelines relevant to learning recovery interventions.

First, the questionnaire was designed to obtain information on the teachers' mastery in implementing the learning recovery program in terms of the following key areas:

- Program components
- Institutional support
- Teachers' mastery in instructional delivery and implementation

Second, the instrument consisted of statements answered using a Likert scale, which allowed respondents to rate their level of agreement based on their actual experiences in implementing the program. This scale helped quantify teachers' perceptions and made the responses suitable for statistical analysis.

Third, to assure the validity of the instrument, it was reviewed and checked by experts in the field of education and research. Their suggestions were incorporated to improve clarity, relevance, and appropriateness of the items.

Lastly, the finalized questionnaire was then administered to the selected ARAL tutors' respondents in the nine (9) elementary schools in Sta. Maria West District during the School Year 2025–2026 through online platforms for pilot testing and was garnered an internal validity result using the Cronbach alpha of 0.87, which is interpreted as Highly Acceptable.

### **Data Gathering Procedure**

The researcher followed several steps in collecting the data. First, the researcher asked permission from the Schools Division of Bulacan to conduct the study among the ARAL Tutors of nine schools in the District of Sta. Maria West. After receiving the approved permit from the Schools Division, the researcher coordinated with the school principals to finalize the schedule of data collection. On the agreed schedule, the researcher administered the questionnaire to the respondents through online platform (google form) session. Before the administration of the questionnaire, the researcher explained the nature and purpose of the study to make it that the respondents are properly informed.

### *Statistical Treatment of Data*

The data gathered in this study were analyzed and interpreted using appropriate statistical tools to answer the research questions.

Weighted mean was used to describe the ARAL Program components in terms of availability of ARAL instructional materials and modules, teaching strategies used for remediation and tutorials, assessment tools utilized, and time allotment and tutorial schedule. The following scale was used for interpretation:

| <b>Scale</b> | <b>Range</b> | <b>Qualitative Description</b> |
|--------------|--------------|--------------------------------|
| 1            | 1.00 to 1.79 | Strongly Disagree              |
| 2            | 1.80 to 2.59 | Disagree                       |
| 3            | 2.60 to 3.39 | Moderately Agree               |
| 4            | 3.40 to 4.19 | Agree                          |
| 5            | 4.20 to 5.00 | Strongly Agree                 |



Weighted mean was utilized to determine the level of institutional support as perceived by the respondents in each of the four areas: school head supervision, DepEd trainings and seminars, availability of learning resources, and monitoring and evaluation system.

Using a 5 -point Likert scale was used to interpret the result.

| <b>Scale</b> | <b>Range</b> | <b>Qualitative Description</b> |
|--------------|--------------|--------------------------------|
| 1            | 1.00 to 1.79 | Very Low Support               |
| 2            | 1.80 to 2.59 | Low Support                    |
| 3            | 2.60 to 3.39 | Moderately Support             |
| 4            | 3.40 to 4.19 | High Support                   |
| 5            | 4.20 to 5.00 | Very High Support              |

In addition, weighted mean was used to determine the level of teachers' mastery in implementing the ARAL Program based on their responses to the Likert-scale questionnaire, using a 5-point Likert scale for interpretation.

| <b>Scale</b> | <b>Range</b> | <b>Qualitative Description</b> |
|--------------|--------------|--------------------------------|
| 1            | 1.00 to 1.79 | Very Low Mastery               |
| 2            | 1.80 to 2.59 | Low Mastery                    |
| 3            | 2.60 to 3.39 | Moderate Mastery               |
| 4            | 3.40 to 4.19 | High Mastery                   |
| 5            | 4.20 to 5.00 | Very High Mastery              |

The Spearman's Rank Correlation Coefficient (Spearman's rho) was used. This statistical tool was utilized to determine the significant relationship between teachers' mastery in implementing the ARAL Program, its components, and institutional support for the program.

The interpretation of the correlation coefficient was as follows:

| <b>Correlation Coefficient</b> |     | <b>Dancey and Reidy (Psychology)</b> |
|--------------------------------|-----|--------------------------------------|
| -1                             | 1   | Perfect                              |
| -0.9                           | 0.9 | Strong                               |
| -0.8                           | 0.8 | Strong                               |
| -0.7                           | 0.7 | Strong                               |
| -0.6                           | 0.6 | Moderate                             |
| -0.5                           | 0.5 | Moderate                             |
| -0.4                           | 0.4 | Moderate                             |
| -0.3                           | 0.3 | Weak                                 |
| -0.2                           | 0.2 | Weak                                 |
| -0.1                           | 0.1 | Weak                                 |
| 0                              | 0.  | Zero                                 |

Source: (28), Akoglu, H. (2018), *User's Guide to correlation coefficients. Turkish Journal of Emergency Medicine*, 18(3), 91-93.

#### *Significance Level (p-value)*

The level of significance was set at 0.05. If the computed *p-value* is less than 0.05, the null hypothesis rejected, indicated a significant relationship between variables.

The weighted mean was used to determine the extent to which teachers encountered specific challenges in implementing the ARAL Program. A 5-point Likert scale was used to describe the level of challenges encountered.

| <b>Scale</b> | <b>Range</b> | <b>Interpretation</b> |
|--------------|--------------|-----------------------|
| 1            | 1.00 to 1.79 | Very Low Challenge    |
| 2            | 1.80 to 2.59 | Low Challenge         |
| 3            | 2.60 to 3.39 | Moderate Challenge    |
| 4            | 3.40 to 4.19 | High Challenge        |
| 5            | 4.20 to 5.00 | Very High Challenge   |

The standard deviation may also be used to determine the consistency of teachers' responses regarding the ARAL components, Institutional support and challenges encountered.

Lastly, the researcher created an intervention plan based on the findings on the results obtained on the data gathered and analyzed.

## Results and Discussion

Academic Recovery and Accessible Learning (ARAL) Program Components

**Table 1:** ARAL program Instructional Materials

| Factor                                                                                                      | Mean | SD   | Qualitative Description | Verbal Interpretation |
|-------------------------------------------------------------------------------------------------------------|------|------|-------------------------|-----------------------|
| ARAL Program Instructional Materials                                                                        |      |      |                         |                       |
| 1. The instructional materials used in the ARAL Program are appropriate for the learners' needs.            | 3.60 | 0.91 | Agree                   | Positive              |
| 2. The materials provided in the ARAL Program support the achievement of learning competencies.             | 3.59 | 0.86 | Agree                   | Positive              |
| 3. Instructional materials are readily available and accessible during the implementation of ARAL sessions. | 3.62 | 1.04 | Agree                   | Positive              |
| 4. The ARAL instructional materials are clear, organized, and easy to understand.                           | 3.64 | 0.91 | Agree                   | Positive              |
| 5. The teacher is competent in utilizing ARAL instructional materials effectively.                          | 4.01 | 0.89 | Agree                   | Positive              |
| 6. The instructional materials are aligned with learners' learning gaps.                                    | 3.60 | 0.86 | Agree                   | Positive              |
| 7. The materials encourage active participation of learners                                                 | 3.71 | 0.84 | Agree                   | Positive              |
| 8. The ARAL materials are updated and relevant to current curriculum needs.                                 | 3.70 | 0.89 | Agree                   | Positive              |
| 9. The instructional materials are sufficient in quantity for all learners.                                 | 3.60 | 1.01 | Agree                   | Positive              |
| 10. The materials enhance learners' understanding of basic skills.                                          | 3.77 | 0.88 | Agree                   | Positive              |
| OVERALL Mean and SD                                                                                         | 3.68 | 0.92 | Agree                   | Positive              |

Note: 4.20-5.00 - Strongly Agree / Very Positive; 3.40- 4.19 – Agree / Positive; 2.60-3.39 – Neutral; 1.80-2.59 – Disagree / Negative; 1.00-1.79 - Strongly Disagree / Very Negative

Based on the data presented, the computed overall mean of 3.68 (SD = 0.92) indicates that respondents generally agreed that the instructional materials used in the ARAL Program were appropriate, accessible, relevant, and supportive of learners' needs. The relatively low standard deviation suggests that respondents' perceptions were fairly consistent. Among the indicators, Statement 5 obtained the highest mean (M = 4.01, SD = 0.89), indicating strong agreement that teachers are competent in utilizing ARAL instructional materials effectively. Meanwhile, Statements 3 (SD = 1.04) and 9 (SD = 1.01) showed the greatest variability in responses, suggesting differing perceptions regarding the availability and sufficiency of instructional materials.

**Table 2:** ARAL program Teaching Strategies.

| <b>Factor</b>                                             | <b>Mean</b> | <b>SD</b> | <b>Qualitative Description</b> | <b>Verbal Interpretation</b> |
|-----------------------------------------------------------|-------------|-----------|--------------------------------|------------------------------|
| ARAL Program Teaching Strategies                          |             |           |                                |                              |
| 1. Uses appropriate strategies for striving learners.     | 3.86        | 0.84      | Agree                          | Positive                     |
| 2. Uses learner-centered and interactive activities.      | 3.00        | 0.80      | Agree                          | Positive                     |
| 3. Applies differentiated instruction effectively.        | 3.91        | 0.83      | Agree                          | Positive                     |
| 4. Adjusts strategies based on learners' performance.     | 3.99        | 0.85      | Agree                          | Positive                     |
| 5. Provides guided practice during lessons.               | 4.01        | 0.89      | Agree                          | Positive                     |
| 6. Simplifies lessons based on learners' ability level.   | 4.02        | 0.83      | Agree                          | Positive                     |
| 7. Uses varied instructional approaches in ARAL sessions. | 3.97        | 0.84      | Agree                          | Positive                     |
| 8. Motivates learners to actively participate.            | 4.05        | 0.88      | Agree                          | Positive                     |
| 9. Integrates remediation techniques effectively.         | 3.98        | 0.84      | Agree                          | Positive                     |
| 10. Ensures understanding before moving to new lessons.   | 4.02        | 0.78      | Agree                          | Positive                     |
| OVERALL Mean and SD                                       | 3.99        | 0.84      | Agree                          | Positive                     |

Note: 4.20-5.00 - Strongly Agree / Very Positive; 3.40- 4.19 – Agree / Positive; 2.60-3.39 – Neutral; 1.80-2.59 – Disagree / Negative; 1.00-1.79 - Strongly Disagree / Very Negative

Table shows that the overall computed mean of 3.99 (SD = 0.84) indicates that respondents agreed that teachers effectively implement instructional strategies in the ARAL Program. The relatively low standard deviation suggests that responses were generally consistent across respondents. Among the indicators, "Motivates learners to actively participate" obtained the highest mean (M = 4.05, SD = 0.88), reflecting strong agreement regarding teachers' ability to encourage learner engagement. Conversely, "Applies differentiated instruction effectively" recorded the lowest mean (M = 3.91, SD = 0.83), although it still falls within the Agree category.

Hence, the findings suggest that teachers consistently employ learner-centered, differentiated, and remedial instructional strategies that support the learning needs of striving learners in the ARAL Program.

**Table 3:** ARAL program Assessment Tool

| <b>Factor</b>                                                                       | <b>Mean</b> | <b>SD</b> | <b>Qualitative Description</b> | <b>Verbal Interpretation</b> |
|-------------------------------------------------------------------------------------|-------------|-----------|--------------------------------|------------------------------|
| ARAL Program Assessment Tool                                                        |             |           |                                |                              |
| 1. Appropriate assessment tools are used to measure learner progress.               | 3.83        | 0.81      | Agree                          | Positive                     |
| 2. Assessments identify learners' learning gaps in reading.                         | 3.85        | 0.81      | Agree                          | Positive                     |
| 3. Formative assessments are regularly conducted during ARAL sessions.              | 4.03        | 0.80      | Agree                          | Positive                     |
| 4. Assessment results are used to improve instruction.                              | 4.04        | 0.79      | Agree                          | Positive                     |
| 5. Immediate feedback is provided to learners.                                      | 4.07        | 0.77      | Agree                          | Positive                     |
| 6. Assessment tools are aligned with ARAL learning objectives.                      | 3.95        | 0.78      | Agree                          | Positive                     |
| 7. Learners are given opportunities to demonstrate understanding in different ways. | 4.00        | 0.77      | Agree                          | Positive                     |
| 8. The teacher records and monitors assessment results systematically.              | 4.12        | 0.83      | Agree                          | Positive                     |
| 9. Assessment results guide remediation planning.                                   | 4.07        | 0.80      | Agree                          | Positive                     |

|                                                            |      |      |       |          |
|------------------------------------------------------------|------|------|-------|----------|
| 10. Assessment tools are easy to administer and interpret. | 3.93 | 0.76 | Agree | Positive |
| OVERALL Mean and SD                                        | 3.99 | 0.79 | Agree | Positive |

Note: 4.20-5.00 - Strongly Agree / Very Positive; 3.40- 4.19 – Agree / Positive; 2.60-3.39 – Neutral; 1.80-2.59 – Disagree / Negative; 1.00-1.79 - Strongly Disagree / Very Negative

Based on the data above, the overall computed mean of 3.99 (SD = 0.79) indicates that respondents agreed that assessment practices in the ARAL Program are effectively implemented. The low standard deviation suggests a high degree of consistency in respondents' perceptions regarding the use of assessment tools and procedures. Among the indicators, "The teacher records and monitors assessment results systematically" obtained the highest mean (M = 4.12, SD = 0.83), reflecting strong agreement on teachers' commitment to monitoring learner progress. On the other hand, "Appropriate assessment tools are used to measure learner progress" recorded the lowest mean (M = 3.83, SD = 0.81), although it still falls within the Agree category.

Hence, the findings suggest that teachers consistently utilize assessment results to monitor progress, provide feedback, and guide remediation efforts, thereby supporting the objectives of the ARAL Program.

**Table 4:** ARAL program Time Allotment

| Factor                                                            | Mean | SD   | Qualitative Description | Verbal Interpretation |
|-------------------------------------------------------------------|------|------|-------------------------|-----------------------|
| ARAL Program Time Allotment                                       |      |      |                         |                       |
| 1.The teacher manages ARAL time effectively.                      | 3.78 | 0.92 | Agree                   | Positive              |
| 2. The allotted time is sufficient for learning activities.       | 3.46 | 1.01 | Agree                   | Positive              |
| 3. The teacher completes planned lessons within the given time.   | 3.72 | 0.94 | Agree                   | Positive              |
| 4. Time is adjusted based on learners' needs.                     | 3.95 | 0.95 | Agree                   | Positive              |
| 5. The time allocation is appropriate for remediation activities. | 3.66 | 1.03 | Agree                   | Positive              |
| 6. Time is maximized for meaningful learning activities.          | 3.81 | 0.97 | Agree                   | Positive              |
| 7. There is minimal additional time during ARAL sessions.         | 3.61 | 0.95 | Agree                   | Positive              |

|                                                                   |      |      |       |          |
|-------------------------------------------------------------------|------|------|-------|----------|
| 8. The schedule allows learners to focus without pressure.        | 3.77 | 0.87 | Agree | Positive |
| 9. The duration supports mastery of basic skills.                 | 3.68 | 1.00 | Agree | Positive |
| 10. The time allotment is suitable for both teacher and learners. | 3.48 | 1.10 | Agree | Positive |
| OVERALL Mean and SD                                               | 3.69 | 0.97 | Agree | Positive |

Note: 4.20-5.00 - Strongly Agree / Very Positive; 3.40- 4.19 – Agree / Positive; 2.60-3.39 – Neutral; 1.80-2.59 – Disagree / Negative; 1.00-1.79 - Strongly Disagree / Very Negative

Table shows that the overall computed mean of 3.69 (SD = 0.97) indicates that respondents agreed that time management in the ARAL Program is generally effective. The overall standard deviation suggests that responses were relatively consistent, although some indicators showed greater variability in perceptions. Among the indicators, "Time is adjusted based on learners' needs" obtained the highest mean (M = 3.95, SD = 0.95), indicating that teachers are perceived to be flexible in allocating time according to learners' requirements. Conversely, "The allotted time is sufficient for learning activities" recorded the lowest mean (M = 3.46, SD = 1.01), suggesting that some respondents have concerns regarding the adequacy of the time provided for ARAL activities. Similarly, "The time allotment is suitable for both teacher and learners" showed the highest variability (SD = 1.10), reflecting differing views on whether the current schedule adequately meets the needs of both teachers and learners.

This implies that while the current time allotment is generally workable, there are still areas that may need improvement to better support remediation activities and enhance mastery of basic skills.

**Table 5:** Summary Table of ARAL program Components.

| <b>Factor</b>                        | <b>Mean</b> | <b>SD</b> | <b>Qualitative Description</b> | <b>Verbal Interpretation</b> |
|--------------------------------------|-------------|-----------|--------------------------------|------------------------------|
| ARAL Program Instructional Materials | 3.68        | 0.92      | Agree                          | Effective                    |
| ARAL Program Teaching Strategies     | 3.99        | 0.84      | Agree                          | Effective                    |
| ARAL Program Assessment Tool         | 3.99        | 0.79      | Agree                          | Effective                    |
| ARAL Program Time Allotment          | 3.69        | 0.97      | Agree                          | Effective                    |
| OVERALL Mean and SD                  | 3.84        | 0.88      | Agree                          | Effective                    |

Note: 4.20-5.00 - Strongly Agree / Very Effective; 3.40- 4.19 – Agree / Effective; 2.60-3.39 – Neutral; 1.80-2.59 – Disagree / Not Effective; 1.00-1.79 - Strongly Disagree / Very Not Effective

The summary table presents the overall evaluation of the ARAL Program components in the District of Sta. Maria West, Division of Bulacan. This shows that the ARAL Program implementation is generally rated as effective across all key factors, with an overall computed mean of 3.84 (SD = 0.88). This means that ARAL tutors generally agree on the effectiveness of the program, with a relatively moderate of responses.

Among the indicators, Teaching Strategies and Assessment Tools obtained the highest mean (M = 3.99), suggesting strong implementation of learner-centered instruction and assessment practices. But the Instructional Materials received the lowest mean (M = 3.68), though still interpreted as effective, indicating a need for further enhancement in terms of resources and materials.

ARAL Program is effectively implemented in terms of instructional delivery, assessment practices, and instructional support, with generally consistent perceptions among the tutors.

**Table 6:** Institutional Support for the ARAL program

| <b>Factor</b>                                                         | <b>Mean</b> | <b>SD</b> | <b>Qualitative Description/Verbal Interpretation</b> |
|-----------------------------------------------------------------------|-------------|-----------|------------------------------------------------------|
| School Head Supervision                                               |             |           |                                                      |
| 1.The school head regularly supervises ARAL implementation.           | 4.26        | 0.67      | Very High Support                                    |
| 2. The school head provides clear guidance for ARAL.                  | 4.25        | 0.68      | Very High Support                                    |
| 3. Feedback from the school head improves my teaching.                | 4.23        | 0.70      | Very High Support                                    |
| 4. The school head monitors teacher performance in ARAL.              | 4.26        | 0.67      | Very High Support                                    |
| 5. The school head is supportive of ARAL concerns.                    | 4.34        | 0.67      | Very High Support                                    |
| 6. The school head conducts classroom observations.                   | 4.28        | 0.66      | Very High Support                                    |
| 7. The school head provides technical assistance when needed.         | 4.28        | 0.65      | Very High Support                                    |
| 8. The school head encourages improvement in ARAL implementation.     | 4.33        | 0.66      | Very High Support                                    |
| 9. The school head ensures effective compliance with ARAL guidelines. | 4.30        | 0.65      | Very High Support                                    |
| 10. The school head communicates expectations clearly.                | 4.28        | 0.66      | Very High Support                                    |
| OVERALL Mean and SD                                                   | 4.28        | 0.67      | Very High Support                                    |



Note: 4.20-5.00 – Very High Support; 3.40 to 4.19 – High Support; 2.60 to 3.39 – Moderately Support; 1.80 to 2.59 – Low Support; 1.00 to 1.79 – Very Low Support

The results show that the level of school head support in the implementation of the ARAL Program is rated as very high, with an overall mean of 4.28 (SD = 0.67). This indicates that respondents strongly agree that school heads actively support, supervise, and guide the implementation of the program.

Low standard deviation suggests that responses are highly consistent among respondents, indicating a shared perception of strong leadership support. Among the indicators, “The school head is supportive of ARAL concerns” obtained the highest mean (M = 4.34, SD = 0.67), reflecting strong perceived administrative support. Meanwhile, all other indicators also received very high ratings, particularly in supervision, monitoring, and technical assistance.

**Table 7:** DepEd Trainings and Seminars

| <b>Factor</b>                                                        | <b>Mean</b> | <b>SD</b> | <b>Qualitative Description/Verbal Interpretation</b> |
|----------------------------------------------------------------------|-------------|-----------|------------------------------------------------------|
| DepEd Trainings and Seminars                                         |             |           |                                                      |
| 1.Attended sufficient ARAL-related trainings.                        | 3.93        | 0.85      | High Support                                         |
| 2. Trainings are relevant to classroom implementation.               | 4.10        | 0.73      | High Support                                         |
| 3. Seminars improve my ARAL teaching skills.                         | 4.12        | 0.72      | High Support                                         |
| 4. Training materials are useful and clear.                          | 3.98        | 0.79      | High Support                                         |
| 5. There are continuous professional development opportunities.      | 4.10        | 0.69      | High Support                                         |
| 6. Trainings provide practical classroom strategies.                 | 4.12        | 0.66      | High Support                                         |
| 7. Trainings enhance my understanding of learner remediation.        | 4.17        | 0.63      | High Support                                         |
| 8.Given opportunities to attend updated ARAL trainings.              | 4.09        | 0.76      | High Support                                         |
| 9. Training activities are well organized and meaningful.            | 4.09        | 0.72      | High Support                                         |
| 10. Trainings support my professional growth in ARAL implementation. | 4.13        | 0.72      | High Support                                         |
| OVERALL Mean and SD                                                  | 4.08        | 0.74      | High Support                                         |

Note: 4.20-5.00 – Very High Support; 3.40 to 4.19 – High Support; 2.60 to 3.39 – Moderately Support; 1.80 to 2.59 – Low Support; 1.00 to 1.79 – Very Low Support

The results show that tutors perceive ARAL-related training and professional development opportunities as highly supportive, with an overall computed mean of 4.08 (SD = 0.74). This means that tutors all agree that training programs contribute positively to their instructional competence and professional growth in ARAL implementation.

Moreover, low standard deviation suggests that responses are consistent, indicating a shared perception among tutors regarding the usefulness and relevance of training. Among the indicators, “Trainings enhance my understanding of learner remediation” obtained the highest mean (M = 4.17, SD = 0.63), reflecting strong agreement on the effectiveness of training in improving remediation skills. Conversely, “Attended sufficient ARAL-related trainings” recorded the lowest mean (M = 3.93, SD = 0.85), suggesting that while trainings are effective, there may still be a perceived need for increased training opportunities.

This reflected that DepEd training and seminars play an important role in strengthening teachers’ competencies and supporting the effective implementation of the ARAL Program in schools.

**Table 8:** Availability of Learning Resources.

| <b>Factor</b>                      |                                                                  | <b>Mean</b> | <b>SD</b> | <b>Qualitative Description/Verbal Interpretation</b> |
|------------------------------------|------------------------------------------------------------------|-------------|-----------|------------------------------------------------------|
| Availability of Learning Resources |                                                                  |             |           |                                                      |
| 1.                                 | Adequate instructional materials are available for ARAL program. | 3.80        | 0.87      | High Support                                         |
| 2.                                 | Learning materials / modules are accessible when needed.         | 3.85        | 0.86      | High Support                                         |
| 3.                                 | Teaching aids support ARAL implementation.                       | 3.82        | 0.88      | High Support                                         |
| 4.                                 | Digital resources are available for instruction.                 | 3.92        | 0.85      | High Support                                         |
| 5.                                 | The school provides timely learning materials.                   | 3.91        | 0.82      | High Support                                         |
| 6.                                 | Resources are sufficient for all learners.                       | 3.89        | 0.84      | High Support                                         |
| 7.                                 | Learning materials are updated and relevant.                     | 3.90        | 0.86      | High Support                                         |
| 8.                                 | Teachers can easily access needed resources.                     | 4.00        | 0.80      | High Support                                         |
| 9.                                 | Resource distribution is well-organized.                         | 3.88        | 0.87      | High Support                                         |

|                                                                |      |      |              |
|----------------------------------------------------------------|------|------|--------------|
| 10. The availability of materials supports effective teaching. | 3.93 | 0.83 | High Support |
| OVERALL Mean and SD                                            | 3.89 | 0.85 | High Support |

Note: 4.20-5.00 – Very High Support; 3.40 to 4.19 – High Support; 2.60 to 3.39 – Moderately Support; 1.80 to 2.59 – Low Support; 1.00 to 1.79 – Very Low Support

The table presents the level of availability of learning resources in the ARAL Program as perceived by the tutors. The overall mean of 3.89 (SD = 0.85) indicates that they generally perceive the availability of learning resources as high support, suggesting that schools provide sufficient instructional materials, learning modules, and teaching aids to support ARAL implementation.

Among the indicators, the highest mean was obtained by “Teachers can easily access needed resources” (M = 4.00, SD = 0.80), indicating that accessibility of learning materials is the most positively perceived aspect. This suggests that teachers are generally able to obtain the resources they need for instruction without significant difficulty. On the other hand, the lowest mean was observed in “Adequate instructional materials are available for ARAL program” (M = 3.80, SD = 0.87), although still interpreted as high support, indicating that while resources are available, there is still room for improvement in terms of quantity or adequacy.

**Table 9:** Monitoring and Evaluation System

| Factor                                                         | Mean | SD   | Qualitative Description/Verbal Interpretation |
|----------------------------------------------------------------|------|------|-----------------------------------------------|
| Monitoring and Evaluation System                               |      |      |                                               |
| 1. There is a clear system for monitoring ARAL implementation. | 3.91 | 0.83 | High Support                                  |
| 2. Regular evaluation is conducted in school.                  | 4.02 | 0.77 | High Support                                  |
| 3. Monitoring feedback improves program implementation.        | 4.04 | 0.76 | High Support                                  |
| 4. Data are used for decision-making.                          | 4.03 | 0.78 | High Support                                  |
| 5. The evaluation system is systematic.                        | 3.97 | 0.83 | High Support                                  |
| 6. Monitoring results are communicated clearly.                | 4.02 | 0.80 | High Support                                  |
| 7. Evaluation results support instructional improvement.       | 4.06 | 0.77 | High Support                                  |
| 8. Monitoring is done consistently and fairly.                 | 4.04 | 0.77 | High Support                                  |

|                                                             |      |      |              |
|-------------------------------------------------------------|------|------|--------------|
| 9. Documentation of ARAL implementation is well-maintained. | 4.06 | 0.76 | High Support |
| 10. The monitoring system enhances program effectiveness.   | 4.03 | 0.78 | High Support |
|                                                             |      |      | High Support |
| OVERALL Mean and SD                                         | 4.02 | 0.79 |              |

Note: 4.20-5.00 – Very High Support; 3.40 to 4.19 – High Support; 2.60 to 3.39 – Moderately Support; 1.80 to 2.59 – Low Support; 1.00 to 1.79 – Very Low Support

As shown in the table presents the teachers' assessment of the Monitoring and Evaluation System of the ARAL Program. The overall computed weighted mean of 4.02 with a verbal interpretation of "High Support" reflects a generally strong and favorable evaluation and got positive description.

The overall computed mean of 4.02 (SD = 0.79) indicates that respondents perceive the monitoring and evaluation system of the ARAL Program as highly supportive and effectively implemented. The relatively low standard deviation suggests that responses are closely clustered around the mean, indicating a high level of agreement among respondents. This consistency implies that teachers share similar perceptions regarding the effectiveness of monitoring practices, particularly in terms of feedback utilization, documentation, and evaluation processes.

**Table 10:** Summary Table of Institutional Support for ARAL program

| Factor                             | Mean | SD   | Qualitative Description | Verbal Interpretation |
|------------------------------------|------|------|-------------------------|-----------------------|
| School Head Supervision            | 4.28 | 0.67 | Very High Support       | Effective             |
| DepEd Trainings and Seminars       | 4.08 | 0.74 | High Support            | Effective             |
| Availability of Learning Resources | 3.89 | 0.85 | High Support            | Effective             |
| Monitoring and Evaluation System   | 4.02 | 0.79 | High Support            | Effective             |
| OVERALL Mean and SD                | 4.07 | 0.76 | High Support            | Effective             |

Note: 4.20-5.00 – Very High Support / Very Effective; 3.40- 4.19 – High Support / Effective; 2.60-3.39 – Moderately Support; 1.80-2.59 – Disagree / Low Support; 1.00-1.79 – Very Low Support / Very Not Effective

The table presents the summary of Institutional Support for ARAL Program. The overall mean of 4.07 (SD = 0.76) indicates that teachers / tutors generally perceive the implementation of the ARAL Program as effective, with an overall interpretation of high support. This suggests that the program is well-implemented across key dimensions, including leadership support, professional development, learning resources, and monitoring systems.

In addition, among the factors, School Head Supervision obtained the highest mean ( $M = 4.28$ ,  $SD = 0.67$ ), interpreted as very high support, indicating strong leadership involvement in the implementation of the program. This suggests that school heads play a crucial role in guiding, monitoring, and supporting teachers in ARAL implementation.

However, availability of learning resources recorded the lowest mean ( $M = 3.89$ ,  $SD = 0.85$ ), although still interpreted as high support, indicating that while resources are generally available, there may still be areas for improvement in terms of adequacy and accessibility.

The relatively low standard deviations across all factors indicate consistent responses among participants, suggesting shared perceptions regarding the effectiveness of ARAL Program implementation.

**Table 11:** Teacher's Mastery in Implementing the ARAL Program

| Factor                                                                                                                                                                                                                                                                                                                                            | Mean | SD   | Qualitative Description/Verbal Interpretation |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|-----------------------------------------------|
| Teacher's Mastery in Implementing the ARAL Program                                                                                                                                                                                                                                                                                                |      |      |                                               |
| 1. I am confident in implementing ARAL strategies effectively.                                                                                                                                                                                                                                                                                    | 3.89 | 0.72 | High Mastery                                  |
| 2. I can identify learners who need remediation.                                                                                                                                                                                                                                                                                                  | 4.31 | 0.63 | Very High Mastery                             |
| 3. I can design appropriate instructional interventions.                                                                                                                                                                                                                                                                                          | 3.95 | 0.70 | High Mastery                                  |
| 4. The use of the Comprehensive Rapid Literacy Assessment (CRLA) for Grade 1-3 and the Philippine Informal Reading Inventory (Phil-IRI) for Grade 4-5 provides reliable data on learners' reading abilities, enabling teachers to implement targeted interventions and enhance the effectiveness of the ARAL Program in addressing literacy gaps. | 4.09 | 0.69 | High Mastery                                  |
| 5. I adjust teaching strategies based on learners' needs.                                                                                                                                                                                                                                                                                         | 4.27 | 0.63 | Very High Mastery                             |
| 6. I can effectively implement differentiated instruction.                                                                                                                                                                                                                                                                                        | 4.13 | 0.67 | High Mastery                                  |
| 7. I can manage ARAL sessions efficiently.                                                                                                                                                                                                                                                                                                        | 4.08 | 0.68 | High Mastery                                  |
| 8. I can motivate learners during remediation activities.                                                                                                                                                                                                                                                                                         | 4.17 | 0.66 | High Mastery                                  |
| 9. I can track learners' progress accurately.                                                                                                                                                                                                                                                                                                     | 4.17 | 0.66 | High Mastery                                  |

|                                                          |      |      |              |
|----------------------------------------------------------|------|------|--------------|
| 10. I can effectively address learning gaps of learners. | 4.20 | 0.65 | High Mastery |
| OVERALL Mean and SD                                      | 4.13 | 0.66 | High Mastery |

Note: 4.20-5.00 – Very High Mastery; 3.40 to 4.19 – High Mastery; 2.60 to 3.39 – Moderate Mastery; 1.80 to 2.59 – Low Mastery; 1.00 to 1.79 – Very Low Mastery

On the table above, the overall mean of 4.13 (SD = 0.66) indicates that ARAL tutors demonstrate a high level of mastery in implementing ARAL -related teaching competencies. The relatively low standard deviation suggests that responses are closely clustered around the mean, indicating a high level of consistency among respondents.

This means that tutors generally share similar confidence levels and competencies in identifying learners' needs, implementing differentiated instruction, and addressing learning gaps. Among the indicators, "Can identify learners needing remediation" (SD = 0.63) and "Can track learners' progress accurately" (SD = 0.62) show the least variability, suggesting strong agreement among respondents in these areas.

The findings show that teachers demonstrate a high level of mastery in implementing the ARAL Program, which supports effective remediation and improved learner outcomes.

**Table 12:** Challenges Encountered in ARAL Implementation

| Factor                                                      | Mean | SD   | Qualitative Description/Verbal Interpretation |
|-------------------------------------------------------------|------|------|-----------------------------------------------|
| Challenges Encountered in ARAL Implementation               |      |      |                                               |
| 1.Experience difficulty addressing diverse learning needs.  | 3.40 | 0.91 | Moderate Challenge                            |
| 2. Encounter limited instructional materials.               | 3.34 | 0.88 | Moderate Challenge                            |
| 3. Time allocation affects ARAL effectiveness.              | 3.58 | 0.95 | High Challenge                                |
| 4. Large number of learners affects instruction quality.    | 3.56 | 0.92 | High Challenge                                |
| 5. Some learners lack motivation during ARAL sessions.      | 3.60 | 0.89 | High Challenge                                |
| 6. Experience difficulty managing behavior during sessions. | 3.45 | 0.93 | High Challenge                                |
| 7. There is insufficient support for ARAL implementation.   | 3.14 | 0.86 | Moderate Challenge                            |
| 8. I face challenges in assessing learners effectively.     | 3.22 | 0.84 | Moderate Challenge                            |
| 9. Lack of training affects my ARAL implementation.         | 3.20 | 0.87 | Moderate Challenge                            |
| 10. Resource limitations hinder effective teaching          | 3.38 | 0.89 | Moderate Challenge                            |

|                     |      |      |                    |  |
|---------------------|------|------|--------------------|--|
|                     |      |      | Moderate Challenge |  |
| OVERALL Mean and SD | 3.39 | 0.89 |                    |  |

Note: 4.20-5.00 – Very High Challenge; 3.40 to 4.19 – High Challenge; 2.60 to 3.39 – Moderate Challenge; 1.80 to 2.59 – Low Challenge; 1.00 to 1.79 – Very Low Challenge

The table presents the level of challenges encountered by tutors in the implementation of the ARAL Program. The overall mean of 3.39 (SD = 0.89) indicates that tutors experience a moderate level of challenges, suggesting that while the ARAL Program is manageable, there are still notable constraints that affect its full effectiveness.

The identified challenges, the highest mean was observed in “Some learners lack motivation during ARAL sessions” (M = 3.60, SD = 0.89), followed closely by “Time allocation affects ARAL effectiveness” (M = 3.58, SD = 0.95) and “Large number of learners affects instruction quality” (M = 3.56, SD = 0.92). These results indicate that motivational issues among learners, limited instructional time, and large class sizes are the most pressing concerns faced by teachers in ARAL implementation.

On the other hand, the lowest mean was recorded in “There is insufficient support for ARAL implementation” (M = 3.14, SD = 0.86), which still falls under a moderate challenge. This suggests that institutional support is generally perceived as adequate, although there is still room for improvement in strengthening assistance mechanisms.

The SD values, ranging from approximately 0.84 to 0.95, indicate a moderate level of variability in responses. This implies that while tutors agree on the presence of challenges, their experiences are not entirely uniform. Some teachers may experience these issues more intensely than others depending on their specific classroom context.

Hence, findings suggest that although the ARAL Program is being implemented effectively in many aspects, challenges such as learner motivation, time constraints, class size, and resource limitations continue to affect its full optimization. Addressing these concerns may further enhance the efficiency and impact of the program.

### Table 13: Hypothesis Testing

*Null Hypothesis: There is no significant relationship between Teachers’ Mastery in implementing ARAL Program to its components and Institutional Support for the program.*

| Variables Tested                      |                                   | Spearm<br>an's rho<br>Correlat<br>ion<br>Coeffici<br>ent | Interpret<br>ation                       | p-<br>val<br>ue | Decisi<br>on<br>Rule           | Decisi<br>on | Interpret<br>ation              |
|---------------------------------------|-----------------------------------|----------------------------------------------------------|------------------------------------------|-----------------|--------------------------------|--------------|---------------------------------|
| Teachers’<br>Mastery<br>in<br>impleme | ARAL<br>Program<br>Compon<br>ents | 0.691                                                    | moderate<br>positive<br>relationshi<br>p | 0.0<br>00       | Reject<br>Ho if<br>p-<br>value | Reject<br>Ho | Significant<br>relationshi<br>p |

|                         |                                                            |       |                                          |           |                                                      |              |                                 |
|-------------------------|------------------------------------------------------------|-------|------------------------------------------|-----------|------------------------------------------------------|--------------|---------------------------------|
| ning<br>ARAL<br>Program | Instituti<br>onal<br>Support<br>for the<br>ARAL<br>Program | 0.666 | moderate<br>positive<br>relationshi<br>p | 0.0<br>00 | is less<br>than or<br>equal<br>to<br>alpha<br>(0.05) | Reject<br>Ho | Significant<br>relationshi<br>p |
|-------------------------|------------------------------------------------------------|-------|------------------------------------------|-----------|------------------------------------------------------|--------------|---------------------------------|

The hypothesis testing shows that there is a significant relationship between teachers' mastery in implementing the ARAL Program and both its components and institutional support.

The results reveal moderate positive correlations between teachers' mastery and the ARAL Program components ( $r = 0.691$ ), as well as institutional support ( $r = 0.666$ ), with p-values of 0.000. Since the p-values are lower than 0.05, the null hypothesis is rejected.

This means that as teachers' mastery increases, the effectiveness of ARAL program components and the level of institutional support also tend to increase. In general, there is a meaningful and significant relationship among these variables.

**Table 14:** Intervention Plan for ARAL Program

AIM: Advancing Instruction, Monitoring, and Mastery in ARAL Implementation

| <b>Key Area</b>             | <b>Identified<br/>Need/<br/>Result</b>                                            | <b>Objective</b>                                                             | <b>Strategies<br/>/<br/>Activities</b>                                                                                   | <b>Person<br/>s<br/>Involve<br/>d</b>                | <b>Timeline<br/>Expected<br/>Output</b>                                  | <b>/</b> |
|-----------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------------|----------|
| Instruction<br>al Materials | Moderately<br>rated<br>(3.68); need<br>for<br>sufficiency<br>and<br>accessibility | Improve<br>availability<br>and<br>adequacy of<br>ARAL<br>materials           | Developme<br>nt and<br>reproductio<br>n of<br>localized<br>ARAL<br>modules<br>and<br>enrichment<br>materials on<br>time. | School<br>Heads,<br>Teachers<br>, DepEd<br>Officials | Year-round /<br>Complete and<br>accessible<br>ARAL learning<br>materials |          |
| Teaching<br>Strategies      | High<br>mastery but<br>needs<br>enhanceme<br>nt in<br>differentiati<br>on         | Strengtheni<br>ng<br>instructiona<br>l strategies<br>for diverse<br>learners | LAC<br>sessions on<br>differentiate<br>d instruction<br>and<br>remediation<br>strategies                                 | School<br>Heads,<br>Master<br>Teachers               | Termly /<br>Improved<br>teaching<br>strategies                           |          |
| Assessment<br>Practices     | Strong<br>needs but                                                               | Enhancing<br>use of                                                          | Training in<br>CRLA/Phil-                                                                                                | School<br>Heads,                                     | Termly /<br>Improved                                                     |          |



|                      |                                         |                                          |                                                           |                               |                                            |
|----------------------|-----------------------------------------|------------------------------------------|-----------------------------------------------------------|-------------------------------|--------------------------------------------|
|                      | consistency in utilization              | assessment results for intervention      | IRI interpretation and data-based instruction.            | Reading Coordinators          | data-driven instruction                    |
| Time Allotment       | Identified challenge (3.69 mean)        | Improve time management in ARAL sessions | Seminar-workshop on lesson pacing and time management     | School Heads, Teachers        | Termly / Better use of time                |
| Learner Engagement   | Low motivation and participation        | Increase learner engagement              | Interactive activities, rewards, and gamification         | Teachers                      | Monthly / Increased participation          |
| Classroom Management | High challenge in behavior management   | Improve classroom discipline             | Coaching and peer observation                             | School Heads, Master Teachers | Year round / Improved classroom management |
| Training             | Limited ARAL trainings attended         | Increasing teacher competence            | Attend face to face or online DepEd training and seminars | DepEd School Heads            | Annual / Termly / Higher competence        |
| Monitoring & Support | Strong but needs continuous improvement | Strengthening feedback system            | Regular observation, coaching and mentoring               | School Heads, Supervisors     | Monthly / Improved performance             |

The only goal of this intervention plan is to improve more the teachers' mastery in ARAL implementation, enhance learner performance, better instructional support, and more effective delivery of the ARAL Program.

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# **STRENGTHENING SUCCESSION PRACTICES THROUGH MENTORING AND KNOWLEDGE SHARING IN CATHOLIC EDUCATIONAL INSTITUTIONS**

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## **Abstract**

This qualitative descriptive study examined how mentoring and knowledge sharing strengthen succession planning practices among administrators and supervisors in Catholic educational institutions. The study focused on selected Catholic schools in Rizal, Philippines, particularly schools connected with the Diocese of Antipolo Catholic Schools Association. It explored how Catholic schools identify and prepare potential leaders, how mentoring and knowledge sharing support the transfer of Catholic identity and charism, what challenges and enabling factors affect succession planning, and how school leaders perceive the effectiveness of existing succession planning initiatives. Data were gathered through an open-ended questionnaire administered to 23 school administrators and supervisors from seven Catholic schools. The responses were analyzed through thematic analysis by identifying recurring ideas, organizing them according to the study's key areas, and interpreting the themes in relation to the research questions. Findings revealed that succession planning in Catholic schools is supported by a holistic approach that combines formal training, practical leadership experiences, mentoring, knowledge sharing, and faith-based formation. Most respondents expressed satisfaction with existing approaches to identifying and preparing future leaders, although some noted the need for more inclusive and transparent criteria. Mentoring was described as both formal and informal, providing guidance, professional support, and opportunities for leadership readiness. Knowledge sharing occurred through orientation programs, regular meetings, professional learning communities, documentation practices, digital platforms, retreats, faith-sharing sessions, and immersion in school events. The findings also showed that Catholic identity and charism are sustained through retreats, recollections, liturgical activities, service programs, and values-based decision-making. Challenges included limited resources, heavy workloads, insufficient documentation, uneven mentoring implementation, and personnel-related constraints. Enabling factors included structured mentoring, clear communication, proactive transition planning, shadowing, documentation, openness, collaboration, and mission alignment. The study concludes that succession planning in Catholic educational institutions is most effective when it is systematic, relational, values-driven, and embedded in daily school operations. It recommends formal mentoring programs, stronger knowledge management systems, early identification of potential leaders, regular evaluation of succession initiatives, and sustained integration of professional development with Catholic mission and identity.

**Keywords:** Succession Planning. Mentoring. Knowledge Sharing. Catholic Education. Leadership Development.

## **Introduction**

Organizational continuity and leadership development are essential for achieving both short-term effectiveness and long-term sustainability. As organizations evolve, confront demographic shifts, or experience unexpected leadership transitions, the need for capable and well-prepared successors becomes increasingly vital. Succession planning plays a pivotal role in facilitating smooth leadership transitions, minimizing operational disruptions, and preserving institutional knowledge. More than a reactive measure to fill vacant roles, it is a strategic and forward-looking approach that involves identifying high-potential individuals, cultivating their leadership competencies, and preparing them for future responsibilities.

Despite its proven benefits, succession planning is often underdeveloped in many organizations, including schools and faith-based institutions. The absence of clear frameworks and long-term strategies leads to leadership gaps, underprepared successors, and the erosion of institutional knowledge (Talpoş et al., 2017; Coole & Harbour, 2015). Catholic schools face particular challenges because many rely on a small number of aging administrators and religious leaders whose eventual retirement may leave critical leadership gaps. Without structured succession planning, leadership transitions may be handled reactively, resulting in hurried appointments, unprepared successors, and possible misalignment with the school's mission and values. This threatens institutional stability, the continuity of educational programs, employee morale, and community trust.

Succession planning is widely recognized as a key element of workforce sustainability and leadership continuity (Helton & Jackson, 2007). A well-structured succession plan equips future leaders to meet the technical and managerial demands of their roles while ensuring that their actions remain aligned with the organization's mission, values, and long-term vision. Two foundational mechanisms that strengthen succession planning efforts are mentoring and knowledge sharing. Mentoring provides a structured pathway for experienced leaders to guide emerging talents, while knowledge sharing ensures the transfer of critical institutional memory and processes, reducing disruption and preserving organizational culture. Together, these mechanisms build a resilient and future-ready leadership pipeline.

Leadership transitions represent a critical stage in professional and organizational development because individuals must adapt to new expectations, responsibilities, and cultural dynamics. Such transitions require technical competence alongside the redefinition of professional identity as leaders internalize institutional values, goals, and

social norms to fulfill their new roles effectively (Ende & Friaes, 2024). This emphasizes the importance of deliberate preparation and support mechanisms that facilitate smooth adaptation and ensure leadership continuity within organizations.

Globally, there is growing emphasis on aligning succession planning with organizational missions and modern management practices. Contemporary approaches emphasize the development of internal talent pools, competency-based learning pathways, and leadership development as part of daily organizational culture (Elias & Farah, 2019). The shift from reactive to holistic models prepares leaders not only to fill roles but also to lead adaptively, ethically, and in alignment with long-term organizational direction. For succession planning to be truly effective, it must be intentional, systematic, and embedded within organizational culture. When applied to Catholic schools, it safeguards their unique identity while ensuring that future leaders are equipped to meet evolving educational and administrative demands. Mentoring and knowledge sharing are critical in this context because they promote continuity, preserve institutional values, and support leadership readiness for generations to come.

This study, entitled “Strengthening Succession Practices Through Mentoring and Knowledge Sharing Among Administrators and Supervisors in Catholic Educational Institutions,” investigated how mentoring and knowledge sharing practices can influence and be applied in the development of more structured and mission-driven succession planning practices for Catholic schools. Its objective was to examine how leadership continuity, institutional identity, and organizational sustainability are supported through these practices.

The study was conducted within Catholic educational institutions located in Rizal, Philippines. These institutions are guided by the Catholic Church’s mission of holistic formation, with leadership practices deeply rooted in faith, service, and the values of their founding congregations or diocesan authorities. Rizal is home to Catholic schools that are privately administered and diocesan, making it a relevant context for exploring succession planning practices. Educational leaders in these institutions play a crucial role in preserving academic standards, institutional identity, and spiritual heritage. Given the increasing demands of school leadership and eventual turnover of administrators, examining how mentoring and knowledge sharing contribute to leadership continuity is highly relevant.

The participating schools were seven Catholic schools in Rizal under the oversight of religious congregations or the local diocese of the Diocese of Antipolo Catholic Schools Association, such as Angono Catholic College, Binangonan Catholic College, Cainta Catholic College, San Francisco Parish School, San Ildefonso College, St. John the Baptist Parochial School, and St. Michael Parochial School. These institutions were purposively chosen based on their leadership structure, accessibility, and willingness to participate.

By focusing on this setting, the study highlighted the importance of succession planning in maintaining both organizational stability and the distinctive Catholic identity of the schools involved.

The study was guided by Knowledge Management Theory and Social Learning Theory. Knowledge Management Theory emphasizes capturing, organizing, sharing, and sustaining organizational knowledge so that important practices and insights are not lost during leadership transitions. Social Learning Theory highlights learning through observation, modeling, relationships, and guided practice. In the context of Catholic educational institutions, these theories support the idea that future leaders learn not only from formal programs but also through mentoring relationships, shared institutional experiences, and exposure to faith-informed leadership practices.

The conceptual orientation of the study was also anchored on the Input-Process-Output model. The input consisted of current and potential leaders, institutional knowledge rooted in Catholic identity and charism, leadership development frameworks, and support from the religious congregation or diocese. The process included mentoring and coaching by current leaders and religious members, knowledge sharing practices, leadership formation and professional development programs, and collaboration between schools and the congregation or diocese. The output included strengthened succession planning practices, prepared and values-driven future leaders, sustained leadership and institutional stability, a culture of mentoring and knowledge sharing, and stronger school-Church partnerships.

The investigation was organized around four research questions: How do Catholic schools identify and prepare potential leaders? What role do mentoring and knowledge sharing play in ensuring the transfer of Catholic identity and charism in leadership succession? What challenges and enabling factors affect succession planning in Catholic institutions? How do school leaders perceive the effectiveness of their existing succession planning initiatives? These questions shaped the method, data organization, analysis, and interpretation of findings.

## **Method**

This study employed a qualitative descriptive research design. The design was appropriate because the study aimed to explore how Catholic schools identify and prepare future leaders, integrate mentoring and knowledge sharing, and sustain Catholic identity and charism in leadership succession. It sought to understand current practices, challenges, and recommendations for leadership continuity, particularly in succession planning.



An open-ended survey was selected as the primary data-gathering tool to allow participants the flexibility to provide detailed and reflective responses at their own pace and without the time constraints of interviews or focus group discussions. Because school administrators and supervisors often have demanding schedules, the open-ended questionnaire encouraged broader participation while still generating rich qualitative data. The format also encouraged honest and thoughtful sharing of experiences, which was important because the study focused on leadership practices and internal processes such as succession planning.

The study gathered data from school administrators and supervisors currently serving in participating Catholic schools. Leaders from previous academic years were excluded, while newly promoted leaders and those with longer tenure were included. The participants were considered essential informants because of their direct involvement in leadership and decision-making roles. The study involved 23 administrators and supervisors across seven selected private Catholic schools in Rizal, Region IV-A CALABARZON, Philippines. These schools were Angono Catholic College, Binangonan Catholic College, Cainta Catholic College, San Francisco Parish School, San Ildefonso College, St. John the Baptist Parochial School, and St. Michael Parochial School.

Each participating institution operates under the supervision of the respective parish or diocesan authority and upholds the mission of providing quality education rooted in Catholic faith and values. The institutions deliver complete basic education programs covering kindergarten, elementary, junior high school, and senior high school levels, while schools designated as colleges extend their offerings to tertiary education. These schools are integral parts of their local communities and serve as centers for both academic formation and faith development. Their educational environment reflects a blend of academic excellence and Catholic identity, where leadership, mentoring, and community service are central to institutional mission.

The primary research instrument was an open-ended questionnaire designed to explore how Catholic schools identify and prepare future leaders, integrate mentoring and knowledge sharing, and maintain Catholic identity and charism in leadership succession. The questionnaire was organized into five sections aligned with the key areas of the study: identifying and preparing future leaders, mentoring and knowledge sharing, Catholic identity and charism, challenges and best practices, and perceptions and recommendations. The first section focused on identification and preparation of future leaders. The second section focused on mentoring and knowledge sharing. The third section addressed Catholic identity and charism. The fourth section examined challenges and best practices. The fifth section gathered perceptions of effectiveness and recommendations.

The questionnaire consisted of original items created by the researcher and questions adapted or inspired by previous studies reviewed in the thesis. To ensure validity, the instrument was reviewed by the researcher's adviser and the school director before distribution. Feedback was incorporated to improve the clarity and relevance of questions. The questionnaire was distributed online through the school director to participating school administrators and supervisors. Participants were given one week to complete and submit the survey. All responses were collected and administered solely by the researcher to ensure confidentiality and data security.

The data-gathering process followed organized and ethical steps. The researcher prepared the questionnaire based on the study's objectives and research questions. The instrument was reviewed for clarity, relevance, and appropriateness. The researcher coordinated with the school director of the participating Catholic schools, explained the purpose of the study, the content of the questionnaire, and the distribution process. The school director forwarded the finalized questionnaire to administrators and supervisors. A polite reminder was sent midway through the one-week period to encourage participation from those who had not yet responded.

Ethical considerations were strictly observed. Consent forms were obtained before data collection. Data were handled in accordance with Republic Act No. 10173, or the Data Privacy Act of 2012, to ensure confidentiality and privacy. Responses were organized for analysis and were kept confidential. Data were stored securely in a password-protected digital folder accessible only to the researcher and were retained for a limited period after collection for analysis purposes. Responses included in the appendices were anonymized to protect participant identity.

Given the qualitative and descriptive nature of the study, responses were not analyzed using numerical or inferential statistics. Instead, thematic analysis was used. The analysis began with familiarization, in which all responses were read to gain a general understanding of the data. Key ideas, concepts, and patterns were coded. Codes were then organized into broader themes corresponding to the research questions and study objectives. The themes were reviewed and refined to ensure that they accurately reflected the participants' responses. The resulting themes were interpreted in connection with the research objectives and questions. Selected quotations from participants were used to illustrate each theme and provide concrete examples of practices, challenges, and perceptions regarding leadership preparation and succession planning.

To support credibility and minimize researcher bias, peer debriefing was conducted. The researcher sought feedback from an academic peer familiar with qualitative research to review the identified themes and interpretations. This process served as a form of inter-rater reliability check to help ensure that the analysis reflected participant responses rather than researcher assumptions. The trustworthiness of the findings was supported

by the participants' roles as school administrators and supervisors, the clear organization of responses according to the study's key areas, and the systematic coding and thematic analysis process.

## **Results**

The findings revealed that leadership development and succession planning in Catholic schools are sustained less by formal structures alone and more by the intentional cultivation of mentoring relationships, continuous knowledge transfer, and values-driven formation. The data emphasized the strength of structured mentoring and coaching as a foundation for preparing future leaders, complemented by knowledge sharing and documentation practices that support organizational memory and continuity. However, maintaining these practices becomes challenging when personnel responsible for disseminating information lack proper training, as seen in errors during pilot implementations of new systems. Respondents emphasized the need for program sustainability by integrating leadership formation into daily operations, promoting collaboration, reflection, and feedback, and ensuring alignment with Catholic identity and mission.

In relation to the identification of future leaders, most respondents expressed satisfaction with the schools' approaches. Twenty-one out of 23 respondents indicated that they were pleased with current processes. They cited opportunities for growth, including trainings, seminars, mentoring, and succession planning programs, as major factors contributing to their satisfaction. One respondent stated, "The school has provided numerous opportunities to employees who have demonstrated potential in leading tasks or activities. Through this, employees recognize their strength and leadership capability." Another noted the perceived fairness of the process, saying, "I am satisfied with my school's process of identifying and preparing future leaders because it provides equal opportunities for students to showcase their strengths."

However, two respondents expressed dissatisfaction. They observed that leadership identification sometimes prioritizes academic qualifications or personal connections rather than adopting a more holistic assessment of potential. One respondent commented, "The school is prioritizing those with a master's degree, which is understandable, but they should also take into account factors like years of service, as well as the effectiveness and efficiency of the employees." These comments suggest a need for greater transparency, inclusivity, and balance in the selection process.

Respondents consistently identified moral and ethical traits, relational skills, and leadership abilities as important qualities in potential leaders. Servant leadership was frequently mentioned as a guiding principle. One participant stated, "I think it all boils

down on being a GOOD SERVANT LEADER.” Collaboration and teamwork were also emphasized, as illustrated by the comment, “School considers team player, obedience, and possesses school core values.” Faith-centered values were also highlighted, with one respondent stating that a potential leader must be “good and trustworthy with a heart to the Catholic institution and love for the children.” Other competencies included adaptability, communication skills, initiative, loyalty, and responsibility. These responses indicate that leadership identification in Catholic schools prioritizes leaders who are competent, ethically grounded, relationally skilled, and aligned with the Catholic mission.

Leadership preparation was achieved through a combination of formal training, on-the-job experience, and faith-based formation. Respondents described workshops, seminars, in-service training, retreats, recollections, mentoring, committee participation, and involvement in school projects. One participant described leadership preparation as involving “formal training, retreats and recollections, outreach programs, and now we were divided into 12 tribes wherein we can reflect and share experiences together.” Another emphasized the combination of faith and practice, stating that “the school develops leadership rooted in Catholic values through both structured formation and practical experience. Staff participate in diocesan-led faith leadership programs, regular spiritual retreats, and mentorship under experienced Catholic leaders.”

The schools’ leadership preparation practices reflected their Catholic mission and vision by emphasizing faith, service, and ethical integrity. Respondents explained that such practices form leaders who are Christ-centered, service-oriented, and committed to holistic development. One response stated, “These practices reflect the school’s Catholic mission and vision by forming leaders who are Christ-centered, service-oriented, and committed to the holistic development of others.” Another stated, “Since our religion is the core of our institution, faith formation and spiritual development guide future leaders to grow in their relationship with God and to recognize His presence in their daily lives, which reminds them to bring the school’s vision and mission to life.” The integration of formal training, practical experience, and faith formation therefore cultivates leaders who are capable, ethical, spiritually guided, and committed to service.

Mentoring emerged as a central theme. It occurred through both formal and informal practices and was deeply rooted in Catholic identity. Formal mentoring involved pairing new teachers, student leaders, or potential leaders with experienced mentors who helped them with classroom management, curriculum planning, professional conduct, and faith-based leadership. One respondent explained, “There are formal and informal mentoring approaches in the department. Formal mentoring happens when new teachers or potential leaders are assigned to experienced mentors who guide them in classroom management, curriculum planning, and professional conduct. Informal mentoring, on

the other hand, naturally develops through collaboration, shared responsibilities, and open communication among colleagues.”

Informal mentoring occurred through daily interactions, shared responsibilities, and open consultation. Respondents emphasized that mentoring occurred regularly through scheduled sessions and day-to-day collaboration. Mentoring relationships supported professional growth and leadership readiness by providing practical guidance, encouragement, and real-life opportunities to lead. Mentors delegated responsibilities, allowing mentees to lead school committees, organize activities, and facilitate meetings. One participant observed that “everything runs smoothly when there is teamwork and when the leader acts not as a boss, but as a SERVANT LEADER.” Another described leadership preparation through programs, seminars, and encouragement for further studies through a scholarship program.

Mentoring helped staff gain professional competence while also cultivating compassion, respect, service, collaboration, and spiritual grounding. One respondent summarized that mentoring relationships in a Catholic school setting are intentionally designed to nurture both professional excellence and faith-informed leadership, equipping staff with the skills, confidence, and spiritual grounding needed to serve effectively and assume future leadership roles. However, mentoring was not consistently experienced by all participants. Seven respondents observed that mentoring was inconsistently implemented, with some programs lacking clear structure or formal guidelines. Five respondents noted that mentoring efforts were difficult to sustain because of limited time, competing responsibilities, and insufficient preparation or training of facilitators. Three respondents emphasized the absence of systematic documentation and follow-through, which hinders continuity when leadership changes occur. Participants described these challenges in statements such as “Not much executed like careful planning, clear communication,” “Limited budget, heavy workloads, and lack of time for training affect consistency and participation in leadership programs,” and “Eyed and trained future leaders are leaving the school.” These findings show that mentoring is valued but depends on consistent implementation, institutional support, structured training, and documentation.

Knowledge sharing also emerged as an essential succession practice. It ensures that new leaders understand school culture, traditions, and values while sustaining institutional memory and leadership continuity. Respondents identified retreats, mentoring, active participation in school events, faith-sharing sessions, and orientation programs as knowledge-sharing mechanisms. Retreats were cited by 10 respondents, mentoring by seven, active participation in school events by six, faith-sharing sessions by five, and orientation programs by five. One participant emphasized orientation and induction as a way to introduce new leaders to the school’s history, mission, vision, and core values while emphasizing servant leadership and holistic formation. Another stressed immersion,

stating that by engaging new leaders in school programs, community service, volunteer work, or mission trips, they internalize the culture until it becomes part of their system.

The schools also use systems, tools, and practices to capture and transfer knowledge. These include regular meetings, professional learning communities, documentation of activities, mentoring logs, and digital platforms such as Google Drive, SharePoint, or learning management systems. These tools support the dissemination of best practices, institutional policies, and procedural knowledge. One respondent noted that regular meetings, Google Workspace for document sharing, and professional learning communities make it easier to document best practices, policies, and institutional experiences, although sustaining them can be challenging when workloads are high or when there is limited time to update records and share feedback regularly. These findings point to the need for training and support to ensure that knowledge sharing systems are effective and sustainable.

Catholic identity and charism were strongly present in succession planning. The schools implement formation activities designed to nurture spiritual, moral, and professional growth among students, teachers, and leaders. Retreats, recollections, pastoral ministries, and outreach programs such as DAMAYAN were consistently cited as central practices. One participant stated that the school conducts retreats, recollections, spiritual direction sessions, Masses, prayer services, celebrations of liturgical seasons, community outreach, charity drives, and environmental programs that help participants practice compassion and social responsibility. Other respondents mentioned weekly or monthly spiritual activities, including Gawarasal, Pananagutan Mass, First Friday Devotions, and the Novena to the Mother of Perpetual Help. These activities are complemented by seminars, team-building events, and service initiatives.

Ensuring that future leaders embody Catholic values in decision-making was considered essential. Respondents emphasized that faith, ethics, and service are integrated into leadership formation. Leaders are encouraged to act with integrity, fairness, and compassion and to make decisions aligned with Gospel principles and the school's mission. One respondent explained that future leaders are encouraged to apply Gospel values such as integrity, fairness, and compassion when making choices that affect others. Leadership decisions are often made in consultation, emphasizing discernment and alignment with the school's mission of serving others in truth and love. This aspect of succession planning was seen as important because it safeguards mission continuity, school culture, and faith-based identity during leadership transitions.

Challenges affecting succession planning were grouped into resources, policies, and personnel. Some respondents indicated no significant challenges, but others cited limited budgets, insufficient teaching personnel with advanced degrees, time constraints, and varying engagement in leadership programs. One respondent stated that budgets may be

limited, policies may delay leadership development, and personnel factors may depend on whether an employee accepts an offer. Others noted that staff unwillingness to immerse themselves in school culture, educational backgrounds, financial constraints, and seniority culture can hinder leadership development. Constraints affect leadership development by limiting access to skilled mentors and trainers, reducing consistency in program delivery, or discouraging selected employees from participating.

A specific challenge involved the sharing of online documents. One respondent explained that online document sharing is difficult to sustain if the person disseminating information has not received proper training, and that most errors occur during pilot implementation of new systems. Despite these challenges, schools continue to prioritize formation activities within available resources, leverage support from diocesan and Catholic education offices, and explore solutions such as peer mentoring, online learning, and shared resources. The persistence of challenges was linked to systemic, cultural, and resource-related factors, competing priorities, dual academic and administrative duties, personal motivations, and resistance to change.

Best practices were also identified. Several respondents described smooth leadership transitions that succeeded because of preparation, mentoring, and Catholic values alignment. One participant shared that when appointed as Assistant Student Services Head, the Student Services Head reminded the participant of work tasks, assignments, and expectations, so that by the time the Student Services Head went on maternity leave, the assistant had been oriented and given short training. Other examples included gradual implementation of management style, careful handovers, and proactive succession planning. One case involved a long-serving principal who announced retirement a year in advance, giving the school time to identify a promising deputy, conduct mentoring sessions focused on leadership skills and the Catholic mission, and communicate transparently with staff and the community. This transition succeeded because it allowed the incoming leader to build relationships, understand the school culture, and assume responsibilities with confidence.

Enabling factors included mentoring, knowledge sharing, shadowing, clear communication, documentation, openness, collaboration, time allocation, and mission alignment. One respondent explained that outgoing and incoming leaders engaged in mentoring and knowledge sharing, where previous officers explained not only duties but also the values behind each task. Turnover meetings, shared files, and open communication helped incoming leaders understand ongoing projects. These findings show that smooth transitions are achieved when schools integrate structured succession planning, mentoring, clear communication, and Catholic identity.

Respondents perceived the effectiveness of succession planning in holistic terms. Indicators included program smoothness, goal attainment, employee satisfaction,

positive feedback, teamwork, successful completion of assigned tasks, program continuity, stakeholder satisfaction, retention, and consistent performance. One participant explained that effectiveness is not only about operational success but also about living the school's mission and fostering a community where faith and education thrive together. Another stated that a successful leadership transition is one where the school experiences stability, mission continuity, and community confidence. These responses show that effectiveness involves operational efficiency, relational health, ethical leadership, and fidelity to Catholic mission.

Recommendations focused on structured mentoring, documentation, and values-based leadership formation. Respondents suggested planning ahead, providing hands-on mentoring opportunities, keeping a digital archive of leadership reports, event plans, and reflections, offering training and workshops, developing potential employees who lack qualifications, and implementing talent pipelines. Integration into daily operations was also emphasized. Respondents suggested embedding mentoring in professional development schedules, conducting regular retreats and seminars, maintaining updated digital files and turnover reports, and encouraging continuous feedback. One respondent emphasized that weaving mentoring, documentation, and value-based reflection into daily routines promotes sustainability, continuity, and fidelity to Catholic identity.

Balancing operational efficiency with mission-driven leadership was another recommendation. Respondents suggested aligning administrative processes with core values, automating routine tasks, setting clear goals, and integrating performance monitoring with values-based evaluation. Structured mentoring, documentation of processes and policies, and opportunities for collaboration were identified as top strategies for strengthening leadership preparation and succession planning. Respondents emphasized that mentoring and knowledge sharing should be strengthened through formal mentorship programs, open communication, cross-department collaboration, monitoring of effectiveness, and integration into daily operations.

## **Discussion**

The findings indicate that succession planning in Catholic educational institutions is both systematic and deeply relational. It involves processes such as leader identification, training, mentoring, documentation, and knowledge sharing, but it also depends on the transmission of Catholic values, charism, institutional culture, and servant leadership. The study supports the view that succession planning is not merely the replacement of one leader with another. It is a continuing process of forming individuals who can uphold professional responsibilities while remaining faithful to the institution's mission.



The first research question examined how Catholic schools identify and prepare potential leaders. The findings show that Catholic schools rely on a holistic approach that includes professional competence, moral integrity, relational skills, initiative, loyalty, communication, teamwork, adaptability, responsibility, and alignment with Catholic values. Respondents viewed servant leadership as central to leadership readiness. This finding reflects the character of Catholic educational institutions, where leadership is not understood only in administrative terms but also as service. The use of seminars, workshops, in-service training, committee participation, retreats, recollections, outreach programs, and mentoring provides future leaders with both technical and faith-based preparation. However, the findings also show that selection criteria need to be more inclusive and transparent, especially when academic qualifications or personal connections are perceived to overshadow experience, effectiveness, and efficiency.

The second research question focused on the role of mentoring and knowledge sharing in ensuring the transfer of Catholic identity and charism in leadership succession. The findings strongly suggest that mentoring and knowledge sharing are central mechanisms through which leadership continuity is sustained. Mentoring provides future leaders with practical guidance, role modeling, confidence, and opportunities to assume responsibilities gradually. Informal mentoring through daily collaboration complements formal mentoring arrangements. This is consistent with the study's use of Social Learning Theory because future leaders learn through observation, modeling, interaction, and shared practice. In Catholic schools, they do not only learn how to perform administrative tasks; they also observe how experienced leaders integrate faith, service, compassion, fairness, and mission into decision-making.

Knowledge sharing complements mentoring by preserving institutional memory. The study shows that orientation programs, retreats, faith-sharing sessions, active participation in school events, professional learning communities, documentation practices, meetings, mentoring logs, and digital platforms support the continuity of school culture and traditions. This is consistent with Knowledge Management Theory, which emphasizes the need to capture, organize, transmit, and sustain knowledge. In Catholic schools, the knowledge being transferred includes not only policies and procedures but also traditions, charism, mission, and values. The findings confirm that succession planning is strengthened when knowledge sharing is systematic, documented, and embedded in daily operations.

The third research question examined challenges and enabling factors affecting succession planning. Challenges included limited budgets, workload pressures, time constraints, insufficient training, inconsistent mentoring structures, modest documentation practices, personnel engagement, resistance to change, and possible loss of trained future leaders who leave the school. These constraints show that even when

schools value succession planning, implementation may be uneven. Mentoring may be valued but not consistently structured. Knowledge-sharing platforms may exist but may not be sustained if personnel lack training or time. This points to the need for institutional commitment, clear policies, training for mentors and knowledge custodians, and regular monitoring.

At the same time, the findings identified enabling factors that support smoother leadership transitions. These include proactive planning, clear communication, shadowing, structured mentoring, turnover meetings, shared files, open collaboration, mission alignment, and sufficient transition time. The example of a principal announcing retirement a year in advance illustrates the value of planned transition. The example of the assistant assuming responsibility after being oriented by the incumbent leader illustrates the importance of short-term role preparation and task familiarization. These examples show that leadership continuity is strengthened when outgoing and incoming leaders share duties, expectations, values, and institutional knowledge before a full transition occurs.

The fourth research question examined leaders' perceptions of effectiveness. The findings show that effectiveness is perceived not only through operational outcomes but also through relational and mission-based indicators. Respondents cited smooth program implementation, goal attainment, satisfaction, positive feedback, teamwork, retention, continuity, stakeholder confidence, and alignment with Catholic mission. This means that in Catholic educational institutions, successful succession planning must be judged according to both performance and fidelity to mission. A transition may be efficient, but it is not fully effective unless the incoming leader preserves the Catholic identity, values, culture, and mission of the institution.

Overall, the study confirms that succession planning in Catholic schools requires the integration of professional development, mentoring, knowledge sharing, faith formation, and institutional support. The findings also extend the study's theoretical foundation. Knowledge Management Theory is reflected in the use of documentation, orientation, digital platforms, meetings, and professional learning communities. Social Learning Theory is reflected in mentoring, shadowing, modeling, and shared leadership experiences. The Catholic school context expands these theories by showing that what is transmitted is not only technical knowledge but also spiritual identity, service orientation, charism, and mission.

The findings have implications for school administrators, human resources offices, diocesan education offices, religious congregations, potential successors, and future researchers. School leaders and human resources offices can use the findings to design more transparent selection practices, formal mentoring programs, leadership pipelines, and documentation systems. Diocesan education offices and religious congregations can

provide formation support to ensure that emerging leaders are grounded in Catholic values and charism. Potential successors can be given opportunities to participate in committees, projects, retreats, seminars, and mentoring arrangements. Future researchers may examine similar practices across other dioceses, compare lay and religious administrators, or use longitudinal designs to assess leadership succession over time.

The study concludes that Catholic schools identify and prepare future leaders through a combination of formal training, practical experience, mentoring, and faith-based formation. Mentoring and knowledge sharing play a pivotal role in leadership succession by transferring skills, institutional knowledge, traditions, values, and Catholic identity. Challenges such as limited resources, policy constraints, time pressures, documentation gaps, and personnel engagement affect implementation, but these can be mitigated through proactive planning, structured mentoring, clear communication, and mission alignment. The perceived effectiveness of succession planning extends beyond operational success and includes relational health, stakeholder satisfaction, ethical decision-making, and fidelity to Catholic mission.

Based on the findings, schools, human resources offices, and diocesan education offices should establish formal, long-term mentoring initiatives that pair experienced leaders with potential successors. They should provide mentor training focused on coaching, feedback, leadership skills, ethical decision-making, servant leadership, and faith-informed practices. Schools should give potential leaders structured opportunities to develop management, communication, and problem-solving skills through committees, projects, retreats, diocesan-led programs, and community service. Schools should identify potential leaders early and implement gradual, well-communicated transition strategies, including shadowing and handovers.

Institutions should also strengthen knowledge management systems by maintaining orientation materials, mentoring logs, digital archives, turnover reports, policy documents, program documentation, and professional learning community outputs. These resources should be regularly updated and made accessible to relevant personnel. Succession planning, mentoring, and knowledge sharing should be embedded into routine school processes rather than treated as occasional activities. Regular evaluations should be conducted to assess effectiveness, identify gaps, and maintain alignment with the school's mission, values, and organizational goals. Finally, schools should balance operational efficiency with mission-driven leadership by ensuring that administrative decisions support both effective management and Catholic identity.

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# **SLEEP HABITS, NIGHTTIME TECHNOLOGY USE AND TARDINESS: THEIR IMPACT ON ACADEMIC PERFORMANCE OF SENIOR HIGH SCHOOL STUDENTS**

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## **Abstract**

This study examined the relationship among sleep habits, nighttime technology use, tardiness, and academic performance among Senior High School students of Notre Dame of Banga, Inc. for the first semester of School Year 2025–2026. Specifically, it described the demographic profile of the respondents; determined their sleep habits, nighttime technology use, and frequency of tardiness; and analyzed how these variables impact academic performance. The study employed a mixed-methods sequential explanatory design. Quantitative data were collected from 88 Senior High School students selected via stratified random sampling, while qualitative insights were gathered through semi-structured interviews with 10 participants. Descriptive statistics (frequency, percentage, mean, and standard deviation) and Pearson’s  $r$  correlation coefficient were utilized to analyze quantitative parameters, while thematic analysis was applied to qualitative data. Descriptive results revealed that students intensely engage in nighttime technology use which directly correlates with irregular sleep habits and heightened morning tardiness. Correlation analysis demonstrated strong, statistically significant relationships between these behavioral variables and academic performance. Specifically, first-semester Grade Point Average (GPA) is strongly negatively correlated with nighttime technology use and classroom tardiness, but strongly positively correlated with healthy sleep habits. Qualitative themes validated the metrics, highlighting a cycle of bedtime procrastination driven by electronic gadgets that leads to severe morning sleep inertia. The study concludes that sleep habits, nighttime technology use, and tardiness are deeply intertwined with student success. Therefore, promoting healthy sleep routines, digital discipline, and collaborative time-management practices between parents and school administrators is essential for improving student punctuality, well-being, and academic performance.

**Keywords:** Nighttime Technology Use, Sleep Habits, Tardiness, Academic Performance, Mixed-Methods

## **Introduction**

In recent years, academic performance among students has been increasingly influenced by behavioral and lifestyle factors. Among these, sleep habits, nighttime technology use, and tardiness have emerged as critical determinants of learning outcomes. According to



Hershner & Chervin (2017), adequate sleep plays a vital role in cognitive functioning, memory consolidation, and academic success.

Many studies have emphasized that insufficient sleep leads to decreased concentration and poor academic performance (Short et al., 2019; Dewald-Kaufmann et al., 2017). In addition, irregular sleep schedules have been linked to lower grades and reduced cognitive efficiency (Okano et al., 2019). Nighttime technology use has also become widespread among students. The increasing use of smartphones and social media contributes to sleep disturbances and reduced academic engagement (Levenson et al., 2017). According to Touitou et al. (2016), exposure to blue light at night disrupts melatonin production and delays sleep onset.

Tardiness is another factor that affects academic performance. Students who frequently arrive late miss instructional time, resulting in lower academic achievement (Gottfried, 2019). Likewise, punctuality has been associated with discipline and academic success (Crede et al., 2019).

These studies emphasize the growing concern that behavioral patterns influenced by digital media are now significantly affecting students' readiness for school and their ability to meet academic expectations on time.

This study is grounded in two complementary frameworks: Sleep Hygiene Theory and Self-Regulation Theory. Sleep Hygiene Theory posits that environmental and behavioral routines directly influence sleep quality (Hirshkowitz et al., 2015). Adolescents frequently display poor sleep hygiene due to late-night device use, which can lead to attention difficulties and cognitive fatigue (Becker et al., 2018; Cain & Gradisar, 2019; Hale & Guan, 2015). Complementing this, Self-Regulation Theory explains how personal control governs goal-directed behavior (Zimmerman, 2017). Students who struggle with self-regulation are highly vulnerable to problematic media use, creating a direct conflict between late-night entertainment and necessary sleep schedules (Boer et al., 2020; Demoff et al., 2019).

Despite documented correlations between these individual variables, mixed-methods research exploring the combined cycle of technology displacement, sleep debt, and school punctuality within provincial Philippine educational settings remains scarce.

This study addresses this gap by pursuing the following objectives:

What is the profile of the respondents:

- Age;
- Sex;
- Grade Level and Strand
- GPA for First Semester, 2025-2026?

What is the level of students' sleep habits (sleep duration, consistency and quality)?

What is the extent of students' nighttime technology use (frequency, duration and purpose)?

What is the frequency of students' tardiness during the first semester?

Is there a significant relationship between the students' academic performance and there:

- Sleep habits;
- Nighttime technology use; and
- Tardiness?

Based on the findings of the study, what intervention program or action plan can be proposed to improve student wellness and academic punctuality?

## **Method**

This study utilized a Mixed-Methods Sequential Explanatory Design, combining quantitative and qualitative approaches. In the quantitative phase, structured survey questionnaires were administered to a larger group of Senior High School students to identify patterns and correlations between their sleep habits, nighttime technology use, tardiness, and academic performance. In the qualitative phase, follow-up interview was with a smaller subset of students to provide deeper insights into the results of the survey.

This design was chosen because it allows the researcher to first establish statistical relationships and then explain those findings through students' experiences. The sequential explanatory approach is well-suited when the researcher seeks to interpret quantitative results in greater depth using qualitative data (Creswell and Plano Clark, 2018). Similarly, the mixed-methods research provides a more comprehensive understanding of complex social issues by integrating numerical trends with contextual explanations (Johnson and Onwuegbuzie, 2004).

The study was conducted at Notre Dame of Banga, Inc., a Catholic school in Barangay Benitez, Banga, South Cotabato. The school serves as one of the key academic institutions in the municipality, catering to Elementary, Junior and Senior High School students.

The respondents of this study were Senior High School students (Grades 11 and 12) at Notre Dame of Banga, Inc. for the first semester of School Year 2025–2026. The total population of Senior High School students at the time was 112, consisting of 46 Grade 11–STEM students, 47 Grade 12–STEM students, and 18 Grade 12–HUMSS students. A stratified random sampling technique using Slovin's Formula with a 5% margin of error was used in selecting the survey respondents. The population was grouped according to grade level and strand (Grade 11–STEM, Grade 12–STEM, and Grade 12–HUMSS). Respondents were then randomly selected from each stratum until the required sample size of 88 was reached (35 Grade 11–STEM, 38 Grade 12–STEM, and 15 Grade 12–HUMSS). These students participated in the quantitative phase of the study (survey). This method ensured proportional representation of each group within the population. From this sample, 10 students were purposively selected for follow-up interviews in the qualitative phase to further explore and explain the survey findings.

The study utilized a dual-phased approach to instrumentation to capture both the breadth of numerical trends and the depth of participant experiences. The primary instrument was a structured survey questionnaire designed to measure behavioral variables and academic impact through two distinct five-point Likert scales, ensuring a statistically rigorous foundation. This was followed by a qualitative inquiry tool intended to elaborate on the quantitative findings, thereby providing a holistic understanding of the relationship between student habits and academic performance.

The data gathering tool used in Phase I was the structured survey questionnaire, which consisted of four parts. Part I described the Demographic profile of the respondents, while Parts II, III, and IV focus on the frequency of Sleep Habits, Technology Use, and Tardiness. These were interpreted through the following scales:

**Table 2.** *Five-Point Likert Scale A: Frequency-Based (For Behaviors)*

| <b>Numerical Rating</b> | <b>Statistical Range</b> | <b>Frequency Label</b> | <b>Verbal Interpretation</b>               |
|-------------------------|--------------------------|------------------------|--------------------------------------------|
| 5                       | 4.21 – 5.00              | Always                 | The behavior occurs daily (7 days a week). |
| 4                       | 3.41 – 4.20              | Often                  | The behavior occurs 4–6 times a week.      |
| 3                       | 2.61 – 3.40              | Sometimes              | The behavior occurs 1–3 times a week.      |
| 2                       | 1.81 – 2.60              | Rarely                 | The behavior occurs 1–2 times a month.     |
| 1                       | 1.00 – 1.80              | Never                  | The behavior does not occur at all.        |

The second phase of the data gathering tool consisted of a Semi-Structured Interview Guide which was designed to explore the "why" behind the statistical results gathered in Phase I. It was organized into the following thematic inquiries:

**Thematic Inquiry I: Morning Fatigue and the Struggle to Wake Up**– This section aimed to explain "Poor/Inconsistent" sleep quality and the struggles students face when waking up.

**Thematic Inquiry II: The "Late-Night Screen Time and Delayed Sleep"** – This explored the "High Intensity" of technology use, specifically focusing on the displacement of sleep in favor of late-night gadget engagement.

**Thematic Inquiry III: Explaining the Tardiness-Performance Link** – This segment provided a narrative for the negative correlation found between tardiness and academic grades.

**Thematic Inquiry IV: Proposed Action Plan for Sleep Hygiene and Tardiness Intervention**– This final section gathered qualitative support for the proposed action plan, allowing participants to suggest practical solutions to the issues identified.

The researcher implemented a systematic four-step procedure to ensure ethical and organized data collection:

**Administrative Clearance:** Formal permission was secured from the School Principal of Notre Dame of Banga, Inc. to conduct the study within the Senior High School department. Parent's consent forms were also distributed to the respondents a day before the study was conducted and were collected on the day of administration of the survey.

**Quantitative Phase (Survey):** The validated 5-point Likert scale survey was administered to eighty-eight (88) respondents. The researcher provided a brief orientation regarding the two different scales used (Frequency vs. Agreement) to ensure accurate responses.

**Qualitative Phase (Interview):** Following the **Sequential Explanatory Design**, semi-structured interviews were conducted with ten (10) participants. This phase aimed to explain the "Late-Night Habits " and "Poor/Inconsistent Sleep" identified in the survey results.

**Data Encoding:** All survey responses and interview transcripts were tallied and categorized for statistical and thematic analysis.

The data gathered in this study were analyzed using following appropriate statistical tools based on the research problems:

- Frequency and percentage were used to describe the demographic profile and the distribution of the students' self-reported First Semester General Average.
- Weighted Mean was used to serve as the primary tool to determine the "Extent" of behaviors. Each indicator weighed from 1 to 5 based on the respondent's choice.
- Standard Deviation was employed to measure the dispersion of responses, indicating whether student habits were consistent across the sample.
- Pearson's  $r$  Correlation Coefficient was used to determine the strength and direction of the relationship between behavioral variables and academic performance.
- Thematic Analysis was utilized for the qualitative data to identify recurring themes, providing a narrative explanation for the statistical findings.

All quantitative data were encoded in Microsoft Excel and organized according to study variables, while qualitative responses were transcribed and reviewed for emerging themes. To ensure confidentiality, respondents were assigned code numbers instead of using their names.

## Results and Discussion

### Demographic Profile of the Participants

The demographic profile of the respondents includes age, sex, grade level and average grade of learners in the first semester of SY 2025-2026.

**Table 3.** *Age of Participants*

| Age   | Frequency | Percentage (%) |
|-------|-----------|----------------|
| 16    | 26        | 29.55          |
| 17    | 52        | 59.09          |
| 18    | 9         | 10.23          |
| 19    | 1         | 1.13           |
| 20    | 0         | 0.00           |
| Total | 88        | 100.00         |

The data show that majority of the respondents were 17 years old (59.09%). This age group falls within adolescence, a developmental stage characterized by biological shifts in sleep patterns. (Department of Education in the Philippines, 2016).

**Table 4.** *Gender of Participants*

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male   | 40        | 45.45          |
| Female | 48        | 54.55          |
| Total  | 88        | 100.00         |

Table 4 revealed that 54.55 % of the respondents were females, while the remaining 45.45 percent were males, indicating a balanced participation.

**Table 5.** *Grade Level and Strand of the Participants*

| Grade Level and Strand | Frequency | Percentage (%) |
|------------------------|-----------|----------------|
| Grade 11 STEM          | 35        | 39.77          |
| Grade 12 STEM          | 38        | 43.18          |
| Grade 12 HUMMS         | 15        | 17.05          |
| Total                  | 88        | 100.00         |

Table 5 presents the demographic profile of the eighty-eight (88) Senior High School student-respondents in terms of grade level. The data shows that the majority of the respondents were from Grade 12–STEM with thirty-eight (38) students, followed by

Grade 11–STEM with thirty-five (35) students, while the smallest group consisted of Grade 12–HUMSS students with fifteen (15) respondents.

**Table 6.** *GPA of Senior High School Students*

| <b>Grades</b> | <b>Frequency</b> | <b>Percentage (%)</b> | <b>Descriptor</b>        |
|---------------|------------------|-----------------------|--------------------------|
| 90-100        | 18               | 20.45                 | Outstanding              |
| 85-89         | 32               | 36.36                 | Very satisfactory        |
| 80-84         | 25               | 28.41                 | Satisfactory             |
| 75-79         | 13               | 14.77                 | Fairly Satisfactory      |
| Below 75      | 0                | 0                     | Did Not Meet Expectation |
| Total         | 88               | 100.00                |                          |

It is shown in the table that majority of the respondents obtain a **Very satisfactory** grade (36.36%). While there were only 13 respondents who obtained a **Fairly Satisfactory** grade (14.77%) for the first semester of the school year 2025-2026.

### **Level of Students' Sleep Habits**

Table 7 presents the quantitative data regarding the sleep hygiene and patterns of the respondents. Sleep habits are a critical component of adolescent health, particularly for students at Notre Dame of Banga, Inc., who face rigorous academic demands. This table evaluates the frequency of behaviors such as maintaining regular bedtimes, achieving the recommended duration of rest, and the physiological state of the students upon waking.

**Table 7.** *Level of Students' Sleep Habits*

| <b>Indicators</b>                                                        | <b>Mean</b> | <b>SD</b> | <b>Interpretation</b> |
|--------------------------------------------------------------------------|-------------|-----------|-----------------------|
| 1. I go to bed at a regular time every night.                            | 2.14        | 0.79      | Rarely                |
| 2. I get at least 7 to 8 hours of sleep on school nights.                | 2.10        | 0.82      | Rarely                |
| 3. I find it difficult to fall asleep within 30 minutes of going to bed. | 4.10        | 0.80      | Often                 |
| 4. I feel well-rested and alert when I wake up for school.               | 2.52        | 0.92      | Rarely                |
| 5. I take afternoon naps due to lack of sleep at night                   | 3.81        | 0.96      | Often                 |
| Overall Weighted Mean                                                    | 2.93        | 0.86      | Sometimes             |

The overall weighted mean of **2.93** suggests that students only "Sometimes" practice healthy sleep habits. The obtained overall SD (0.86) indicates a low level of dispersion, suggesting that the respondents sleep habit were homogeneous. However, the specific indicators for duration (2.10) and feeling rested (2.52) fall under "Rarely," indicating a significant sleep deficit. This is illuminated by Theme 1: Morning Fatigue and the Struggle

to Wake Up," where participants described "heavy head" and "brain fog" as daily occurrences. The high mean for difficulty falling asleep (4.10) suggests that even when students attempt to rest, their bodies remain in a state of alertness.

These findings align with Short et al. (2017), who argued that adolescent biological clocks are often at odds with early school start times. This implies that students are entering the classroom in a state of "cognitive fatigue," which limits their ability to process complex information during the first periods of the day.

### Extent of Nighttime Technology Use

Table 8 illustrates the digital behaviors of the respondents during the late-night hours. Given the accessibility of smartphones and high-speed internet, technology use has become a primary nocturnal activity for Senior High School students. The table below measures the intensity of gadget engagement, the nature of the content consumed, and the degree to which digital use interferes with intended sleep schedules.

**Table 8.** *Extent of Nighttime Technology Use*

| Indicators                                                                             | Mean | SD   | Interpretation |
|----------------------------------------------------------------------------------------|------|------|----------------|
| 1. Using social media (TikTok/FB) in bed for 1+ hour.                                  | 4.69 | 0.51 | Always         |
| 2. Using gadgets for entertainment after 10:00 PM.                                     | 4.30 | 0.74 | Always         |
| 3. Using gadgets for academic reviews before sleep.                                    | 2.43 | 1.02 | Rarely         |
| 4. Losing track of time while using phone, resulting in a later bedtime than intended. | 4.75 | 0.45 | Always         |
| 5. Keeping mobile data or Wi-Fi "ON" throughout the night.                             | 4.52 | 0.65 | Always         |
| Overall Weighted Mean                                                                  | 4.14 | 0.67 | Often          |

The overall mean of **4.14** indicates that students "**Often**" engage in heavy nighttime technology use, with entertainment-related indicators (social media =4.69 and Using gadget for entertainment=4.30) reaching the "**Always**" level. Indicator 4 "I lose track of time while using my phone, resulting in a later bedtime than intended," obtained the highest mean of **4.75**, interpreted as "**Always**". The overall SD of **0.67** is very low. This indicates that students were almost entirely in agreement about their nighttime technology use. This quantitative data is explained by **Theme 2: "Late-Night Screen Time and Delayed Sleep,"** where students admitted that the "infinite scroll" of social media makes it nearly impossible to adhere to a bedtime. Interestingly, using technology for academics (**2.43**) is "**Rarely**" practiced, proving that late-night gadget use is almost exclusively for leisure.

This supports Cain and Gradisar (2019) regarding the "Displacement Effect," where digital entertainment replaces sleep. This implies that as students stay "ON" (Indicator 5), their brains remain stimulated by blue light, further delaying the onset of restorative sleep.

### Frequency of Students' Tardiness

The following data presents the behavioral manifestation of the previously discussed sleep and technology habits: punctuality. Tardiness is measured not just by the act of being late, but by the frequency of missing essential morning activities and the students' self-perception of their ability to arrive on time. This table provides a clear picture of how behavioral habits translate into school attendance.

**Table 9.** *Frequency of Students' Tardiness*

| Indicators                                              | Mean | SD   | Interpretation |
|---------------------------------------------------------|------|------|----------------|
| 1. Arriving late to the first-period class.             | 3.74 | 0.73 | Often          |
| 2. Missing school announcements or morning prayers.     | 3.59 | 0.89 | Often          |
| 3. Struggling to wake up despite multiple alarms.       | 4.48 | 0.68 | Always         |
| 4. Arriving late due to feeling tired or sleepy.        | 4.10 | 0.73 | Often          |
| 5. Being late to class after the recess or lunch break. | 2.42 | 0.92 | Rarely         |
| Overall Weighted Mean                                   | 3.67 | 0.79 | Often          |

The results revealed the highest indicator, "Struggling to wake up" (4.48), directly links the sleep data to the attendance data. **Theme 3: The "Frequent Tardiness and Missing First-Period Classes"** highlights that students do not want to be late, but feel "defeated by their own exhaustion." The fact that they are "**Rarely**" late after lunch (**2.42**) suggests that the issue is specifically tied to the morning fatigue. The overall mean of **3.67** falling in the "**Often**" range and an overall weighted SD of 0.79 for the frequency of students' tardiness indicates a low level of dispersion, suggesting that respondents share a relatively uniform experience regarding punctuality. This consistency implies that tardiness is a widespread phenomenon within the student population, likely influenced by sleep difficulties and heavy technology use.

This confirms Gottfried (2017), who posited that tardiness is a precursor to chronic absenteeism and academic disengagement. This further implies that the "first hour" of school is the most vulnerable time for these students, as they are physically present but mentally and temporally "behind."

### The Relationship Between Variables and Academic Performance

The final quantitative section examined the correlation between the three primary behavioral variables and the students' Grade Point Average (GPA). This analysis determined whether the observed habits have a statistically significant impact on



academic success. Applying Pearson's  $r$ , we found the strength and direction of these relationships.

**Table 10.** *Relationship Between the Independent Variables and GPA*

| <b>Variables Linked to GPA</b> | <b>Pearson <math>r</math></b> | <b>p-value</b> | <b>Interpretation</b>                    | <b>Decision</b> |
|--------------------------------|-------------------------------|----------------|------------------------------------------|-----------------|
| Sleep Habits                   | 0.74                          | 0.001          | Significant Positive Relationship        | Reject          |
| Nighttime Tech Use             | -0.78                         | 0.001          | Significant Strong Negative Relationship | Reject          |
| Tardiness                      | -0.77                         | 0.001          | Significant Strong Negative Relationship | Reject          |

The results of Pearson's  $r$  correlation analysis revealed that **Nighttime Technology Use ( $r = -0.78$ )** has the strongest negative impact on grades. The strong negative correlation proves that as technology use increases, academic marks decline significantly. On the other hand, a strong positive correlation (0.74) between **Sleep habits and Academic Performance** indicates that disciplined sleep routines strongly foster higher academic achievements. Consequently, the result obtained a strong negative correlation between Tardiness and Academic Performance, demonstrating that recurrent morning lateness is heavily tied to lower grade performance.

### Qualitative Results and Thematic Analysis

Following the presentation of quantitative data, a qualitative analysis was conducted to provide a deeper explanation of the statistical trends observed. Ten (10) participants were selected for semi-structured interviews to explore the lived experiences behind the data.

**Table 11.** *Thematic Analysis of Student Interviews on Sleep Habits, Nighttime Technology Use, and Tardiness*

| <b>Codes</b>                                                                                          | <b>Sub-Themes Categories</b>                  | <b>/ Major Themes</b>                          |
|-------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------|
| P2: brain fog<br>P3: feeling "undone."<br>P5: snoozing alarms<br>P6: Heavy head<br>P8: afternoon naps | -Physical Exhaustion<br>-Circadian Disruption | 1. Morning Fatigue and the Struggle to Wake Up |
| P1: TikTok scrolling<br>P2: FOMO<br>P3: "one more video,"<br>P4: eye strain                           | -Recreational Screen Addiction                | 2. Late-Night Screen Time and Delayed Sleep    |

|                                                                                                                  |                                                 |                                                                      |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------|
| P5: social media alertness                                                                                       |                                                 |                                                                      |
| P5: Missing quizzes<br>P2: instructional gaps<br>P9: social embarrassment<br>P8: "lost" feeling.                 | -Academic Disadvantage<br>-Psychological Stress | 3. Frequent Tardiness and Missing First-Period Classes               |
| P5: understanding non-laziness<br>P8: workshop requests<br>P7: teacher empathy<br>P10: Moving difficult subjects | -Digital Hygiene Literacy                       | 4. Proposed Action Plan for Sleep Hygiene and Tardiness Intervention |

## Qualitative Narratives on Major Themes

The following narratives provide an in-depth look at the lived experiences of the Senior High School students at Notre Dame of Banga, Inc., specifically focusing on how they navigate the challenges of sleep, technology, and school punctuality.

### **Theme 1.** *Morning Fatigue and the Struggle to Wake Up*

This theme explains the quantitative finding where students "Rarely" feel rested. Participants described a state of "Morning fatigue," a feeling of heavy physical exhaustion and mental "fog" that makes waking up for early classes a daily struggle. Many students reported that their bodies are in a state of "sleep debt" that cannot be easily repaid by afternoon naps. The survey results showed that students "Rarely" feel well-rested when waking up for school (Mean = 2.52). The participants' narratives explain this as a physical and mental "fog" that makes morning attendance a significant hurdle.

*To Note: "When my alarm goes off at 5:30 AM, my head feels heavy. It's like my brain hasn't turned on yet. I usually snooze it four or five times before I can actually stand up. My body feels like it hasn't slept at all." (P5) "Waking up is the hardest part. Even if I hear the alarm, my body feels like it hasn't slept at all. I end up snoozing it until I'm already late." (P6)*

This physical exhaustion carries over into the classroom, affecting cognitive engagement:

*To Note: "I'm always tired in the first period. I try to listen to the teacher, but I find myself staring at the wall or almost nodding off. I can't absorb what is written on the board because I'm just too sleepy to care." (P6)*

This narrative confirms that the students' lack of punctuality is a physical consequence of the sleep disruption caused by late-night digital engagement. The description of "heavy

limbs" and a "brain that hasn't turned on" indicates that students are experiencing high levels of "Morning Fatigue". This suggests that their sleep is being interrupted while they are still in a deep sleep stage, a direct result of falling asleep too late due to technology use. This mirrors the "Sleep Debt" theory discussed by Hershner and Chervin (2016), which states that accumulated sleep loss results in diminished alertness and cognitive "fog" during the early hours. The habit of "snoozing" matches the biological shifts in adolescent sleep patterns noted in the DepEd (2016) guidelines.

This implies that students are physically and neurologically unready for learning during the first period. Their attendance might be marked as "present," but their cognitive capacity is effectively "absent" due to physiological exhaustion.

## **Theme 2.** *Late-Night Screen Time and Delayed Sleep*

The first theme describes the psychological and behavioral pull of technology that leads to the "**Often**" frequency of gadget use found in the survey. Participants consistently identified social media and short-form video content as the primary reason for delayed sleep. This behavior is characterized by a "Late-night screen time," where the instant gratification of entertainment outweighs the perceived need for rest.

To Note: *"I usually start scrolling on TikTok around 9:00 PM. Before I know it, it's already 1:00 AM. It's hard to stop because the videos just keep coming and I want to see the next one. (P1) "I tell myself just five more minutes on TikTok, but then I look at the clock and it's already midnight. I feel like I'm stuck in a loop," (P3).*

Another participant highlighted the use of technology as a stress-relief tool that backfires:

To Note: *"I feel like I need my phone to relax after a long day of STEM subjects, but then I stay up way too late. My eyes hurt from the screen but I can't put it down because I'm replying to my friends in our group chat until midnight." (P4)*

This suggests that nighttime technology use is not merely for academic purposes but serves as a digital displacement for sleep, creating a physiological barrier to maintaining a healthy bedtime.

This also confirmed that the high frequency of technology use is driven by a lack of digital self-regulation. This finding aligns with Boer et al. (2020), who identified that adolescents often lose the "conflict of choice" between sleep and digital entertainment. It also supports the "Displacement Effect" mentioned by Cain and Gradisar (2019), where digital activities physically replace the hours intended for restorative rest.

This implies that the problem is not a lack of academic time, but a lack of "Digital Hygiene." Without intervention strategies to break this cycle, students will continue to suffer from chronic sleep postponement, regardless of how early they intend to go to bed.

### **Theme 3: Frequent Tardiness and Missing First-Period Classes**

The third theme focuses on the impact of tardiness on academic performance. Participants expressed that being late creates a "trap" where they miss the most critical part of the lesson—the introduction and the first-period quiz. This results in a "cycle of confusion" for the rest of the school day

The strong negative correlation between tardiness and GPA ( $r = -0.77$ ) is explained by the narratives regarding missed instructional time. Students reported that being late is not just a disciplinary issue, but a major barrier to learning.

To Note: *"I arrived 15 minutes late yesterday. By the time I sat down, the quiz was halfway done. I had to rush and I guessed most of the answers just to finish. It's a trap because once you're late, you're already behind for the whole day."* (P5) *"When I arrive late, I miss the quiz or the first activity. I feel lost for the rest of the period, and my grades reflect that."* (P2)

Beyond the missed lessons, the emotional impact of tardiness also hinders academic focus:

To Note: *"Being late is embarrassing. Walking into the room while everyone is quiet and looking at you makes me lose my focus and I feel ashamed. I end up thinking about being late instead of listening to the lecture."* (P9)

The above narratives answer the "why" behind the negative correlation found between tardiness and GPA ( $r = -0.77$ ), proving that instructional loss during the first hour of school is a primary driver of lower academic achievement. Tardiness is revealed here as a "trap" that causes an immediate academic disadvantage. The act of "guessing answers" because of a rushed arrival shows how punctuality—or the lack thereof—directly manipulates the student's grade, independent of their actual intelligence or ability.

This supports Gottfried (2017), who argued that tardiness is a unique predictor of reduced instructional time and lower GPA. The "social embarrassment" mentioned by other participants also connects to Credé et al. (2010), who linked attendance behaviors to the overall psychological engagement of the student.

This implies that the "first 20 minutes" of the school day is important. Habitual tardiness causes missing the introduction of a lesson and even missing half way of the quiz, making the rest of the day's content harder to follow, leading to lower overall performance.

### **Theme 4: Proposed Action Plan for Sleep Hygiene and Tardiness Intervention**

The final part of the interview guide sought student insights on potential school-based interventions. The data revealed that students are self-aware of their digital struggles and desire systemic support.

To Note: *"I wish teachers understood that we aren't just lazy. Sometimes the phone is the only way we relax, but then we can't wake up. Moving difficult subjects like Math or*

*Science to a later period might help us actually be awake for the hard stuff."* (P10) *"I guess it would be better if the school conducts seminar or workshop, focusing on Digital Hygiene,"* (P8).

These insights indicate that students are aware that their technology use is a coping mechanism for stress, even though it results in tardiness. Their suggestion about conducting a seminar or workshop about "Digital Hygiene" will help educate students about limiting the use of gadget at night and promoting digital discipline.

This implies that disciplinary action (punishment) for tardiness may be less effective than Administrative Adjustments. Creating a school environment that acknowledges the "Frequent Tardiness" and provides "Digital Hygiene" workshops is likely to yield better academic results than traditional sanctions.

The following Joint Display integrates the quantitative results with the qualitative themes, illustrating how nighttime technology use, sleep hygiene, and tardiness interact to influence academic performance.

**Table 12.** *Joint Display of Integrated Quantitative and Qualitative Findings*

| <b>Research Variable</b> | <b>Quantitative Result (Mean/Correlation)</b> | <b>Qualitative Theme</b>                                            | <b>Integrated Narrative Insight (Explanation)</b>                                                                                                                                                            |
|--------------------------|-----------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sleep Habits             | <i>Mean = 2.93 (Sometimes)</i>                | <i>Theme 1: Morning Fatigue and the Struggle to Wake Up</i>         | <i>Low sleep quality is a direct result of digital displacement. Students report "heavy limbs" and "brain fog," confirming that their bodies are in a constant state of sleep debt.</i>                      |
| Nighttime Technology     | <i>Mean = 4.14(Often)</i>                     | <i>Theme 2: Late-Night Screen Time and Delayed Sleep</i>            | <i>The "Often" frequency of gadget use is driven by a lack of digital self-regulation. Students describe an "late-night scrolling" on social media that replaces intended sleep time with entertainment.</i> |
| Tardiness                | <i>Mean = 3.67(Often)</i>                     | <i>Theme 3: Frequent Tardiness and Missing First Period Classes</i> | <i>Lateness is the physical manifestation of sleep debt. Students are not intentionally late but are physically unable to wake up for early classes due to late-night screen time.</i>                       |
| Academic Performance     | <i>r = -0.78 (Strong Negative)</i>            | <i>Cognitive and Instructional</i>                                  | <i>Lower GPAs are caused by a "double hit": students are too tired to focus during the</i>                                                                                                                   |

|                      |                                                                             |
|----------------------|-----------------------------------------------------------------------------|
| <i>onal<br/>Gaps</i> | <i>day and miss foundational instructions<br/>due to morning tardiness.</i> |
|----------------------|-----------------------------------------------------------------------------|

The qualitative integration through the **Joint Display** (Table 12) shows that the "Late-Night Screen Time and Delayed Sleep" leads to "Morning Fatigue and the Struggle to Wake Up," which leads to "Tardiness," ultimately resulting in lower GPAs.

The stories shared by the students in the interviews do not just show their personal struggles; they also explain the numbers found in the surveys by matching them with past research. First, the "Late-Night Screen Time and Delayed Sleep" (Theme 2) shows how students cannot stop scrolling through apps like TikTok late at night. This perfectly explains what Boer et al. (2020) found in their study: when students lack self-control with social media, their grades drop. It also matches the ideas of Short et al. (2017), who proved that using phones right before bed cuts down a student's total sleep time. Second, the "Morning Fatigue and the Struggle to Wake Up" (Theme 1) show the physical toll of these late-night habits. Students described waking up with a "heavy head" and feeling a "brain fog" that makes it hard to learn in their first class. This gives a real-world example of what Hershner (2020) discovered: losing sleep weakens the parts of the brain that handle memory and focus. Finally, "Frequent Tardiness and Missing First-Period Classes" (Theme 3) shows how being late hurts a student's grades. Students explained that when they arrive late, they miss morning quizzes and the start of the lesson, forcing them to guess answers. This behavioral pattern perfectly supports the research of Gottfried (2017) and Ansari et al. (2020), who both stated that morning lateness causes a major loss in learning time and leads to a lower GPA. By missing the first 15 to 20 minutes of class, students are left feeling lost, which explains the strong negative relationship ( $r = -0.78$ ) between technology use and academic grades.

The implication of these findings is that student performance at Notre Dame of Banga, Inc. is being hindered by a "cascade effect." To improve academic outcomes, school administrators and parents must move beyond traditional disciplinary measures for tardiness. Instead, there is an urgent need for interventions that target the root cause: Digital Hygiene. If students can be taught to break the "digital distractions" and restore their sleep patterns, the physical symptom of tardiness will decrease, and cognitive readiness for academic tasks will naturally increase.

Together, the quantitative and qualitative data in this study revealed a clear, interconnected behavioral cycle among Senior High School students at Notre Dame of Banga, Inc. The quantitative results established a strong negative correlation between nighttime technology use and academic performance ( $r = -0.78$ ), which the qualitative findings explained through the theme of the "Late-Night Screen Time and the Delayed Sleep." This suggests that the "Often" frequency of gadget use is not merely a habit but a physiological struggle for self-regulation against digital entertainment.

Furthermore, the data indicates that tardiness is the primary physical manifestation of "Morning Fatigue and the Struggle to Wake Up." The "Often" frequency of tardiness (Mean = 3.67) is directly tied to the "Rarely" frequency of feeling well-rested (Mean = 2.52). The qualitative narratives in the "Frequent Tardiness and Missing First-Period

Classes" emphasized that students are not intentionally late; rather, they are physically and cognitively hampered by a lack of restorative sleep. This lack of punctuality leads to Instructional Loss, where students miss foundational concepts during the first period, ultimately resulting in the lower GPAs observed in the correlation analysis ( $r = -0.77$ ).

## **Summary of Implications**

**Technological Intervention:** Since nighttime gadget use is the primary disruptor of the sleep-performance cycle, school interventions must focus on Digital Literacy and Sleep Hygiene rather than just traditional study skills.

**Shift in Disciplinary Perspective:** The findings imply that student tardiness should be viewed through a wellness lens. Traditional disciplinary actions for being late may be less effective than addressing the physiological root cause: late-night screen time and the resulting melatonin suppression.

**Academic Support:** Because students "Often" miss the start of the first period, there is a need for academic "bridging" strategies to ensure that tardy students can catch up on foundational instructions missed during the morning transition.

In conclusion, the academic success of the respondents is significantly hindered by a "cascade effect" starting from late-night technology use, leading to poor sleep, which then manifests as morning tardiness and reduced classroom focus. These findings provide a robust foundation for the development of the proposed action plan- The "**REST-START**" Initiative, which aims to provide students with the tools for digital self-regulation and improved sleep hygiene to enhance their overall academic performance.

## **Summary of the Study**

The primary objective of this study was to investigate the relationship between Sleep Habits, Nighttime Technology Use, and Tardiness and their impact on Academic Performance of Senior High School students at Notre Dame of Banga, Inc., during the First Semester of School Year 2025–2026. Recognizing tardiness not merely as a disciplinary infraction but as a multi-faceted issue deeply intertwined with student well-being, domestic factors, and institutional policies, this research sought to provide a comprehensive diagnosis of why students arrive late and how this chronic lateness affects their classroom success. To achieve a holistic understanding of this phenomenon, the study employed a sequential-explanatory, mixed-methods research design. The study utilized a Mixed-Methods Sequential Explanatory Design, which combined both quantitative and qualitative approaches. Quantitative data were gathered using a structured, researcher-constructed survey instrument that underwent rigorous pilot testing and validation. The instrument assessed various dimensions of late arrival, including environmental barriers and personal habits. Qualitative insights were gathered through semi-structured, in-depth interviews with key participants, allowing them to articulate their morning routines, internal anxieties, and classroom struggles in their own words.

The research was contextually anchored at Notre Dame of Banga, Inc., involving a carefully selected sample of senior high school students. The statistical treatment of the quantitative data involved both descriptive and inferential statistics. Frequencies, percentages, and weighted means were calculated to determine the profile of the participants and the severity of tardiness factors. Pearson's Correlation Coefficient ( $r$ ) was utilized to establish the direction and strength of the relationship between tardiness rates and academic performance marks. On the other hand, the qualitative data were processed using thematic analysis, which involved meticulous transcription, open coding, and the crystallization of overarching themes from the participants' narratives. Finally, a joint display matrix was constructed to integrate, cross-reference, and merge the quantitative metrics with the qualitative themes, culminating in a robust, multi-dimensional interpretation that served as the foundational basis for the proposed action plan.

### **Summary of Findings**

The study investigated the relationship between sleep habits, nighttime technology use, tardiness, and their impact on academic performance among 88 Senior High School students. The findings are summarized as follows:

#### **Demographic Profile**

The study involved 88 Senior High School students. The majority are 17 years old (59.09%), representing the mid-adolescent stage where biological sleep shifts are most prevalent.

#### **Sleep Habits**

Students "Sometimes" practice healthy sleep habits (Mean = 2.93), but specifically "Rarely" feel rested (Mean = 2.52). Qualitatively, students described experiencing "Sleep Debt," reporting that even when they try to sleep, they feel "heavy-headed" or experience "brain fog" the next morning.

#### **Nighttime Technology Use**

There is an "Often" extent of technology use obtaining the overall mean of 4.14. Students "Always" lose track of time" (Mean=4.75), scrolling on social media (Mean = 4.69), and using gadgets for entertainment (Mean=4.30) The qualitative interviews revealed the "Late-Night Screen Time," where the instant gratification of social media and infinite scrolling makes it "nearly impossible" for students to put their phones away, even when exhausted.

#### **Tardiness**

Students are "Often" late (Mean = 3.67), primarily due to struggling to wake up (Mean = 4.48). Qualitatively, this was identified as the "Tardiness Trap," a cycle where late-night digital engagement leads to multiple alarm snoozing and a physical inability to arrive for the first period.



## Correlational Analysis

Nighttime technology use showed the strongest negative impact on grades ( $r = -0.78$ ) because of instructional loss. While sleep habits revealed a positive relationship with academic performance ( $r=0.74$ ), indicating that as students disciplined sleep habits results to higher academic achievement. Quantitative analysis showed a significant negative correlation between nighttime technology use and GPA ( $r = -0.78$ ) and between tardiness and GPA ( $r = -0.77$ ). The qualitative data explained this through "**Frequent Tardiness and Missing First-Period Classes**," where students miss the foundational concepts and "priming" activities conducted during the first hour of classes, leading to lower assessment scores.

## Proposed Intervention/Action Plan

Based on the integrated data, there is a clear need for a multi-faceted intervention focusing on wellness, policy reform, and parental guidance to break the cycle of sleep debt.

## Conclusions

Based on the findings, the following conclusions are drawn:

**On Sleep and Technology:** Nighttime technology use is the primary driver of poor sleep hygiene. The "**Late-Night Screen Time**" acts as a digital disruptor that overpowers the physiological urge to sleep, leading to chronic "**Delayed Sleep**."

**On Tardiness:** Tardiness is not merely a behavioral issue but a physiological consequence of digital displacement. Students committed "**Frequent Tardiness**" and were neurologically unready for morning instructions.

**On Academic Performance:** The decline in academic performance is a result of a "cascade effect." Technology disrupts sleep, sleep deprivation causes tardiness, and tardiness leads to "**Missing First-Period Classes**," which directly lowers the students' GPA.

**Integrated Conclusion:** The qualitative narratives successfully "explained" the quantitative correlations, proving that the negative impact on grades is a result of both physiological fatigue and missed instructional time. The Mixed-Methods approach confirms that academic success in the digital age is heavily dependent on sleep hygiene. Traditional disciplinary measures for tardiness fail to address the root cause: the displacement of sleep by digital media.

## Implications

**For School Policy:** Tardiness should be viewed through a wellness lens rather than just a disciplinary one. Traditional punishments may be less effective than addressing the root cause: sleep hygiene and digital self-regulation.

**For Pedagogy:** Because students often miss the start of the first period, "bridging" strategies are needed to help tardy students catch up on foundational instructions missed during the morning transition.

## **Recommendations**

Based on the conclusions of the study, the following Proposed Action Plan is recommended for implementation:

### **Strategic Intervention Program for Student Wellness (The Proposed Action Plan)**

To address the findings on Sleep Debt, it is recommended that the school implement the "Proposed Action Plan". This involves a 10-minute morning "priming" session to reduce brain fog and the use of sleep-tracking journals to help students connect their rest habits with their academic focus.

### **School Policy Recommendations on Digital Discipline**

To reduce students' "Late-Night Screen Time and Delayed Sleep," the school should adopt a "Digital Curfew" policy. This recommendation suggests that teachers refrain from setting submission deadlines between 8:00 PM and 6:00 AM, encouraging students to disconnect from devices before sleep.

### **Parent-Teacher Guidance Workshop Module**

To bridge the gap between home and school, a workshop module titled "The Science of the Loop" should be integrated into PTA meetings. This will provide parents with the tools to negotiate "Digital Trust Agreements" at home, directly addressing the root cause of night time technology use.

To ensure a systematic response to the identified academic challenges, a comprehensive and detailed **Proposed Action Plan** has been developed as the primary output of this study. This plan outlines specific objectives, key activities, responsible personnel, and expected outcomes designed to break the cycle of sleep debt and instructional loss.

**Table 14.** *Proposed action plan: the rest-start initiative*

**Goal:** To improve the academic performance of Senior High School students by mitigating the impact of nighttime technology use on sleep hygiene and morning punctuality.

| <b>Project/<br/>Program</b>                    | <b>Objectives</b>                                       | <b>Key Activities</b>                                                                                                                                                        | <b>Persons Involved</b>           | <b>Timeframe</b>         | <b>Expected Outcome</b>                                                    |
|------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------|----------------------------------------------------------------------------|
| I. Strategic Intervention for Student Wellness | To reduce "Morning Fatigue and the Struggle to Wake Up" | 1. The "Power 10" Buffer: A 10-minute low-intensity transition period at the start of the 1st period to allow students to physiologically "wake up" before core instruction. | Teachers, Students, School Clinic | Quarterly Implementation | Increased alertness and reduced "brain fog" during early morning classes.  |
|                                                |                                                         | 2. Sleep Hygiene Journaling: Integration of sleep-tracking logs in PE/Health classes to help students visualize the link between rest and GPA.                               | Health Teachers, Guidance Office  | Monthly                  | Enhanced student mindfulness regarding sleep-performance correlation.      |
| II. School Policy on Digital Discipline        | To break the "Late-Night Screen Time and Delayed Sleep" | 1. 8:00 PM Digital Curfew: Institutional policy where no online assignments or submissions are due late at night to discourage screen time.                                  | School Admin, Faculty             | Immediate/Permanent      | Decreased digital displacement of sleep and reduced late-night gadget use. |
|                                                |                                                         | 2. Instructional Bridging: Providing summary "Bridge Sheets" for the first 15 minutes of class to mitigate the impact of the "Tardiness Trap."                               | Subject Teachers                  | Ongoing                  | Minimized academic gaps for students struggling with morning punctuality.  |
| III. Parent-Teacher Guidance Workshop          | To educate stakeholders on the "Science of the Loop"    | 1. "Science of the Loop" Seminar: Educational sessions for parents explaining how algorithms disrupt adolescent melatonin.                                                   | Guidance Counselors, Parents      | Once per Semester        | Improved parental understanding of the physiological causes of tardiness.  |

|                            |                                                                                                                                                               |                      |                  |                                                                                   |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------|-----------------------------------------------------------------------------------|
| and<br>home<br>regulation. |                                                                                                                                                               |                      |                  |                                                                                   |
|                            | 2. Digital Trust<br>Agreements:<br>Collaborative drafting of<br>home contracts<br>regarding gadget-free<br>zones and phone<br>"parking stations" at<br>night. | Parents,<br>Students | Post-<br>Seminar | Improved<br>home-<br>school<br>consistency<br>in regulating<br>technology<br>use. |

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## WHEN THE ASIAN PRINCESS SPEAKS

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### Abstract

For generations, women's language is traditionally coded as weak for using softer tone and expressing emotions. Linguists such as Robin Lakoff introduced linguistic features of what makes up women's language. This research aims to find out the linguistic features that are used in the three Asian Disney animated films "Aladdin," "Mulan," and "Raya and the Last Dragon" using Robin Lakoff's theory (1975) in the women's language. This descriptive-qualitative study identifies the linguistic features that are present in the dialogues of the female characters and how these diachronic views function in the narrative. The three selected films were conducted through using a discourse analysis. The research findings show that most of the linguistic features are used by the main female character with lexical hedges being the dominant one across the three films. The study has shown that while lexical hedges are theorized to be weaken women's language it has evolved into a tool where women use it for self-expression and negotiation. It also shows the diachronic progression of the linguistic features of each female character. The research was able to identify that there is a change in how frequent they utilize those features. Female characters who were using lexical hedges are seen using is less at the conclusion of the film. The research implies that language and culture are integrated and developed through time. The female characters in this film are a representation of what has changed and evolved in language as it mirrors how society views women.

**Keywords:** Women's language, Robin Lakoff, Disney film, Asian female characters, diachronic analysis

### Introduction

Language and gender have always been connected to how society shapes social construct of how human present themselves. Linguists and sociologists say that linguistic structures are imbued with societal expectations. For one, women's language is viewed as less dominating than men. Lakoff (1975) examined women's language and found that there are linguistic features that make their language distinct from others. According to Lakoff, women's language tends to be soft-spoken, high pitched, and polite language.



In a global perspective, mainstream films such as Disney influence young people to see social stereotypes from how they portray characters of different backgrounds. In a modern era where technology is expected to be around everywhere, the youth are entertained with Disney movies which are picked by their parents for them. It is where they learn how to develop language structure by observing how the main characters interact with each individual. Language comes into play as it is crucial as social ideologies can be manifested through a character's language (Al-Yasin and Rabab'ah, 2021). In the Philippines, studies in women's language have been limited. A study of women's language with analysis of Maria Clara in the TV series called Maria Clara and Ibarra reveals that women in the Philippines during the 19th century have been using borrowed words as per result of colonization. As women's role has been in the confine of their homes, they are perceived as demure, sophisticated, and graceful. These points towards the linguistic features contain hyper polite and avoidance of swear or slang words that may deem them as un-lady like. Especially in the Philippines, there is a societal standard that women should be quiet and obedient to the authority of their parents or husbands (Catu et al., 2023).

The gap in this research is that previous studies have focused on the women's language but more on western culture. There have been only a few studies that studied the Asian women's language. While there have been studies on Disney princesses' language, studies focused on the Western culture like Frozen, Beauty and the Beast, and Brave. The researcher sees this gap as an opportunity to explore and discover how women's language goes more than just being polite to a statement of empowerment.

The purpose of this research is to establish the linguistic features of women's language in the selected animated films that are produced by Disney Studios with Asian media as a focus. By specifying the language used by these women, this research aims to describe the functions of these ten linguistic features in understanding how an Asian woman, or in this context, the Asian Disney Princess speaks.

In pursuit of finding a way to connect language and gender, it was decided by the researcher that the sustainable development goals in this research is goal number five which advocates for gender equality. This way, the purpose of this study is to show that women's language is not weak and is a tool to express their statements with politeness as a power.

## **Research Questions**

This study aims to describe the women's language and the linguistic features of selected Asian Disney princesses and understand the functions of these women's languages.

Specifically, it will seek to answer the following research questions:

1. What linguistic features by Lakoff are present in the dialogues of selected Asian Disney princesses?
2. How do these diachronic views of linguistic features function in the narratives?

## Theoretical Lens

This study utilized Lakoff's framework for women's language which proposes that their language contains lexical hedges, tag questions, rising intonation, empty adjectives, intensifiers, politeness, hypercorrect grammar, and emphatic stress. Lakoff's study of gendered language, as presented in *Language and Woman's Place*, focuses particularly on the 'linguistic discrimination' experienced by women in society (1975).

Lakoff divides this discrimination into two overall types: 'the way they (women) are taught to use language' and 'the way general language use treats them', both of which function to degrade the woman to a submissive position in society: 'that of sex object, or servant'. Thus, Lakoff perceives gendered language as an expression of the unequal roles of men and women in society. Through introspection of her own and her acquaintances' speech, Lakoff identifies nine linguistic features that comprise a style of language which she labels 'women's language', as this style dominates the language of most women.

In connection, these theories are interrelated in means of analyzing women's language because every discourse has at least one underlying function. The researcher aims to uncover the purpose of these functions in order to understand more of how women utilize their language to communicate in the society.

## Significance of the study

**Women.** This research will directly benefit women in the society as their communication style will be analyzed. This will benefit them to further expand their knowledge about their language and learn about its functions.

**Linguists.** This research will benefit the linguists who study women's language particularly those who are interested in studies by Robin Lakoff. This study explored a gap in previous studies which will contribute to other parts of the study.

**Film makers.** This study will benefit the film makers who wish to make representations of the female characters in films.

**Researchers.** This study will benefit future researchers who are interested in studying the same field of linguistics.

**Students.** This study will benefit the students who are studying their language and gender in order to understand the course better.

**General public.** The study will benefit the general public who are interested in knowing more about how language works, specifically in women's language in Disney films.

## Definition of Terms

Below are conceptually and operationally defined terms for the readers guidance and a better understanding of the study.

**Empty adjectives.** Conceptually, empty adjectives are defined as a group of adjectives that may indicate approval or admiration which are tied to emotional reactions (Lakoff, 1975). Operationally, these are words that are considered filler words that are often placed in communication for politeness.

**Hedges.** Conceptually, hedges are defined as an expression that is indicating lack of confidence in the discourse. Women use hedges to express uncertainty (Lakoff, 1975). Operationally, hedges are the words that are used as fillers at the end of the sentence well, kind of, and sort of.

**Hypercorrect grammar.** Conceptually, hypercorrect grammar means there is an avoidance of using slang but using the proper pronunciation of it instead (Lakoff, 1975). Operationally, hypercorrect grammar is using the proper way of grammar in sentences during discourse.

**Intensifiers.** Conceptually, are linguistic elements that are used to express a strong emotion (Lakoff, 1975). Operationally, intensifiers are words that add strong emotion to the sentence such as so, really, very, just, absolutely, perfectly, sublimely, and more.

**Precise color terms.** Conceptually, Lakoff (1975) distinguishes the ability of fine color discrimination to women. This makes them particular on what shade of colors and have precise terms for each one, an ability that is foreign to men. Operationally, this means that women are color specific when it comes to objects.

**Super polite forms.** Conceptually, super polite forms mean that women have a degree of politeness in their speech rather than men (Lakoff, 1975). Due to societal expectations of women, women's language exhibits obedience. Operationally, these forms are sentences such as *can you please pass the salt?* and *will you please close the door?*

**Rising intonation on declaratives.** Conceptually, rising intonation refers to women's intonation that is used in declarative sentences that sounds like a question (Lakoff, 1975). Operationally, it is used in declaratives that transform them into sounding like interrogatives.

**Tag questions.** Conceptually, tag questions are devices that are used when the speaker needs a response from the hearer (Lakoff, 1975). Operationally, tag questions are words that invoke response for example; *isn't it*, *do you agree*, and *aren't I?*

**Women's language.** Conceptually, women's language is established by Robin Lakoff as a distinct variety from men's language. Their specific features include lexical hedges, tag questions, rising intonation, empty adjectives, intensifiers, politeness, hypercorrect grammar, and emphatic stress. Operationally, these are the features that are included in how women speak in society.

## **Review of Related Literature**

The following literature review discusses the women's language by Robin Lakoff, women's language in media, representation of female characters in films, and cultural. This chapter presents the related literature and studies the researcher finds helpful in developing the study.

## **Women's Language**

At the earliest age, there is already a dichotomy on what gender that baby belongs to. Parents decide whether to give pink or blue baby items according to the gender of their child which sets dichotomous beginnings in the society. Other family members assign the

pronouns “he” or “she” at the first glance to determine their attributes. These early linguistic distinctions define what a person is on the society.

In that sense, parents will have different traits when they communicate to their children. This is where gender stereotypes are reinforced and it all begins with language. Girls are often instilled with statements to be polite and behave so they will be rewarded and boys, on the other hand are encourage to be loud and aggressive (Dundic, 2024). By shaping this stereotypes, gender and language are interwoven and reflect the norms of the society.

For many years due to prejudice, women has been viewed as the lesser sex because of the difference of their physical strength, intelligence, and character. This has constructed the idea of chivalry in the West in which men are expected to defend and protect women as they are weak. These chivalric acts can be seen with children’s stories such as Cinderella, Snow White, Sleeping Beauty, and other fairy tales (Fernandez, 2024).

However, these weakness does not only factor in the physical strength of women. It was also believed the women’s language are also weaker than men. As early as 1922, Otto Jespersen introduced Deficit Theory which states that women’s language contains weak traits. The theory was expounded and popularized by Robin Lakoff in 1975 in she introduced the linguistic features that make up women’s language.

Women’s language has a different lexical structure than that of men. In Robin Lakoff’s book, it is described that women can distinguish specific colors when both genders were made to look at the same wall with a shade of purple. Examples of the description from women were to describe the shade as *mauve*. In this sense, women are discriminated upon when they make precise evaluation in colors like *beige*, *ecru*, *aquamarine*, and *lavender*. These color terms are irrelevant or trivial to men. This lexical disparity reflects the social inequity of women.

Other experiments conducted to find differences between the speech of women are that they use particles that grammarians refer to as ‘meaningless.’ Though these are deemed insignificant, these particles define the social context of the discourse (Lakoff, 1975).

The experiment included allowing certain individuals to analyze the two pairs of sentences which are identical syntactically with the same structure. 1) *On dear, you’ve put the peanut butter in the refrigerator again* 2) *Shit, you’ve put the peanut butter in the refrigerator again*. There are no clear referent and the only difference is with the inclusion of ‘meaningless particle.’ It is no surprise that individuals classify the first sentence as a women’s language.

For a long time, in the area of gendered language studies, women’s language is seen in a different light much as it is in society. Researchers in the field of social dialects and gender studies based this conclusion from previous studies. One researcher Zhu (2019), discussed the reasons in her study titled *Woman Language: Features and Historic Change*. The first reason why there is a difference is that because of their physiology. She claimed that women speak more men because of the endocrine system that are responsible for the hormones regarding this behavior. While this may not be true in some cases, Zhu (2019) states that women produce a wider range of intonation because women’s vocal fold tend to vibrate faster than men.

One reason of why women's language is linguistically are also rooted in psychological. Traditional cultures have made women supportive rather than being cooperative. Super polite forms in the speech of women are the results of being always supportive. Another result of psychological difference with women will have them produce hedges, tag questions, rising intonation, and declaratives because of their lack of confidence and security. Zhu (2019) also mentioned that women have higher sensitivity that contribute to their speech being different, which can result to being super polite and using of euphemisms.

In support of this study, a study of Holmes (2013) suggested that women's distinct language is related with their social status. In Holmes' findings, women tend to be status-conscious individuals, referred to as the guardian of society's values, and are stereotyped to be polite. Both reasons were routed by the degradation of women's image because of traditional values that are rooted from the Old Testament of the Bible and ancient myths around the world whom viewed women as the "other" rather than being a part of marginalized groups in the society.

In 1975, Linguist Robin Lakoff introduced the linguistic features of women's language. She introduced ten features including lexical hedges or fillers, tag questions, rising intonation on declaratives, 'empty' adjectives, precise color terms, intensifiers, hypercorrect grammar, super polite forms, lack of swear words, and emphatic stress.

Lakoff (1975) starts with lexical hedges which he defines to be phrases or a set of words which are meant to extend or limit a meaning of a word. Lakoff describes these hedges as cooperative and humble in nature; words such as "well", "you know", "sort of", "kind of", "like", "I guess", and "maybe."

According to an excerpt from "Men and Women in Conversation" of Githens (1991), hedges typically indicate uncertainty or a lack of confidence in their speech. It is also considered as a cautionary language as it allows speakers to indirectly infer facts of information. In example, hedging includes modal verbs such as "might" or "may" which create a room for correction when speakers are unsure of the information that they present in the discourse.

Although hedges are a women's linguistic features as cited by Lakoff (1975), it does not mean that it is entirely exclusive on one gender. In fact, on a recent study of AlMarayat, et al (2025) reveals that hedges are a present in political discourse. The study has analyzed the political discourse of the presidential debates of Obama and Romney which demonstrates the hedging and pragmatic functions. It revealed that hedges are dominant in Obama's speech and utilized to appear more inclusive and with rhetorical caution. Hedges were not seen as a linguistic weakness but a rhetorical mechanism that softens conflict and politeness in a political communication.

Tag questions are a form that takes form as a short question almost added to the end of the sentence. Although this type of linguistic feature is used by both men and women, Lakoff (1975) has discovered that women use tag questions more often than men. The examples of tag questions are "isn't it?", "can't we?", "did not I?", "won't he?"

According to some studies, tag questions suggest vulnerability in female speakers and conveys that the speaker is unsure about their argument (Ouda, 2021). However, Lakoff

has hypnotized that women are self-aware about their confusion and vulnerability in a distinctive way. Tag questions are features of language that arise when a speaker has less than full confidence of the truth of the claim in an argument. That is why there is a tag on the end of the sentence to either confirm or deny the claim.

The tag at the end of the sentence or utterance are an attached interrogative clause which women use to convert a sentence into a question. This move in the grammatical structure is to reduce the force in a statement.

Tag questions also often need the confirmation of the other speaker even the truth of the claim is obvious. For example, tag phrases such as “it’s a nice day, isn’t it?” the truth of the claim is true, however the speaker predicts the response and wait for the other’s confirmation.

Rising intonations on declaratives are a particular pattern that Lakoff (1975) noted to be part of informal discussions among women. These patterns are shown to express doubt, express information, or seek validation from another interlocutor. Usually, in these conversations, women use this tone to give an indirect message or generate empathy in situations that show sensitivity. The terms “nice” express positive evaluations in both statements, but do not provide actual information about the characteristics that make a person have a good personality.

Lakoff has also identified that women’s language uses many adjectives and there are adjectival words that are considered to be feminine. Words such as cute, lovely, charming, divine, and other adjectives that convey approval and appreciation.

The use of empty adjectives is often connected with female language patterns, but it does not always have a negative connotation. Overuse, on the other hand, may hide the true meaning of the sentence. To explain the nature or features of an object or situation, it is preferable to use more explicit and detailed language.

Intensifier is a feminist sociolinguistic environmental term that refers to words or phrases used by women in conversation that can emphasize or explain the nouns to which they refer. Words like “like”, “kind of”, “you know”, and “sort of” are examples of intensifiers. According to Robin Lakoff, the usage of intensifiers reflects the social functions and cultural conceptions attributed to women and is seen as a method for women to communicate kindly while not disappointing cultural standards.

Tag questions (Lakoff, 1975) are identified as short questions added at the end of a statement in order to gain confirmation or acceptance from the listener. Tag questions are formed based on the verb used in the statement. Thus, a sentence beginning with “You are...” can end with the tag question “aren’t you?”.

Precise color terms mean that it is normal for women to be able to distinguish specific color terms, but the same ability is unusual for men. This is due to the societal view that being knowledgeable in color varieties is irrelevant to the real world (Lakoff, 1975).

Hypercorrect grammar is distinguished through the adherence to standard forms of speech. In Aryani and Susanti’s (2018) study, they recognized hypercorrect grammar being applied to the utterance “may I please speak to Aaron?”, as it sounds politer and more formal, rather than “can I speak to Aaron?”. In some cases, it is also recognized

through the unnecessary correction of grammar in terms of word usage, pronunciation, or structure.

Super polite forms are part of the conventional and traditional beliefs in society that women must be obedient to men, instead of the other way around. Lakoff demonstrates this feature by comparing two imperatives. The first is “Please close the door” which is identified as a polite command.

Nordquist (2020) defines swear words also known as expletives or profanities as words or phrases that are generally considered obscene or offensive. They are considered unacceptable in polite or formal speech; hence societal norms dictate that women tend to avoid these by using weaker expletives like “Oh my god!”

Emphatic stress is a feature that is used as another boosting device in a communication (Lakoff, 1975). This is a phonological feature in women’s language wherein women stress a certain word in a sentence to give emphasis to that word.

### **Representation of Female Characters in Disney Films**

A recent study by Sebold (2020) has discussed several Disney Films and their women characters. According to them, characters such as Judy from Zootopia, and Moana are not perceived as independent characters even though they are not dependent on their male partners (not exclusive to love interest). On the other hand, Elsa from Frozen and Merida from Brave are often perceived as independent characters because they deliver the implicit message that they do not need a man in their lives or as a character. It was deemed to have an impact because male characters contribute to further the plot or used as a plot device.

A recent study of Al-Yasin and Rabab’ah (2021) revealed female Disney characters’ linguistic features by watching fourteen Disney movies that were released up until the 1990s. Since the development of films started way before the publication of the release date, note that it is influenced by the social norms of that era.

In their findings, they have found that there are a significant number of features of women’s language as introduced by Lakoff. The data revealed that they have a huge amount of words relating to “woman’s work” tied to the female characters that are generally considered as their hobbies from which examples are sewing, cooking, and cleaning. The use of empty adjectives was included in such examples are the words: divine, charming, cute, adorable, sweet, lovely, and gorgeous. Words that were considered as empty because they do not give a definite emotional sense to the character. Tag questions such as “the weather is hot today isn’t?” when there are declaratives to be expected because it can be seen that it really was hot weather only indicates that there is insecurity in women’s language as there is a need for validation and correction from other individuals.

These female characters also used intensifiers like the word “so” to mitigate strong emotions and use lexical hedges as often for mitigators of assertion. One of the findings also revealed a usage of hypercorrect grammar.

In the study of Al-Yasin (2021), the movies of Disney movies in the 1990s including *Mulan* (1998), *Beauty and The Beast* (1991), and *Pocahontas* (1995) revealed that women are stereotyped in language, physical appearance, jobs, and clothes. For example, in the movie *Mulan* (1998), the characters sociocultural ideology is manifested in their emphasis on physical appearance in which women should always be prim and proper. This highlights that the society's association of the pride that lies within physical beauty of the bride. Another movie, *Beauty and the Beast* (1991), represents women's jobs to be exclusive to kitchen work as with the character of Mrs. Potts, which is a female character. Another stereotype in women's character is that in the arrival of Gaston, there are three girls which are represented as bimbettes. Bimbettes are women who are physically attractive but lack intelligence. In *Pocahontas* (1995), it is also seen that Pocahontas tries to convince her father to heed to her advice but was not heard. This suggests that women's opinions are not taken into consideration.

Moving on to the 20<sup>th</sup> century, representations of female characters in Disney films has moved along with time. From the stereotypical damsel in distress, Disney moves away from that gender roles and embraces change such in the film *Brave* (2012) which features Merida who goes on a self-discovery journey and not dependent on a prince. According to Elboraie (2025), making Merida the main character is a turning point for Disney as it labels her the hero of her own story. It is also the same for *Moana* (2016) in which introduces a more empowered female character.

### **Previous Analyses of Disney Princess Discourse**

According to the study of Al-Yasin and Rabab'ah (2021), Disney princesses had a lot of hedges in their discourse that are used to express their specific interests. They also used empty adjectives, tag questions, intensive 'so', hypercorrect grammar, and super polite forms. On their tallied data, the amount of linguistic features that were Lakoff's forms of women's language totaled to 244. This had led to implications in which women's language rarely speak slang and are using the hypercorrect form of grammar.

Another study conducted by Mutri (2018) used Lakoff's theory in order to analyze women's language in the movie *The Princess Diaries*, a movie produced by Walt Disney. In their study, the researchers found that eight out of ten characteristics were found in women's language. The main character Mia, exhibits lexical hedges or fillers, intensifiers, 'super polite' forms, 'hypercorrect' grammar, emphatic stress, tag questions, rising intonations, and 'empty' adjectives.

In classic animation movies such as *Mulan* (1998), one study revealed that its language has impact on both children and adults. The lexical cohesion of the movie's language and songs relates with individuals despite the age boundaries. In the study of Almanaseer (2019), they discovered that there are different types of using the pronoun *you* as it is mentioned thirteen times in the movie. The reason of repeating the particular pronoun corresponds to cultural ethnic norms in China.

As in the song lyrics "you'll bring honor to us all" indicated that Mulan's family is dependent on the character to bring them honor and integrity for future generations. Language and culture are interrelated and the discourse in the movie *Mulan* only means that China's words and simple grammatical changes are inherited from generation after generation.



## **Synthesis**

The gap of the literature review in this study is that while previous studies have studied how women use language, it has only been analyzed in the Western context. There were only a few studies that studied about how Asian women have used their language. In this matter, this study shall look into the how Asian Disney princesses utilize linguistic feature and how the narrative progresses along with Lakoff's features in a diachronic analysis.

Overall, the literature review consists of the keywords that are related to women's language. According to Lakoff, there are linguistic features in total: lexical hedges, tag questions, rising intonation, empty adjectives, precise color terms, intensifiers, hypercorrect grammar, super polite forms, emphatic stress, and avoidance of strong swear words.

As in the study of Robin Lakoff, women use these features of language in order to express uncertainty and weakening of language. One of the functions such as intensifier and empty adjectives were found to be a feature of language that strengthens the discourse of women, meanwhile lexical hedges were used as a type of weakening of their language.

## **Method**

This section presents the overview of the research design, the role of the researcher, research corpora, and the data collection method utilized in this study. Moreover, it describes the analysis of the data, the trustworthiness of the study, and the ethical considerations.

### **Research Design**

This study will incorporate a descriptive-qualitative research design using discourse analysis in which the researcher will focus on a general review of a corpora on descriptive qualitative methods (Furidha, 2023). According to Brannan (2022), a qualitative study is a type of design that focuses on the exploration of real-world problems. This differs from quantitative research as this type does not focus on the numerical result but to the insights that make a phenomenon. Due to its nature, the qualitative does not have a linear process. It follows patterns and themes that would be subject for analysis.

The strength of qualitative research design lies on the focus of human behavior that is not quantifiable by any means. Qualitative research design uses interviews from focus groups in order to delve deeper on an issue or phenomenon.

### **Role of Researcher**

The role of the researcher will be the primary author of this study. From the formulation of ideas of the study, the researcher is responsible to supplement the research problem regarding women's language in the selected Disney princesses using Lakoff's theory. In conducting the study, the researcher will sample and analyze the three animated movies and subsequently examine how the dialogues affect the narratives.

The researcher is responsible for analyzing the corpus of selected Asian Disney princesses and analyzing women's language in the corpus. To uncover the language features of women's language, the researcher will pay close attention to detail on the language used and the context of the discussion. More so, the researcher will provide a thematic analysis of the selected animated movies of Asian Disney princesses.

### **Research Corpora**

The researcher will use the following scripts in order to analyze the research problems regarding women's language. The scripts of the animated films that are under the copyright of Walt Disney will be the corpora of the study. The data, specifically the three scripts for the Disney animated movie was gathered by retrieving it on a website called Fandom Wiki. Aladdin, the 1992 animated film has its main characters Aladdin, Jasmine, Genie, and Jafar in a fictional Western Asian kingdom called Agrabah. It is produced by Walt Disney Feature Animation. The main character Aladdin sets out on a journey after he discovers a magical lamp with a genie who grants him three wishes. Princess Jasmine lives in the palace sheltered by his father, the king. Jasmine is caught in a power struggle when Jafar and Aladdin began to take hold of the magic lamp.

The next script is from the animated Disney movie called Mulan. The 1998 animated film features Mulan, a Chinese legend which is produced by Walt Disney Feature Animation. The main character Mulan, goes to war in the stead of her father when the Huns invaded China. The emperor assembled a mobilization of every young man in the family to form an army to stop the Huns. Mulan disguises himself as Fa Ping to enter the military in the stead of his ailing father.

The last corpus is Raya and the Last Dragon, this 2021 animated film features a tale of a prosperous land that lives amongst dragons. The film is produced by Walt Disney Animation Studios and released by Walt Disney Pictures. The character Raya finds the last dragon Sisu in order to restore peace in their lands.

This study focuses on the women's language that is studied by Robin Lakoff. It would tackle on the linguistic features such as empty adjectives, hedges, tag questions, hypercorrect grammar, and politeness.

### **Data Collection**

The researcher will conduct this study with full respect with the ethical codes and principles of academic practices. The researcher will follow the guidelines that shall make the study credible and reliable. The researcher will ensure that the study will not adhere to unethical standards such as manipulation of data, plagiarism, and breaching of intellectual properties. The researchers shall adhere to the levels of accuracy, objectivity, and credibility. After the researcher has passed the necessary requirements, the study is ready to interpret the corpus.

### **Results**

The chapter will consist of the results from the data gathered in the corpus. In this case, the corpus used are the dialogues from the three (3) Disney princesses in the animated

movie Aladdin, Mulan, and Raya and the Last Dragon. These lines or dialogues hold a significant weight on the study as it is the basis for analysis.

This analysis focuses on our two research questions 1) identifying the linguistic features by Lakoff are present in the dialogues of selected Asian Disney princesses and 2) diachronic views of linguistic features function in the narratives in the selected Asian Disney princess's animation.

### **Linguistic Features of Present in Disney Animation**

This part of the study dives in the analysis of the dialogues exchanged by the princesses in the story. The study includes super polite forms, intensifiers, lexical hedges or fillers, tag questions, hypercorrect grammar, rising intonations on declaratives, empty adjectives, avoidance of strong swear words, and emphatic stress. By examining the usage of this linguistic feature will gain understanding on how women in children's movies operate. The tables below will show the dialogues associated with the following linguistic features of the characters; Jasmine, Mulan, and Raya in their respective stories.

Before a comprehensive look in the chapter, this study presents a frequency table as a basis for how frequent the features determined by Lakoff appear throughout the films. This table functions as the measure for the amount of times a speech is used with features such as super polite forms, intensifiers, lexical hedges or fillers, tag questions, hypercorrect grammar, rising intonations on declaratives, empty adjectives, avoidance of strong swear words, and emphatic stress.

#### **Q1. What linguistic features by Lakoff are present in the dialogues of selected Asian Disney princesses?**

**Table 1.** Linguistic Features in the Discourse of Asian Disney Princesses

*Frequency table.*

| <b>Features of women's Language</b> | <b>Jasmin %</b> |        | <b>Mulan %</b> |        | <b>Raya %</b> |        |
|-------------------------------------|-----------------|--------|----------------|--------|---------------|--------|
| Super polite forms                  | 4               | 11.11% | 7              | 20%    | 4             | 7.14%  |
| Intensifiers                        | 5               | 13.89% | 3              | 8.57%  | 16            | 28.57% |
| Lexical hedges                      | 6               | 16.89% | 15             | 42.86% | 21            | 37.50% |
| Tag questions                       | 2               | 5.56%  | 0              | 0%     | 2             | 3.57%  |
| Hypercorrect grammar                | 3               | 8.33%  | 2              | 5.71%  | 2             | 3.57%  |
| Rising intonation                   | 4               | 11.11% | 3              | 8.57%  | 5             | 8.93%  |
| Empty adjectives                    | 5               | 13.89% | 3              | 8.57%  | 1             | 1.79%  |
| Avoidance of swear words            | 2               | 5.56%  | 1              | 2.86%  | 1             | 1.79%  |
| Emphatic stress                     | 5               | 13.89% | 1              | 2.86%  | 3             | 5.36%  |
| Precise color terms                 | 0               | 0%     | 0              | 0%     | 1             | 1.79%  |
| Total linguistic features           | 36              | 100%   | 35             | 100%   | 56            | 100%   |

From the frequency table, there is a significant number that each Asian Disney princesses use their language. In the recent counting, Jasmine displays the greatest number of features. Jasmine has four (4) super polite forms, five (5) intensifiers, six (6) lexical hedges or fillers, two (2) tag questions, three (3) hypercorrect grammar, three (3) rising intonations on declaratives, five (5) empty adjectives, two (2) avoidance of strong swear words, and five (5) emphatic stress.

On the second column, Mulan has a significant amount lexical hedge. In summary, this Asian Disney princess has seven (7) super polite forms, three (3) intensifiers, fifteen (15) lexical hedges or fillers, zero (0) tag questions, two (2) hypercorrect grammar, (3) rising intonations on declaratives, (3) empty adjectives, one avoidance of strong swear words, and one emphatic stress.

**Table 1.1** Super Polite Form

| <b>Jasmine</b>                                                                   | <b>Mulan</b>                                                                                                                                  | <b>Raya</b>                                                          |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| <i>"I'm really very sorry."</i>                                                  | <i>"Please sir, my father has already fought bravely—"</i>                                                                                    | <i>"Please."</i>                                                     |
| <i>"Oh, I'm sorry sir. I don't have any money."</i>                              | <i>"Stop! I'm sorry, I'm sorry."</i>                                                                                                          | <i>"Please get out of there."</i>                                    |
| <i>"Please, if you let me go to the palace, I can get some from the Sultan."</i> | <i>"Sorry, [in her man voice] Uhh, I mean, sorry you had to see that." [with her fist she taps Shang on the shoulder]</i>                     | <i>"Until we have all the gems, you have to stay human. Please."</i> |
| <i>"No, no please!"</i>                                                          | <i>"It was the only way. Please believe me"</i><br><i>"Sir, the Emperor's in danger! But the Huns are here! Please, you have to help me."</i> | <i>"So, I am sincerely asking you, will you help us? Please."</i>    |
|                                                                                  | <i>"With all due respect, your Excellency. I have been away from home long enough."</i>                                                       |                                                                      |
|                                                                                  | <i>Would you like to stay for dinner?</i>                                                                                                     |                                                                      |

A study of Holmes (2013) stated that the reason women use these linguistic functions, in this instance, super polite form is because of their lack of security and confidence. This lack of security is due to the unconventional standing that they have in a patriarchal society which makes takes place in the early eras. Robin Lakoff also stated that the use of these super polite forms is associated with women's way of sounding less aggressive and harsh. The avoidance of these language makes commands turn into requests (Lakoff, 1975).

In the selected Disney movies, there are a significant amount of super polite forms that are scattered throughout the movies of the princesses. From the three movies, the princesses show super polite forms when they are in face of men and other authority figures.

These utterances are often highlighted by the double occurrence of politeness, which are words such as "please," "sorry," "sincere"

*"Oh, I'm sorry sir. I don't have any money."*

*(super polite form)*

*(Disney Movie 1: Aladdin, 1992)*

In this excerpt, Jasmine has gone undercover to sneak out of the palace. She was not recognized by the vendor in the city and began demanding her to pay for the bread a beggar took. This is why her utterance is apologizing and addressing politeness to the other speaker.

According to Lakoff (1970), super polite forms is part of the conventional and traditional beliefs in society that women must be obedient to men. It is the society that sets this standard and women are expected to be politer when addressing especially male members of the family. In this case, even though Jasmine is in fact a princess, but she unknowingly used a politer language with the vendor, which is a man despite their difference in authority.

This scene reflects that women's language in general uses politeness and apologizing as a softener to their speech. When she was in disguise as a normal woman, it points out that men in the society put themselves in dominant position in the absence of authority. It also puts into perspective that women avoid conflict by being non-confrontational even though they have the right to assert power. Jasmine's super polite form in the guise of apology shows that women's language is expected to be polite, careful, and accommodating.

Another line from Mulan that showcases a super polite form of women language is when she says

*"**Please** sir, my father has already fought bravely—."*

*(super polite form)*

*(Disney Movie 2: Mulan, 1998)*

In this excerpt, Mulan has pleaded with the imperial guards to not let her father go in the war. As a deeply patriarchal culture, Mulan has addressed the man with their title and using the word please. Just as Lakoff has stated, women tend to use politer terms because it is embedded in the society that they grew up in.

*“Would you like to stay for dinner?”*

*(super polite form)*

*(Disney Movie 2: Mulan, 1998)*

This is an utterance from a scene that Mulan uttered when she invited Shang, their captain, for dinner when the war was over. In the Asian community, it is common to regard invitation as politeness because you are extending your home to the visitor. Instead of asking directly “you can eat here,” Asians are going to ask for your permission if you are willing to commit to the idea of the invitation.

Likewise, in the study of Holmes (2013) this study agrees that women are stereotyped to be polite because they are conscious of their status and have regard a high value in the society. In other studies of super polite forms, women are always deemed to be supportive which came from the influence on their culture.

**Table 1.2** *Intensifiers*

| <b>Jasmine</b>                                                  | <b>Mulan</b>                                                       | <b>Raya</b>                                                                                                          |
|-----------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| “I’m really very sorry.”                                        | “I really don’t want to take him anywhere.                         | “That didn’t truly happen until 500 years later, when I came into the story.”                                        |
| “Oh, father--I just had the most wonderful time. I’m so happy.” | “I never want to see a naked man again. “                          | “Whoa. Wait a second. This feels too easy.                                                                           |
| “I will never marry you.                                        | “Maybe what I really wanted was to prove I could do things right.” | “Hey, don’t beat yourself up too much, Chief Benja.                                                                  |
| “I never realized how incredibly handsome you are.”             |                                                                    | “I mean, anyone hoping to steal the Dragon Gem now has to face the fury of the two baddest blades in all the lands.” |

|                                     |                                                                                                                                                                                     |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| “And your beard...is so...twisted!” | “Fourth, Fang. Our fiercest enemy.”                                                                                                                                                 |
|                                     | “A nation protected by angry assassins, and their even angrier cats.”                                                                                                               |
|                                     | “You’re getting a little too big for this, bud.”                                                                                                                                    |
|                                     | “We really need your help.”                                                                                                                                                         |
|                                     | “If I can be honest, I really need your help.”                                                                                                                                      |
|                                     | “I just really, really want my ba back. Please.”                                                                                                                                    |
|                                     | “My friend’s a really strong swimmer”                                                                                                                                               |
|                                     | “It’s really late. What are you doing out here?”                                                                                                                                    |
|                                     | “So, it’s none of my business, but using your baby charm to rip people off... ...is super sketchy.”                                                                                 |
|                                     | “I really wanted to believe him. I really wanted to believe that we could be Kumandra again.”                                                                                       |
|                                     | “Okay, Tong, look, you don’t know me, and I don’t know you, but I’m sure that you know a back door or a way outta here, and it’s really important that my friends stay safe, okay?” |

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“I really wish I could believe that. I once thought that we could be friends.”

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Intensifiers are a linguistic feature that is identified by Lakoff (1975) that are used to strengthen or emphasize statements. Lakoff’s book “Language and Woman’s Place” has argued that the use of these intensifiers stems from the tendency of women to communicate more expressive than of men. One of the examples of intensifiers are words like “so,” “very,” “terribly,” “quite,” or “really.”

Lakoff (1975) states that intensifiers emphasize the attitudes and feelings of women towards a particular topic. In such, this will reveal that the linguistic patterns of women’s language are influenced by the societal expectations toward them in how they are supposed to communicate with others.

In a more recent study of women’s language, it is found that intensifiers are used by female characters to emphasize their emotions and opinions while they are in a conversation (Hidayat, 2024).

During the analysis, some of these intensifiers occur in between sentences. For instance, in the animated film of Aladdin, the female character Jasmine says this on the early part of the film.

*“I’m really very sorry.”*

*(intensifier)*

*(Disney Movie 1: Aladdin, 1992)*

In the excerpt, Jasmine has uttered these words because she is expressing an apology to the other speaker. Beside the word *sorry* we can observe that there is also the inclusion of the word *very* which intensifies the whole sentence. This scene reflects that women has the need to use intensifiers in order to make their language strong and to appear sincere to the listener. It says about the position of women in the society in which they need to subdue themselves in their language in order to be forgiven or taken their opinions seriously.

Intensifiers are used as an element to strengthen the lexical categories such as adjectives, adverbs, or any parts of statement. Depending how it is used, the intensifier allows the speaker to emphasize their feelings or opinion.

In another scene where Jasmine tricks Jafar, the villain in the story, she uses a sarcastic remark aimed at Jafar. She uses the word *so* to express an intensity at an object, which is a description to Jafar’s appearance.

*“And your beard...is so...twisted!”*

*(intensifier)*



*(Disney Movie 1: Aladdin, 1992)*

According to Lakoff, women use intensifiers to mitigate strong emotions. For example, these female characters also used intensifiers like the word “so” to mitigate strong emotions and use lexical hedges as often for mitigators of assertion (Lakoff, 1975).

With the existence of “so” in the statement of Jasmine in the sample above, this modifies the adjective twisted which creates another layer of meaning on the sentence. Jasmine deliberately added this intensifier because on the given context, she was humoring the villain, Jafar, about his appearance and identity. In the study of Holmes (2013), intensifiers were found to have an important role in interpersonal communication as it helps the speakers to convey their emotions and emphasis in the discourse itself. By using the intensifier “so,” Jasmine has committed to the emotional implication of the discourse, making it for her deception seem believable in the eyes of Jafar, albeit for a short time.

In Mulan, it is observed that she uses one intensifier which was the utterance:

*“I really don't want to take him anywhere.”*

*(intensifier)*

*(Disney Movie 2: Mulan, 1998)*

The word really is identified to be the intensifier of the sentence because there is an emphasis on the person that she did not want to tag along with. The word is changing the intensity of the utterance.

As same with Raya and the Last Dragon, the study has identified that in the utterance.

*“Whoa. Wait a second. This feels too easy.”*

*(intensifier)*

*“Hey, don't beat yourself up too much, Chief Benja.”*

*(intensifier)*

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

The intensifier is in the word “too”. In this context, Raya has expressed that it feels easy to clear a certain mission, that she thinks that it is suspicious. Raya's utterance agrees with Lakoff's description with intensifiers that it expresses emotions and assertion of the scenario.

The word “too” functions the same as the word “very” in this sentence. It modifies the word “easy” to focus on its emphasis. The study has found that the use of this linguistic function draws to convey emphasis on a particular statement by the female character. The language of Raya in this scenario implies that women do in fact use intensifiers more often than necessary because they like to make an emphasis. This reflects that women in the society put more effort than necessary in order to make a point.

**Table 1.3.** Lexical hedges

| <b>Jasmine</b>                                                        | <b>Mulan</b>                                                                                                                                                                                                | <b>Raya</b>                                                                                                               |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <i>Oh, you must be hungry.<br/>Here you go.</i>                       | <i>Huh</i>                                                                                                                                                                                                  | <i>Huh.</i>                                                                                                               |
| <i>It's all my fault, Rajah. I<br/>didn't even know his<br/>name.</i> | <i>Oops.</i>                                                                                                                                                                                                | <i>Looks like someone's<br/>trying to be clever.</i>                                                                      |
| <i>No, I guess not.</i>                                               | <i>You're uh...tiny.</i>                                                                                                                                                                                    | <i>They are? Uh...</i>                                                                                                    |
| <i>Hmm. I'm rich too, you<br/>know.</i>                               | <i>"I don't think I can do<br/>this."</i>                                                                                                                                                                   | <i>Well, we don't want to<br/>attract attention.</i>                                                                      |
|                                                                       | <i>"You know how it is<br/>when you get those,<br/>uh [pounding her<br/>chest] manly urges<br/>and you just have to<br/>kill something<br/>[slapping her hand],<br/>fix things, uh, cook<br/>outdoors."</i> | <i>Nothing. I'm just not<br/>used to seeing dragons.</i>                                                                  |
|                                                                       | <i>"Hush, I've got a<br/>name. Huh. And it's<br/>a boys name too."</i>                                                                                                                                      | <i>Okay, um, we need to<br/>keep going.</i>                                                                               |
|                                                                       | <i>"Oh, hi guys, I didn't<br/>know you were<br/>*here*."</i>                                                                                                                                                | <i>Uh... Careful. It's a Toot<br/>N Boom.</i>                                                                             |
|                                                                       | <i>"I really don't want<br/>to take him<br/>anywhere."</i>                                                                                                                                                  | <i>Uh...</i>                                                                                                              |
|                                                                       | <i>"For what it's worth,<br/>I think you're a great<br/>captain."</i>                                                                                                                                       | <i>Yeah, well, this one was<br/>easy, but the rest of them<br/>are being held by a<br/>bunch of no-good<br/>binturis.</i> |
|                                                                       | <i>"Uh, how about a girl<br/>who's got a brain,<br/>who always speaks<br/>her mind?"</i>                                                                                                                    | <i>Oh, is that why you're<br/>chasing me?</i>                                                                             |
|                                                                       |                                                                                                                                                                                                             | <i>Uh, Captain Boun?</i>                                                                                                  |

|                                                                           |                                                                                       |
|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <i>"Maybe I didn't go for my father."</i>                                 |                                                                                       |
| <i>"Maybe what I really wanted was to prove I could do things right."</i> | <i>Yeah. Talon may look nice, but it's a hotspot for pickpockets and con artists.</i> |
| <i>"Ummm."</i>                                                            | <i>Sisu, I think maybe it's safer for you to stay here on the boat. Uh...</i>         |
| <i>"Not quite. [calling out] Ready, Mushu?"</i>                           |                                                                                       |
| <i>"Oh, thank you."</i>                                                   | <i>Where are your parents? Hey, uh, whose baby... Oh... Right.</i>                    |
|                                                                           | <i>Yeah, I sort of promised to buy them all the congee they could eat.</i>            |
|                                                                           | <i>Uh, well...</i>                                                                    |
|                                                                           | <i>Uh... Hey, guys?</i>                                                               |
|                                                                           | <i>Yeah, well, the world's broken. You can't trust anyone.</i>                        |
|                                                                           | <i>Whoa. Uh... What's with the downpour?</i>                                          |

Lexical hedges are identified by Lakoff (1975) to be phrases that are used to express uncertainty or vagueness. In her book "Language and Woman's Place," she describes hedges to include expressions that are more evident than women because of the fact that women want to avoid to be overly assertive and therefore down toning their utterances.

Hedges are words such as "maybe," "I think," "sort of," "kind of," and "you know. The use of lexical hedges is determined due to societal standards imposed on women that they should speak in a polite manner, which means that they are less likely to display authority. According to Lakoff (1975), lexical hedges functions to maintain expression of statements and opinion in a less direct way.

In the analysis of three animated Disney films, the study has identified a significant number of lexical hedges. In the film of Aladdin, Jasmine said the following utterances.

*"Oh, you must be hungry. Here you go*

*(hedges)*

*(Disney Movie 1: Aladdin, 1992)*

In this excerpt, Jasmine talked to a beggar and gave him the bread from the stall. This is an example of a declarative statement, but Jasmine has used the hedge word “must be” which describes a probability. While it is a simple word, these hedges can weaken the word or the sentence. Instead of asking “Are you hungry?” Jasmine has stated “must be” even though it is already a fact. This positions Jasmine’s language to be weak as it relies on the answer of the other speaker.

According to Lakoff (1975), lexical hedges are defined to be phrases or a set of words which are meant to extend or limit a meaning of a word. Lakoff describes these hedges as cooperative and humble in nature; words such as “well”, “you know”, “sort of”, “kind of”, “like”, “I guess”, and “maybe.”

It is also evident with the animation of Mulan, in which she uses in the excerpt.

*“I don’t think I can do this.”*

*(lexical hedges)*

*(Disney Movie 2: Mulan, 1998)*

In this context, Mulan has expressed uncertainty before joining the army. She sees a group of men huddled in groups and was hesitant if she can pull off the disguise. In this scene, before Mulan joins the army, she rehearses on how she can talk like a man. When she fails to sound like one, this is where she shows uncertainty on her speech and which are manifested with lexical hedges.

The lexical hedge that Mulan used is part of Lakoff’s linguistic function as it allows the speaker to express uncertainty on her statement or opinion. The use of hedge to balance the assertiveness of the speech influences the overall impact of the sentence towards the sentence. In the utterance above, the impact of “I don’t think” phrase to the rest of the sentence influences the confidence or clarity of the speaker.

It is also evident with the animation of Raya and the Last Dragon, in which she uses in the excerpt.

*“Looks like someone’s trying to be clever.”*

*(lexical hedge)*

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

In this utterance, Raya is conversing with her animal side kick, Tuk-Tuk. They used tricks and Raya complimented them on the middle of an adventure. The utterance is identified to be a lexical hedge because it uses the phrase “looks like” which is an indirect way or a roundabout on the sentence without addressing the listener.

There is also a different type of lexical hedges which functions as fillers in the sentence. In a similar study of Ruschy (2024), filler words are an umbrella term for lexical hedges which can be words or sounds. Lexical hedges and filler words function similarly as it both reduces the force of certainty in women’s speech. They are also used to buy time while a person is speaking before they continue their sentence. In the utterances of Raya on the movie Raya and the Last Dragon (2019), the study identifies the following as fillers.

*“Well, we don’t want to attract attention.”*

(lexical hedge)

*“They are? Uh...*

(lexical hedge)

*“Okay, um, we need to keep going.”*

(lexical hedge)

(Disney Movie 3: *Raya and the Last Dragon*, 2021)

In the earlier theories in linguistics, historians label hedges as a direct reflection of women’s subordinate social status and lack of authority (Githens, 1991). However, rather than viewing as an influence on their social expectations on gender, research suggests that hedges are closely tied as a result of power dynamics. This study agrees with the earlier study as the data suggests that it is through the repeated reinforcement of patriarchy that women’s language has established its own unique way of communication. It can also be that Disney princesses contains a lot of hedges in their discourse because it is their way to express their specific interests (Al-Yasin and Rabab’ah, 2021).

**Table 1.4** *Tag questions*

| <b><i>Jasmine</i></b>                                                                         | <b><i>Raya</i></b>                                                                                                            |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <i>Oh, father. Rajah was just playing with him, weren't you Rajah?</i>                        | <i>Six years of searching and we end up at a literal shipwreck. (SIGHS) That's not a bad sign, is it?</i>                     |
| <i>You were just playing with that overdressed, self-absorbed Prince Achmed, weren't you?</i> | <i>(SARCASTICALLY) Oh, I'm just trying to get a matching set. (GRIMACING) You didn't happen to bring Fang's gem, did you?</i> |

Tag questions are identified by Robin Lakoff (1975) as a linguistic feature that are found at the end of declarative sentences. They are grammatical structures that are declarative clauses and attached by an interrogative clause.

Tag questions carry several functions linguistically. According to Robin Lakoff (1975), tag questions are considered to be less assertive as a statement but more confident than a question. This linguistic function is also used to seek confirmation when the speaker is not sure about their statement, thus leaving room for validation from the other speaker on the discourse.

Another function of a tag question is that it provides as a leeway on the discourse. This means that the speaker does not force their own beliefs on the other speaker but instead offers the opportunity for the listener to agree or disagree on the statement.

In the animated movie Aladdin, Jasmine uttered the following:

*“Oh, father. Rajah was just playing with him, weren't you Rajah?”*

*(tag question)*

*You were just playing with that overdressed, self-absorbed Prince Achmed, weren't you?*

*(tag question)*

*(Disney Movie 2: Mulan, 1998)*

In this excerpt, Jasmine has used a tag question “weren’t you” while questioning her tiger, Rajah. It was in a form of tease and expresses playfulness in the scenario. The tiger then purrs to Jasmine as it is their master. Jasmine repeats the same tag question in another sentence after the first one. The use of the tag question “weren’t you” was still used as she gets validation from her Rajah that she was just playing around and not being mischievous.

According to Lakoff, tag questions are devices that are used when the speaker needs a response from the hearer (Lakoff, 1975). Examples of tag questions are phrases such as “isn’t it?” “weren’t you?”

The linguistic function “weren’t you?” is a tag question as it was used as a tag to request validation or assurance. Although it is in the form of a question, the study can infer that it was not asked in a literal form but rather on a sarcastic note, noting that Rajah could not respond because she does not have the ability to talk.

The use of tag questions by Jasmine reflects that women’s language in the society relies on the validation from other speakers. It positions women in the society needs the other to confirm in their statement to appear less evasive.

It is also evident with the animation of Raya and the Last Dragon, in which the main character, Raya uses in the excerpt.

*“Six years of searching and we end up at a literal shipwreck. (SIGHS) That’s not a bad sign, is it?”*

*(tag question)*

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

Raya has used the tag question “is it?” at the end of the declarative sentence. This tag question is a facilitative kind of tag question. A facilitative tag question is linguistic function that is used as modal in which are used when the speaker is expressing uncertainty. Facilitative tag questions are interchangeable with modal tag questions. From the name, a modal or facilitative tag questions uses modal verbs such as “can,” “should,” “will,” “must,” or “could.”

**Table 1.5** *Hypercorrect grammar*

| <i>Jasmine</i>                                                   | <i>Mulan</i>                                                                                      | <i>Raya</i>                                                                        |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <i>Oh, wise Sultan. How may I serve you?</i>                     | <i>“Um pardon me.”</i>                                                                            | <i>Okay, um, we need to keep going.</i>                                            |
| <i>I do not want to see you.</i>                                 | <i>I'm working on it. Who am I fooling? It's going to take a miracle to get me into the army.</i> | <i>What are you doing out here? Where are your parents? Hey, uh, whose baby...</i> |
| <i>What does it matter? I ran away, and I am not going back.</i> |                                                                                                   |                                                                                    |

Hypercorrect grammar is a linguistic feature that is used when a speaker uses more standard rules of grammar than it requires to avoid being labeled as uneducated (Lakoff, 1975). This linguistic feature is proposed by Robin Lakoff as one of the features of women's language as a projection of a social image that is imposed on women. Women typically uses hypercorrect grammar to avoid coarse language.

Hypercorrect grammar typically involves the following core characteristics: avoidance of vulgar terms, precise pronunciation, and use of prestige forms. The avoidance of vulgar terms comes from the speaker's avoidance of low-prestige language such as double negatives.

Precise pronunciation is when speakers are clear when they enunciate words. Words such as the final “g” on the word “going” instead of just uttering the short “go in’.” Meanwhile. Using prestige forms utilize more formal grammatical forms than the standard way. Examples of this hypercorrect grammar is the usage of “whom” instead of “who.”

While analyzing the corpus, this study has identified tag questions from Asian Disney princesses. In the animated movie *Aladdin*, Jasmine uttered the following:

*“Oh, wise Sultan. How may I serve you?”*

(hypercorrect grammar)

(*Disney Movie 1: Aladdin, 1992*)

In this excerpt, Jasmine has uttered the following words to pretend that she is insane to get out of trouble. She regards the monkey, Abu, to be a Sultan so that people are convinced she is mad.

According to Lakoff, hypercorrect grammar is distinguished through the adherence to standard forms of speech. In Aryani and Susanti's (2018) study, they recognized hypercorrect grammar being applied to the utterance “may I please speak to Aaron?”, as it sounds politer and more formal, rather than “can I speak to Aaron?”

The sentence is considered to be hypercorrect grammar because it is structured to be politer and addressing a supposed authority. It is also too formal to be used in a daily encounter with people outside the palace grounds, where Jasmine grew up in.

Hypercorrect grammar is also evident with the animation of Mulan, in which the main character, Mulan uses in the excerpt.

“Um pardon me.”

(hypercorrect grammar)

(Disney Movie 2: Mulan, 1998)

It is also evident with the animation of Raya and the Last Dragon, in which the main character, Raya uses in the excerpt.

“Okay, um, we need to keep going.”

(hypercorrect grammar)

(Disney Movie 3: Raya and the Last Dragon, 2021)

**Table 1.6** Rising intonation on declaratives

| <b>Jasmine</b>                                         | <b>Mulan</b>                                                       | <b>Raya</b>                                                                                                     |
|--------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <i>You must be hungry.</i>                             | <i>Father, you can't go.</i>                                       | <i>I know, buddy, I haven't forgot...</i>                                                                       |
| <i>How could you? (She runs from the room crying.)</i> | <i>So, you'll die for honor!</i>                                   | <i>Your little sister's magic?</i>                                                                              |
| <i>Hmm. I'm rich too you know.</i>                     | <i>Shang, I saw them in the mountains. You have to believe me.</i> | <i>Wait, wait, wait, you touched this gem piece and it gave you powers. You know what this means, right?</i>    |
| <i>The daughter of a sultan.</i>                       |                                                                    | <i>I know where the gem piece is. The bad news? It's being held by the notorious Chief of Talon, Da ng Hai.</i> |
|                                                        |                                                                    | <i>Hold on to this for me, will ya?</i>                                                                         |

Rising intonations are a linguistic feature that typically involve speakers to increase their pitch at the end of a declarative sentence (Lakoff, 1975). According to Lakoff, women's



language sometimes ends with a rising intonation at the end of sentences because it makes the utterance less assertive. Rising intonations can also function as an invitation for other speakers to confirmation or denying the statement.

While analyzing the corpus, this study has identified tag questions from Asian Disney princesses. In the animated movie *Aladdin*, Jasmine uttered the following:

*“Hmm. I’m rich too you know.”*

*(rising intonation)*

*“The daughter of a sultan.”*

*(rising intonation)*

*(Disney Movie 1: Aladdin, 1992)*

This scene contains rising intonation on the context that the female character, Jasmine was speaking in italics as she attempts to impress Aladdin with her background before she knocks some sense into him. The utterance is declarative as it states something that is a fact or an idea. It becomes a linguistic feature of rising intonation because of the difference in tone that Jasmine uses at the end of the utterance. According to the study of Ouda (2021), the more women exhibit being feminine and womanly they are, the more they are to speak in italics. Speaking in italics is another way of self-expression to convey emphasis or the use of intensifiers, which on this case can be interchangeable with intonation.

This study also has identified tag questions from Asian Disney princesses. In the animated movie *Mulan*:

*“Father, you can’t go.”*

*(rising intonation)*

*(Disney Movie 2: Mulan, 1998)*

Another way of how rising intonations can be involved in women’s language is when it makes speakers increase their pitch at the end of a declarative sentence (Lakoff, 1975). According to Lakoff, women’s language sometimes ends with a rising intonation at the end of sentences because it makes the utterance less assertive. Rising intonations can also function as an invitation for other speakers to confirmation or denying the statement.

In this excerpt, Mulan has advised her father that he should not go in the war that the Emperor of China has imposed. The declaratives are on rising intonation, as Mulan has raised her voice in order to be heard.

The study also identified that there were rising intonations on declaratives on the movie *Raya and the Last Dragon*. While analyzing the corpus, this study has identified tag questions from Asian Disney princesses. In the animated movie *Raya and the Last Dragon*, Raya uttered the following:

*“Your **little sister’s magic?**”*

*(rising intonation)*

(Disney Movie 3: *Raya and the Last Dragon*, 2021)

On this context, Raya discovers Sisú's magic powers come back to which the magical dragon says that it came from her sister. To confirm this information, Raya repeats the information with added rising intonation on the end of the sentence. Transforming the declarative sentence into an utterance that is answerable by a yes or no.

According to Ouda (2021), there is a common distinction in female intonational patterns. It is only among women that a declarative form can have the phrase intonation-pattern of a yes-no question. When added a rising intonation, a speaker's utterance can sound hesitant even if the information is correct.

For example, when one speaker asks "when will we go to the party?" the female speaker replies with "oh... around nine o'clock?" that contains the patterns of rising intonation on declaratives. It can be interpreted that the female speaker means "we will go at nine o'clock, if you agree."

Rising intonations on declaratives are a particular pattern that Lakoff (1975) noted to be part of informal discussions among women. These patterns are shown to express doubt, express information, or seek validation from another interlocutor. Usually, in these conversations, women use this tone to give an indirect message or generate empathy in situations that show sensitivity. The terms "nice" express positive evaluations in both statements, but do not provide actual information about the characteristics that make a person have a good personality.

**Table 1.7** *Empty adjectives*

| <b><i>Jasmine</i></b>                                            | <b><i>Mulan</i></b>                                         | <b><i>Raya</i></b>                                     |
|------------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------|
| <i>That sounds fabulous."</i>                                    | <i>They're very manly and tough.</i>                        | <i>Hey, bud, that was awesome. Give me some shell.</i> |
|                                                                  | <i>They're disgusting.</i>                                  | <i>I got you.</i>                                      |
| <i>Hmm, tell him that's very sweet.</i>                          |                                                             |                                                        |
| <i>It's lovely. (CARPET takes JASMINE's hand with a tassel.)</i> | <i>For what it's worth, I think you're a great captain.</i> |                                                        |
| <i>It's all so magical.</i>                                      |                                                             |                                                        |
| <i>"I just had the most wonderful time."</i>                     |                                                             |                                                        |

Empty adjectives are linguistic functions by Robin Lakoff (1975) that are identified to be adjectives that serve to convey a speaker's emotional reaction, approval, or admiration.

Examples of empty adjectives are words such as “divine,” “adorable,” “charming,” “lovely,” “cute,” “gorgeous,” “glamorous,” or “fabulous.” Lakoff identified the following to be adjectives that women included on their utterances. She adds that these adjectives are most used and associated with women’s speech because these words are considered as feminine. On that point, we rarely see men saying these kinds of adjectives because it is feminine to say or describe with that language.

While the above mentioned are empty adjectives that serve to be part of women’s figurative use of language, there are also empty adjectives that are used in a neutral sense. Some of these adjectives are words such as “great,” “terrific,” “cool,” “neat,” and “interesting.” These adjectives can be used by both genders as it is more gender-neutral.

While analyzing the corpus, this study has identified empty adjectives from Asian Disney princesses. In the animated movie Aladdin, Jasmine uttered the following:

*“That sounds fabulous.”*

*(empty adjective)*

*(Disney Movie 1: Aladdin, 1992)*

In this excerpt, Jasmine has used the word to compliment the home of Aladdin and Abu. The female character, Jasmine would use the adjective “fabulous” as a way to describe her admiration towards the place.

According to Lakoff, empty adjectives are defined as a group of adjectives that may indicate approval or admiration which are tied to emotional reactions (Lakoff, 1975).

The study has identified the use of adjectives with the movie Aladdin (1992). In this scenario, Jasmine uttered “fabulous” and “tell him that’s very sweet.” Fabulous and very sweet are words that include emotional attachment. In a deeper level, the analysis can draw that these words are tied to a character whose personality possess sweetness and the state of being fabulous.

Empty adjectives are evident with the animation of Mulan, in which the main character uses in the excerpt.

*“They’re very manly and tough.”*

*(empty adjectives)*

*“For what it’s worth, I think you’re a great captain.”*

*(empty adjective)*

*(Disney Movie 2: Mulan, 1998)*

It is also evident with the animation of Raya and the Last Dragon, in which the main character, Raya uses in the excerpt.

*“Hey, bud, that was awesome. Give me some shell.”*

*(empty adjective)*

(Disney Movie 3: *Raya and the Last Dragon*, 2021)

Raya from the *Raya and the Last Dragon* has utilized the word “awesome” as to compliment her friend, Tuk-Tuk. According to Robin Lakoff, this kind of linguistic feature are used when it is tied with emotional reactions to the other speaker. The whole function of the sentence is to compliment and approve the actions of the other speaker by relaying it on a form of adjective. The analysis of the data means that this study agrees with the study of Robin Lakoff (1975).

**Table 1.8. Avoidance of swear words**

| <b><i>Jasmine</i></b> | <b><i>Mulan</i></b> | <b><i>Raya</i></b>   |
|-----------------------|---------------------|----------------------|
| How dare you!         | They’re disgusting. | Whoa. What in the... |
| Oh, that stupid law.  |                     |                      |

Avoidance of swear words is a type of linguistic feature introduced by Robin Lakoff (1975) which identifies that women refrain from using taboo language or in this context, swear words. In Lakoff’s book *Language and Women’s Place*, it is indicated that women refrain from using harsh language because it can be seen as unfeminine. Society imposes an expectation on women to be more refine than men and use a language that is more acceptable or gentle while interacting with other people.

While analyzing the corpus, this study has identified avoidance of swear words from Asian Disney princesses. In the animated movie *Aladdin*, Jasmine uttered the following:

*“How dare you!”*

(avoidance of swear words)

*“Oh, that stupid law.”*

(avoidance of swear words)

(Disney Movie 1: *Aladdin*, 1992)

In this context, Jasmine has uttered the first sentence *“How dare you!”* to the three men: her father, Jafar, and Prince Ali because she found them scheming and planning about her life without her consent. In a deeply patriarch society along with the blood of royalty on the fictional kingdom called Agrabah, it was implied that royals do not have the luxury to marry just someone that they like. They must also consider their kingdom, the status, and wealth of a person before they enter a marriage. The reason why Jasmine was upset is because all her life, she is trapped inside the castle and the sultan has been speeding up her marriage.

In the language that Jasmine used, she states the phrase *“How dare you!”* as an expression that she is opposed to the idea of letting someone else decide her life. Unlike men’s language which contains swear words, this language of women are more tame even if they are very upset about something.

Avoidance of swear words are evident with the animation of *Mulan*, in which the main character uses in the excerpt.

*“They’re disgusting.”*

*(avoidance of swear words)*

*(Disney Movie 2: Mulan, 1998)*

In this context, *Mulan* made this remark when she has encountered the group of men huddled together when she was about to enter the army. Instead of swearing because of what she had seen, *Mulan* only used the adjective disgusting to express her distaste with the activities the group of men has been doing.

It is also evident with the animation of *Raya and the Last Dragon*, in which the main character, *Raya* uses in the excerpt.

*“Whoa. What in the...”*

*(avoidance of swear words)*

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

To give context to this utterance, *Raya* has seen something unbelievable that she even muttered the phrase “what in the...” which is an implied swear word. However, this is still considered as a linguistic function of Lakoff because of the lack of swear word itself. *Raya* subconsciously avoids saying the particular swear word and uses ellipses at the end of the utterance.

**Table 1.9.** *Emphatic stress*

| <b>Jasmine</b>                               | <b>Mulan</b>                                           | <b>Raya</b>                                      |
|----------------------------------------------|--------------------------------------------------------|--------------------------------------------------|
| <i>“How dare you! ALL of you!”</i>           | <i>“My name is MULAN. I did it to save my father.”</i> | <i>“LIAR!”</i>                                   |
| <i>“Standing around deciding MY future?”</i> |                                                        | <i>Namaari, it doesn’t have to be like this.</i> |
| <i>“I am NOT a prize to be WON!”</i>         |                                                        | <i>Okay, Tuk, these are the last of ’em. Go!</i> |
| <i>“Never!”</i>                              |                                                        |                                                  |
| <i>“I will never marry you.”</i>             |                                                        |                                                  |

Emphatic stress is a type of linguistic feature introduced by Lakoff (1975) when a speaker applies an emphasis to a word or a phrase in an utterance. The function of an emphatic stress is to give emphasis, single out, compare, correct, or clarify any type of information. This linguistic feature is also known as a “boosting device” in the field of sociolinguistics as an emphatic stress strengthens the overall of the sentence when it is included.

Examples of emphatic stress includes phrases like “It was a BRILLIANT performance!” “What a beautiful dress!” “I had the BEST DAY ever!” which are directly tied to giving emphasis on an utterance that has an implied emotion or feelings of the speaker.

While analyzing the corpus, this study has identified emphatic stress from Asian Disney princesses. In the animated movie Aladdin, Jasmine uttered the following:

*“How dare you! ALL of you!”*

(emphatic stress)

*(Disney Movie 1: Aladdin, 1992)*

Emphatic stress is in the utterance of Jasmine because she brings more emphasis on the word “all.” Upon analysis, the study determined that the reason why Jasmine has chosen to emphasize this word more than any other word in the sentence is because there are other three participants or speakers in the room. She made a choice to point out the word “all” after uttering the phrase “how dare you!” because of the reason that she wants everyone in the room to be the receiver of the utterance.

The usage of emphatic stress makes the whole utterance to be more impactful and included the three male characters that she is referencing to.

Emphatic stress is evident with the animation of Mulan, in which the main character uses in the excerpt.

*“My name is MULAN. I did it to save my father.”*

(emphatic stress)

*(Disney Movie 2: Mulan, 1998)*

In this utterance, Mulan utilized emphatic stress with emphasizing her name in the statement. The reason why there is an emphasis on the noun “Mulan” is because the speaker, Mulan has revealed her true identity to the other characters in the story. Mulan has been concealing her identity under the guise of Ping to go to the army instead of her old father.

It is also evident with the animation of Raya and the Last Dragon, in which the main character, Raya uses in the excerpt.

*“LIAR!”*

(emphatic stress)

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

In this utterance, Raya utilized emphatic stress in the word “liar”. The stress in the word has made it so that the phrase is shouting at the other speaker, Namaari. The context of the utterance is that in the final act of the movie, Raya has become enraged by the betrayal made by Namaari. Before this scene, Namaari has slayed the magical dragon Sisu, in which Raya is acquainted with. The utterance is still considered as emphatic stress because it is tied to the emotions of the speaker.

*“Namaari, it doesn’t HAVE TO BE like this.”*

*(emphatic stress)*

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

**Table 1.10.** *Precise color terms*

|                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------|
| <b><i>Raya</i></b>                                                                                                                     |
| <b><i>(IN NORMAL VOICE) First, to get my jade purse, second, to steal my sword, and third, I don’t know, to kidnap my Tuk Tuk.</i></b> |

According to Lakoff, precise color terms distinguishes the ability of fine color discrimination to women. This makes them particular on what shade of colors and have precise terms for each one, an ability that is foreign to men. According to Robin Lakoff (1975), women’s language uses distinct group of features to identify more precise terms for colors.

While analyzing the corpus, this study has identified precise color terms from one Asian Disney princess. In the animated movie *Raya and the Last Dragon*, Raya uttered the following:

*“First, to get my **jade** purse, second, to steal my sword, and third, I don’t know, to kidnap my Tuk Tuk.”*

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

In the utterance, Raya has briefly mentioned the color jade while referring to her purse. This color in particular is specified just as in Lakoff’s linguistic features in which she believed that women can differentiate colors more specifically than men.

There was no other mention of colors among the three animated films except for *Raya and the Last Dragon*.

## **Q2. How do these diachronic views of linguistic features function in the narratives?**

The following tables will discuss the diachronic views of linguistic features in the progression of the three selected Asian Disney films including *Aladdin*, *Mulan*, and *Raya and the Last Dragon*.

The use of linguistic features by Robin Lakoff (1975) has been discussed on the first analysis in which revealed the female princesses has utilized throughout the movie. In this discussion, the table will analyze how these linguistic features have progressed across the narrative timeline.

## From uncertainty to clarity

Jasmine

| Narrative stage | Dialogue                                                                                           | Function                                        |
|-----------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Early           | <i>"Then maybe I don't want to be a princess."</i>                                                 | Frequent use of hedges                          |
| Middle          | <i>"How dare you! All of you, standing around deciding my future? I am not a prize to be won!"</i> | Use of emphatic stress                          |
| Climax          | <i>"I will never marry you. Father, I choose Prince Ali!"</i>                                      | Use of intensifiers as an expression of protest |
| Resolution      | <i>"Him! I choose...I choose you, Aladdin."</i>                                                    | Controlled politeness and firm tone             |

The narrative progression of the animated movie "Aladdin" that includes only the female character Jasmine has centers on the themes of freedom. The study has seen this with the female's background in which she grew up in nobility. Jasmine feels entrapped having no way of knowing what it feels like to make her own decisions. This solidifies when she was bombarded by suitors that the Sultan has set up for her.

Hedges is a part of Jasmine's language as there are constraints that affected her as she grew and molded by society's beliefs. According to Lakoff (1975), hedges are part of women's language and signals that the language used is weaker or in need of validation.

On the early stages of the narrative, this study presents the utterance:

*"Then maybe I don't want to be a princess."*

(lexical hedge)

(Disney Movie 1: Aladdin, 1992)

Jasmine says this line when she was confronted by the Sultan to perform the duties as the princess by choosing someone to marry. This line corresponds with the struggle for freedom as she suggests that she doesn't want to be a noble. There are also other hedges present on the early parts of the film which aligns with the uncertainty of the character.

Moving to the middle part of the narrative, we see some progression with Jasmine's language as there has been a rise of emphatic stress when she begins to fight for freedom and her right to her own future.

In the scenario where the male characters are arguing what was the right suitor for her, Jasmine says:

*"How dare you! All of you, standing around deciding MY future?"*

*I am NOT A PRIZE to be won!"*



*(emphatic stress)*

*(Disney Movie 1: Aladdin, 1992)*

According to Robin Lakoff (1975), emphatic stress is the use of stress to bring emphasis to a particular word or a phrase to bring attention to its meaning. It is evident that Jasmine from the beginning has shown signs of uncertainty in her place in the palace and in the middle, her language reflects her fight to make an emphasis. This emphatic stress makes her point in what she stands for in the patriarchy.

Naturally, this has retaliation has also shown on the climax of the movie in which she faces off with the villain Jafar:

*“I will never marry you. Father, I choose Prince Ali!”*

*(intensifier)*

*(Disney Movie 1: Aladdin, 1992)*

The presence of intensifier on this narrative reflects that the female character, Jasmine has already solidified her beliefs on what she stands for. The word “never” is an intensifier in which symbolize a strong emphasis on the speaker’s attitude and emotions. It completely changes the meaning as the word “never” negates the entire sentence.

On the other hand, this narrative stage and with the use of intensifier means that Jasmine her set of attitude and emotions that want to express.

And finally, on the resolution of the movie the narrative comes to an end where the hero has defeated the villain. The characters has come to resolution phase in which sets the tone for their happy ending.

In the utterance of Jasmine, it is observed that there were less hedging on her language such as in the dialogue:

*“Him! I choose...I choose you, Aladdin.”*

*(Disney Movie 1: Aladdin, 1992)*

From not being uncertain and using a lot of hedges and super polite linguistic features there is a shift in the language of the female character, Jasmine, as she struggled for her fight of freedom to love. On the process of finding her way and meeting the hero, her belief has solidified and refused to bend down on the rules of her society where she needs to submit to the law.

In doing so, her language that contain uncertainty has evolved into being certain without the need for approval.

## From seeking validation to self-discovery

Mulan

| Narrative stage | Dialogue                                                                                                   | Function                                         |
|-----------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Early           | <i>"Uphold the family honor. Don't worry father. I won't let you down. Wish me luck."</i>                  | Usage of super polite forms                      |
| Middle          | <i>"I didn't mean for it to go this far."</i>                                                              | Use of hedges reflects uncertainty               |
| Climax          | <i>"Maybe I didn't go for my father. Maybe what I really wanted was to prove I could do things right."</i> | Use of hedges but is utilized in self-reflection |
| Resolution      | <i>"I have to do something."</i>                                                                           | Less hedging and more assertion                  |

The narrative progression of the animated movie "Mulan" centers on the themes of seeking validation and expression of identity. Set on China, Mulan has grown up in a deeply patriarchal society where the men in the family have the highest authority. The study has revealed that hedges are a part of Mulan's language and there is a progress on how it is utilized throughout the duration of the film.

This table explains how the linguistic features of Lakoff have spanned in the early, middle, climax, and the resolution of the animated film.

Just like with the first movie, Mulan has used a lot of hedging in her language. Hedges, as mentioned, are linguistic features by Robin Lakoff (1975) which balance speech by modifying the language by making it less direct. Hedges indicate that a language has a lack of confidence or uncertainty.

Mulan used hedges and super polite forms at the early stages of the narrative. The reason for this is that the main character Mulan has played the role of a stereotypical Asian daughter at the first moments of the movie.

It is evident when it was shown on the scenes where she complies with the matchmaking tradition on their village without any doubts to honor their family. On this setting, the study can infer that the society has a steady influence on the speaker's way of language. When women are made to subdue and be submissive, it can reflect on the way they talk as well. In this sense, Mulan's language is polite and also submissive.

*"Uphold the family honor. Don't worry father. I won't let you down."*  
(Disney Movie 2: Mulan, 1998)

In the utterance which was found at the first minutes of the film, although without linguistic feature, still holds the grounds on seeking validation while being polite. This utterance was before the scenario where she would go on to meet the matchmaker in their village.

Mulan uses her words by using her emotions regarding the topic to give assurance to her father. This language of Mulan reflects on their norms where being married is the responsibility of the daughter. Whereas, Mulan feels the need to comfort her parent that she would not fail on this responsibility.

The study sees progression on the build up with the linguistic features in which a lot of hedges was used to show uncertainty.

The following is an example of the hedges used.

*“I didn't mean for it to go this far.”*

*(lexical hedge)*

*(Disney Movie 2: Mulan, 1998)*

In this utterance, it shows uncertainty because Mulan uses the phrase “didn’t mean” as an indirect way of saying that she did not intend it to plan it this way. Robin Lakoff’s hedges that describes women to show uncertainty goes along with this utterance.

This study also sees another observation as it moves along on the climax of the narrative. In the utterance below there still remains lexical hedges as it directly reflects Mulan’s inner conflict. In the animated film, we see that Mulan hides her gender in order for her father to not participate in the war. This decision forces her to hide her identity as a woman and act as a warrior. There is also a conflict between Mulan’s values and her father. Her language would reflect that conflict within herself and manifests into lexical hedging.

However, unlike the original description of Robin Lakoff’s hedging, this study observes that Mulan utilized this particular linguistic feature into a tool in self-reflection. This makes it the opposite of the function of hedges which originally deemed to show uncertainty.

To understand, the utterance from the climax of the film is cited:

*“**Maybe** I didn't go for my father. **Maybe** what I really wanted was to prove I could do things right.”*

*(lexical hedges)*

*(Disney Movie 2: Mulan, 1998)*

In this dialogue, the word “maybe” is present that corresponds to a lexical hedge. Instead of making this utterance weak or display uncertainty, this particular hedge incorporates with the whole sentence and became a part of Mulan’s self-reflection to what she really wants. The utterance that involved this linguistic feature possesses clarity on what the speaker wants.

On the final part of the film, Mulan gradually loses the hedges as she becomes clear on what she should do and want for herself.

*“I have to do something.”*

*(Disney Movie 2: Mulan, 1998)*

The utterance above is an example of what is a representation of the female character, Mulan has progressed at the end of the film. From being conflicted and showing confusion on what she should act to keep her identity hidden, she uses that conflict as a tool to reflect on what she really wants, and lastly she loses the hedges as a part of self-discovery. Her language has become certain and assertive at the end of the film.

### From Betrayal to Trust

*Raya*

| Narrative stage | Dialogue                                                                                                                                                                                                                                                          | Function                                                                   |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Early           | <i>“I really need your help. I made a mistake. I trusted someone I shouldn’t have, and... ..now the world’s broken.”</i>                                                                                                                                          | Minimal Lakoff features; Emphatic stress and intensifiers to make emphasis |
| Middle          | <i>“Well, I’m sorry, Sisu, but that’s what the world is now. You can’t trust anyone.”</i>                                                                                                                                                                         | Emphatic stress                                                            |
| Climax          | <i>“<b>Even</b> if she wanted to help us, how could I <b>possibly</b> trust her?”</i>                                                                                                                                                                             | Hedges to show distrust                                                    |
| Resolution      | <i>“It’s not about her magic. It’s about trust. That’s why it worked. That’s why we can do it, too, by doing the one thing Sisu wanted us to do. What my ba wanted us to do. To finally trust each other and fix this, but we have to come together. Please.”</i> | Absence of hedges because the trust has been restored                      |

The narrative progression of the animated movie “Raya and the Last Dragon” that includes only the female character Raya has centers on the themes of trust. There is assertive empowerment because the main character, Raya is born into leadership and is the direct heir to their clan when her father became cursed.

The most dominant linguistic feature in Raya and the Last Dragon is lexical hedges. Hedges, as mentioned, are linguistic features by Robin Lakoff (1975) which balances speech by modifying the language by making it less direct. Hedges indicates that a language has lack of confidence or uncertainty.

On the early of the film, Raya would have a balance number of lexical hedges and intensifiers. The lexical hedges that Raya uses often contain filler words such as “oh,”

“uhm,” and many others that indicates that this speaker thinks in caution before she connects one utterance with another.

“I **really** need your help. I made a mistake. I trusted someone I shouldn’t have, and... ..now the world’s broken.”

(intensifiers)

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

In the first minutes of the film, the utterance that was found to be dominant are lexical hedges. In scenes like this, the study has analyzed that Raya uses intensifiers such the world “really” to make emphasis on the situation that it is important.

It is evident in the scenes where Raya convinces the great dragon, Sisu to help bring back others because of what the Drunn caused. The Drunn is a mythical creature that wreaked havoc on their nation. It was only when the last dragon, Sisu, saved the world. That is why Raya, the main character expressed desperation in her language and utilized intensifiers.

The study sees progression on the narrative when around the middle part of the film, Raya uses lesser intensifiers but maintain the lexical hedges.

“**Well**, I’m sorry, Sisu, but that’s what the world is now.  
You can’t trust anyone.”

(lexical hedges)

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

The reason for losing the intensifiers and maintaining the lexical hedges is because Raya went from pleading with Sisu to going in an adventure with the dragon to show what has happened during the years she was asleep. Raya gradually lose the intensifiers as they go on the journey to the different clans. This signifies Raya has become unsure trusting other people.

Trust is one of the central themes in the story as Raya and her clan was betrayed by the rest of the clan when they were making amends. Raya is vocal when it comes to her distrust for the Fang tribe because Namaari, her friend, used her trust to get their dragon gem.

“Even if she wanted to help us, how could I possibly trust her?”

(lexical hedges)

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

On the climax of the narrative, we see that the utterance still has lexical hedges because the narrative continues with Raya’s distrust for Namaari. It shows in her language that she still shows uncertainty towards trusting them again. There are other utterances which shows distrust such as:

“Yeah, well, the world’s broken. You can’t trust anyone.”

(lexical hedges)

“You weren’t there when Namaari betrayed me. We’re sticking with my plan. Whoa. Uh... What’s with the downpour?”

(lexical hedges)

“How would I even approach Namaari after all that’s happened?”

(lexical hedges)

*(Disney Movie 3: Raya and the Last Dragon, 2021)*

This data shows that the use of hedges in Raya and the Last Dragon is not a sign of weakness in women’s language but a way for the speaker to express their attitude or emotions to others. It can be a medium to express emotions such as distrust because you can show uncertainty based on the background of the other speaker.

At the resolution of the narrative in the film, the study sees that Raya gradually use fewer lexical hedges. This is because Raya has already resolved her conflict with Namaari and with the other tribe. Raya has also brought back the others who were turned into stone at the end.

*“It’s not about her magic. It’s about trust. That’s why it worked. That’s why we can do it, too, by doing the one thing Sisu wanted us to do. What my ba wanted us to do. To finally trust each other and fix this, but we have to come together. Please.” (Disney Movie 3: Raya and the Last Dragon, 2021)*

This utterance is the conclusion of the narrative stage of Raya and the Last Dragon. At this last stage, there is a change in Raya’s language. From having hedges at the first stage due to being unable to trust people, her linguistic features lessen in the middle, and then on the resolution there were no noticeable hedges as she chooses to trust people in their tribe again.

### **Summary of findings**

findings of this study have revealed that there is a total of one hundred and twenty-seven (127) linguistic features in the selected three Disney animations. Jasmine has accumulated thirty-six linguistic features, Mulan has thirty-five linguistic features, and Raya has the highest record of fifty-six linguistic features. The diachronic analysis also shows that they have used lesser hedging that they did during the earlier parts of the films.

### **Discussion**

This chapter will discuss about the results, the implications for practice, the implication for future research and the concluding remarks of the study.

#### **Result 1. Linguistic features in three animated films of Disney films**

Women’s language is inherently different from men. This is also evident in animated films or cartoons such as Disney Movies that children watch from a young age. Along with the shift of modern era, women’s language has also undergone changes but retain the linguistic features that Lakoff has proposed in 1975. Exploring the linguistic features of the three selected Asian Disney films, the researcher did a discourse analysis on the corpora to understand how the linguistic features function in the dialogues of the female characters in the film.

Through qualitative study, it revealed that the linguistic features of Robin Lakoff (1975) are present in all three Disney films that include an Asian female character. The films were Aladdin, Mulan, and Raya and the Last Dragon. The analysis of data has revealed that the most dominant linguistic feature is lexical hedges.

To understand the results, this discussion will explain how these features function. Firstly, super polite forms have an influence in the dialogues of Jasmine, Mulan, and Raya because they live in a patriarchic society. As observed in all animated films, these female characters either live like a nobility or live in a communist country with male figures is at the top of the authority.

Women's language is shaped by the social norm society expect women to act. In a community, the society reinforces stereotypes on gender that comes from traditional values. Women are framed as empathetic and caring that is why adjectives that describes emotions and nurturing qualities are often associated with women (Ashrafova, 2024).

This research has found that there is a total of one hundred and twenty-seven (127) women's linguistic features by Robin Lakoff that are present throughout the three Disney animated films. The dominant linguistic features in the films are intensifiers, lexical hedges, and super polite terms.

In the film Aladdin, Jasmine has exhibited lexical hedges to be the dominant in her speech counting to six (6) in total. This number is in account that Jasmine has very little screen time and only appears when Aladdin meets her and rescues her from harm. Her other linguistic feature amount to six (6) super polite forms, five (5) intensifiers, two (2) tag questions, three (3) hypercorrect grammar, four (4) rising intonation, five (5) empty adjectives, two (2) avoidance of swear words, five (5) emphatic stress and zero precise color terms.

Next film is in Mulan, where Mulan she utilized a total of fifteen (15) lexical hedges that is showed to appear when she was preparing to go to war. Her other linguistic feature amount to seven (7) super polite forms, three (3) intensifiers, zero tag questions, two (2) hypercorrect grammar, three (3) rising intonation, three (3) empty adjectives, one (1) avoidance of swear words, one (1) emphatic stress and zero precise color terms.

Meanwhile, Raya has acquired a total of twenty-one (21) lexical hedges that the study has recorded to be the highest number of hedges. Her other linguistic feature amount to four (4) super polite forms, sixteen (16) intensifiers, two (2) tag questions, two (2) hypercorrect grammar, five (5) rising intonation, one (1) empty adjectives, one (1) avoidance of swear words, three (3) emphatic stress and one (1) precise color terms.

Three out of three female characters has been identified to use lexical hedges on their dialogues and while it did show weakness, it appears so because of their character development. This study has discovered that the three princesses are more inclined to use lexical hedges more when their journey has yet to begin. This includes their arc to self-discovery or trusting other people in their environment. The uncertainty that they have in their language is because the characters are yet to confront their conflict.

The data in this study reflects that all three characters had a consistent use on hedges at the early of the film which implies that women's language mirrors the stereotype in the

society. This stereotype implies that women are allowed to speak however must know their position in the patriarchy. In Jasmine's case, despite being royalty she still uses hedging and politeness as if she must negotiate safety in public spaces. In Mulan's case, her heavy use of hedges reflects the pressure of hiding her identity and avoiding suspicion. For Raya, the highest hedge count reflects emotional guardedness and mistrust. The results imply that women's language functions as a tool for women's survival.

## **Result 2. *Diachronic views***

According to the study of Al-Yasin and Rabab'ah (2021), Disney princesses had a lot of hedges in their discourse that are used to express their specific interests. They also used empty adjectives, tag questions, intensive 'so', hypercorrect grammar, and super polite forms. Based on this data, this study can agree that the hedges are most dominant in the animated film. To understand the development of the linguistic features, the study has analyzed this through identifying the narrative progression of the three films in the early, middle, climax, and resolution acts.

Jasmine, at the first act of the film, shows super polite linguistic features because she grew up in nobility. As a princess, she shows language features that are suited of a royal. She also displays a lot of usage of imperative phrases as she is used to commands being a holder of the title of the princess. However, this was the only extent of her power.

Mulan, at the first act of the film, often uses hedges to express her inability to go to war even if she went in her father's stead. This influences her behavior and made her uncertain or unsure in her language. However, as the story progresses, the study reveals that these hedges are dropped and less used because she can discern from what she believes is right. The resolution act reveals that Mulan uses more direct language upon expressing her wants and needs.

Raya and the Last Dragon also at the first part of the film uses significant number of lexical hedges and intensifiers. Though dominant, it is important to know what are the context of how Raya uses these hedges. In the analysis, we can associate Raya's hedges with sentences where she is in face of leadership. She does not use these often with emotional scenes, but rather in face of authority. Raya uses this type of linguistic feature to connect with her allies.

In contrast to Jasmine and Mulan, this diachronic view of Raya's film has discovered that she has used a majority of intensifiers and hedges than the two characters. These implies that even with the modernization of women's language, it does not mean that there is a decrease of Lakoff's features but rather it is more evident than today.

In conclusion, Robin Lakoff's linguistic feature do in fact remains to exist on women's language up to the present. It is present from the animated films that are being produced by Disney and is a representation of how language has developed. Culture and values of women in the society has changed and that includes language.

## **Implication for Practice**

This study provides several opportunities for linguists to look into how women use linguistic features in the field of animation or films. Linguists studying women's language can they the findings of the study as a stepping stone into the complex functions of the



language and discourse analysis. By adopting similar methods of research, it can help with the understanding of how language evolve in the field of other forms of media.

This study also provides opportunities for linguists that are studying Robin Lakoff's linguistic features. Researchers who are studying how women's language function across the eras can find this study as an effective resource for discourse analysis and sociolinguistic analysis.

This study demonstrates an implication for media literacy education in which were displayed on the diachronic patterns throughout the movies. It shows that the representation of Asian Disney female characters has evolved over the years in which came from being traditionally feminine to being assertive in their language. Studies can integrate the findings of this study to the current women's language that are present in media.

### **Implication for Future Research**

This study provides several opportunities for further research into the linguistic features of women's language in Asian Disney princesses. The female characters presented in the animated films play a crucial role in how women are depicted in the society we live in. Children that watch Disney animation will pick up on the social cues on how women behave, speak, and act towards others.

Future research may also look on how children apply behaviors from the representation of women characters from any forms of media. With the current wave of social media, every piece of media promotes many different beliefs and culture on a developing mind of children.

Future researchers may look into the other films of Disney animation or other studios to compare and contrast what has changed in the following years using diachronic study from the classic Disney films up to the current movies that are produced by Disney.

### **Concluding Remarks**

The analysis of selected Asian Disney princesses animated movies revealed how the linguistic features of women's language function and utilized by the female characters in each film. The female characters in the Asian Disney films namely Jasmine, Mulan, and Raya are the main source of data in the study. In order to determine if the language used in these three animations, the study has looked into Robin Lakoff's women's language which includes super polite forms, intensifiers, lexical hedges or fillers, tag questions, hypercorrect grammar, rising intonations on declaratives, empty adjectives, avoidance of strong swear words, and emphatic stress.

The circumstances in which these female characters use these linguistic features depends on the context. While these features are typically associated with weakness in language, the study has found out that it is not only a sign of submission on the societal expectations, but these functions make women achieve power with politeness.

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**ETHICAL GOVERNANCE OF GENERATIVE AI IN GRADUATE  
EDUCATION IN REGION IV-A: A PHENOMENOGRAPHIC  
STUDY BASED ON DEONTOLOGICAL AND  
CONSEQUENTIALIST PERSPECTIVES**

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**Abstract**

The rapid integration of generative artificial intelligence (AI) into higher education has created significant opportunities for innovation while simultaneously raising complex ethical concerns that require sound institutional governance. This phenomenographic study explored the qualitatively different ways graduate education leaders in Region IV-A conceptualized the ethical governance of generative AI through the lenses of deontological and consequentialist ethical perspectives. Specifically, the study examined the conceptions of officers of the Philippine Association for Graduate Education (PAGE) Region IV-A and the research leaders in the participating HEIs regarding ethical responsibilities, academic integrity, institutional policies, accountability, perceived benefits, potential risks, and governance mechanisms for AI use in graduate education. Data were collected through semi-structured written interviews guided by questions focusing on ethical principles, outcome-based decision-making, policy development, and future directions for AI governance from 14 participants from 7 higher educational institutions in the region. Thematic analysis and outcome space construction revealed six hierarchical categories of conception: AI as an innovation requiring ethical awareness, AI as a tool governed by academic integrity, AI as a shared institutional responsibility, AI as a catalyst for educational transformation, AI as a technology requiring balanced ethical judgment, and AI as a strategic resource requiring adaptive governance. These conceptions collectively formed an outcome space illustrating a progression from individual ethical compliance toward institution-wide governance characterized by accountability, transparency, human oversight, and responsible innovation. The findings underscore that effective AI governance in graduate education requires balancing duty-based ethical principles with outcome-oriented considerations. The study proposes an Ethical Governance Framework for Generative AI in Graduate Education to guide policy formulation, leadership practices, faculty development, and responsible AI integration across graduate institutions in Region IV-A.

**Keywords:** Generative Artificial intelligence, ethical governance, Phenomenography, deontological ethics, consequentialist ethics, graduate education

## Introduction

Generative artificial intelligence (AI) has rapidly transformed higher education by reshaping teaching, learning, research, academic writing, and institutional management. Powered by large language models, generative AI enables users to generate scholarly content, synthesize literature, analyze data, and support academic decision-making with unprecedented speed and efficiency. In graduate education, where research productivity and knowledge creation are paramount, these technologies offer significant opportunities to enhance learning and scholarship. However, their increasing use has also raised pressing ethical concerns related to academic integrity, intellectual ownership, transparency, accountability, privacy, algorithmic bias, and the preservation of critical thinking. These developments underscore the need for higher education institutions to establish governance mechanisms that promote responsible AI integration while safeguarding the fundamental values of graduate education (Holmes et al., 2022; UNESCO, 2023; Bozkurt et al., 2023).

Graduate education is uniquely tasked with preparing future researchers, educators, policymakers, and academic leaders through rigorous inquiry, ethical scholarship, and original knowledge production. While generative AI can enhance research efficiency, academic writing, curriculum development, and data analysis, excessive or inappropriate reliance on AI-generated outputs may compromise originality, scholarly rigor, and academic honesty. Consequently, educational institutions are increasingly challenged to move beyond simply adopting AI technologies toward developing governance frameworks that balance innovation with ethical responsibility, transparency, and human oversight (Williamson & Eynon, 2020; Holmes et al., 2022; OECD, 2024).

Ethical governance of generative AI requires more than technological regulation; it demands moral principles that guide institutional decision-making. This study is anchored on two complementary ethical perspectives. Deontological ethics emphasizes adherence to duties such as honesty, fairness, academic integrity, and respect for intellectual ownership regardless of outcomes, whereas consequentialist ethics evaluates AI use according to its educational benefits and potential harms. Together, these perspectives provide a balanced framework for developing governance policies that uphold academic values while fostering responsible innovation (Floridi & Cowls, 2019). Consistent with this view, international organizations advocate AI governance founded on transparency, accountability, fairness, human oversight, and collaborative leadership as essential principles for responsible AI implementation in education (European Commission, 2019; UNESCO, 2023; OECD, 2024).

Despite the growing adoption of generative AI in Philippine higher education, empirical studies examining its ethical governance remain limited. Existing research has focused primarily on technology acceptance, instructional applications, and academic integrity, with relatively little attention given to how educational leaders conceptualize institutional AI governance. A preliminary phenomenographic study by Lunar, Barradas, and Perez (2026) addressed this gap by exploring faculty conceptions of the ethical use of generative AI. The study revealed that faculty viewed AI as both an ethical risk and a pedagogical support tool, while consistently emphasizing academic integrity and advocating for clear institutional policies that balance responsible innovation with accountability. These findings highlighted that ethical AI governance is fundamentally an institutional leadership concern, but they were limited to faculty perspectives within a single institution, leaving unanswered how graduate education leaders across higher education institutions conceptualize ethical governance. (Lunar, et.al, 2026).

To address this gap, the present study employed phenomenography to examine the qualitatively different ways officers of the Philippine Association for Graduate Education (PAGE) Region IV-A and research leaders from participating higher education institutions conceptualize the ethical governance of generative AI. Anchored on deontological and consequentialist ethical perspectives, the study explored conceptions of ethical responsibility, institutional governance, academic integrity, accountability, benefits, risks, and adaptive leadership. The study sought to develop a comprehensive Ethical Governance Framework for Generative AI in Graduate Education to guide institutional policy formulation, leadership practices, faculty development, and the responsible integration of generative AI across graduate education institutions.

## **Method**

This study employed a qualitative research design using phenomenography to explore the qualitatively different ways graduate education leaders in Region IV-A conceptualized the ethical governance of generative artificial intelligence (AI) through the lenses of deontological and consequentialist ethics. Fourteen (14) participants, consisting of officers of the Philippine Association for Graduate Education (PAGE) Region IV-A and research leaders from seven (7) participating higher education institutions, were selected through purposive sampling based on their active involvement in graduate education leadership, research administration, and institutional policy development. Data gathering was conducted in June 2026 using a semi-structured written interview consisting of open-ended questions that elicited participants' conceptions of ethical responsibilities, academic integrity, institutional governance, accountability, perceived benefits, potential risks, policy development, and future directions for AI governance in graduate education. The collected responses were analyzed following the principles of phenomenography through iterative reading, coding, comparison, and categorization of meaning units to identify the qualitatively different ways participants understood the phenomenon. The resulting categories of description were subsequently organized into a hierarchical outcome space that illustrated the structural relationships among participants' conceptions of ethical AI governance. Throughout the conduct of the study,

ethical principles were strictly observed by securing informed consent from all participants, ensuring voluntary participation, maintaining anonymity and confidentiality of responses, and using the collected data solely for scholarly and research purposes.

## Results and Discussion

Phenomenographic analysis revealed six hierarchical categories of conception that describe how graduate education and research leaders understood the ethical governance of generative AI. These categories demonstrate an increasing level of conceptual complexity, progressing from individual ethical awareness toward institution-wide strategic governance.

The outcome space demonstrates a progressive expansion of awareness among participants. Initial conceptions focused primarily on individual ethical behavior, while more comprehensive conceptions emphasized institutional governance, strategic leadership, and adaptive policy development. This progression illustrates that ethical AI governance is not merely a matter of regulating technology but represents an evolving institutional responsibility requiring collaborative leadership and continuous ethical reflection.

The outcome space further indicates that the categories are inclusive rather than mutually exclusive. Participants demonstrating higher-order conceptions simultaneously acknowledged the importance of ethical awareness, academic integrity, institutional collaboration, innovation, and ethical reasoning while extending these toward strategic governance. Consequently, the phenomenon was understood not as isolated ethical practices but as an integrated governance ecosystem where responsible AI implementation depends upon institutional leadership, policy development, stakeholder engagement, and continuous adaptation.

**Table 1.** Outcome Space of Graduate Education Leaders' Conceptions of Ethical Governance of Generative Artificial Intelligence

| Hierarchical Category | Category Description                            | of Structural Meaning                                                                                                                         |
|-----------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Category 1            | AI as an Innovation Requiring Ethical Awareness | AI is recognized as a beneficial technological innovation that demands individual ethical consciousness.                                      |
| Category 2            | AI as a Tool Governed by Academic Integrity     | Ethical AI use depends on honesty, originality, transparency, and responsible scholarly practice.                                             |
| Category 3            | AI as a Shared Institutional Responsibility     | Ethical governance extends beyond individuals and becomes a collective responsibility of faculty, students, administrators, and institutions. |



|            |                                                          |                                                                                                                                                                          |
|------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Category 4 | AI as a Catalyst for Educational Transformation          | AI is viewed as an opportunity to improve graduate education through innovation, provided ethical safeguards remain in place.                                            |
| Category 5 | AI as a Technology Requiring Balanced Ethical Judgment   | Decisions regarding AI require balancing deontological obligations with consequentialist evaluation of educational outcomes.                                             |
| Category 6 | AI as a Strategic Resource Requiring Adaptive Governance | AI governance is viewed as a strategic institutional function requiring adaptive leadership, dynamic policies, accountability, transparency, and continuous improvement. |

Viewed through the theoretical framework, the first three categories primarily reflect deontological reasoning, emphasizing moral duties, institutional responsibilities, and adherence to ethical principles. The latter three categories increasingly incorporate consequentialist reasoning, where participants considered the educational outcomes, societal implications, and long-term institutional impacts of AI integration. Rather than competing perspectives, participants perceived these ethical traditions as complementary foundations for responsible AI governance. This synthesis became the defining characteristic of the most comprehensive conception represented by the sixth category.

### **Category 1: AI as an Innovation Requiring Ethical Awareness**

The most foundational conception that emerged from the phenomenographic analysis viewed generative artificial intelligence as an educational innovation that necessitates ethical awareness among its users. Participants recognized AI as a transformative technological advancement capable of improving graduate education through enhanced efficiency, accessibility, and research productivity. However, they also emphasized that technological innovation must always be accompanied by ethical consciousness. Rather than perceiving AI as inherently beneficial or harmful, participants understood that its value depends largely on the ethical awareness of those who utilize it. This conception reflects an individual-level understanding of governance, wherein responsible AI use begins with personal recognition of ethical obligations before institutional policies or governance mechanisms are considered.

Several participants acknowledged that generative AI has become an inevitable component of graduate education and that educators should embrace technological innovation while remaining mindful of its ethical implications.

*"Artificial intelligence is no longer optional in graduate education. It has become part of how research and learning are conducted, but every user must first understand the ethical responsibilities that come with using these technologies." (Participant 3)*

*"AI offers tremendous opportunities for improving research productivity, but innovation without ethical awareness can easily lead to irresponsible academic practices." (Participant 7)*

*"Technology itself is not the problem. The challenge lies in whether educators and students possess sufficient ethical awareness to use AI responsibly." (Participant 11)*

Participants consistently described ethical awareness as the first requirement for responsible AI integration. Before discussing institutional regulations, academic integrity policies, or governance structures, they believed that individuals must first recognize both the opportunities and ethical risks associated with generative AI. Ethical awareness was viewed as the foundation upon which responsible decision-making could subsequently be developed.

From a deontological perspective, this conception demonstrates an emphasis on moral responsibility as an inherent obligation of every educator and graduate student. Participants believed that individuals possess a duty to exercise honesty, prudence, and ethical judgment whenever they engage with AI technologies regardless of the benefits such technologies may provide. This aligns with Kantian ethics, which argues that ethical behavior originates from adherence to moral duties rather than from consideration of desired outcomes. In this view, ethical AI use begins with personal commitment to doing what is morally right because it is one's responsibility as a scholar and educator.

Viewed through a consequentialist lens, participants likewise recognized that insufficient ethical awareness may result in undesirable educational consequences. Without understanding the ethical implications of AI use, students may become overly dependent on automated systems, diminish their critical thinking skills, or inadvertently engage in academic misconduct. Consequently, promoting ethical awareness was viewed not only as a moral obligation but also as a practical strategy for minimizing educational risks while maximizing the positive contributions of AI to graduate education.

This finding is consistent with international literature emphasizing AI literacy as the foundation of responsible AI implementation. UNESCO (2023) argues that ethical awareness should precede technological adoption because users must understand issues related to transparency, accountability, human agency, and fairness before integrating AI into educational practice. Similarly, Holmes et al. (2022) emphasized that educational institutions should cultivate AI literacy that extends beyond technical competence to include ethical reasoning and responsible decision-making. Bozkurt et al. (2023) likewise noted that responsible AI adoption requires educators to critically evaluate both the opportunities and limitations of generative AI rather than viewing technology as inherently beneficial.

While the preliminary investigation by Lunar et.al (2026) highlighted ethical awareness primarily within instructional practice, the present study demonstrates that graduate education leaders broaden this understanding by recognizing ethical awareness as the foundational stage of institutional governance. Participants viewed personal ethical consciousness not merely as an individual characteristic but as the essential prerequisite

for building institutional cultures that promote responsible innovation and ethical AI governance.

The emergence of this category as the foundational conception illustrates that participants considered ethical governance to begin with the individual rather than with institutional policy. Before institutions can develop governance frameworks, implement regulations, or establish accountability systems, educators and academic leaders must first cultivate ethical awareness regarding both the possibilities and limitations of generative AI. This conception therefore represents the initial stage in the hierarchical outcome space, laying the ethical foundation upon which increasingly comprehensive conceptions of AI governance are subsequently constructed.

### **Category 2: AI as a Tool Governed by Academic Integrity**

The second category of conception represents a deeper understanding of ethical governance by viewing generative artificial intelligence not merely as an innovation requiring ethical awareness but as a technological tool whose legitimacy depends upon the preservation of academic integrity. Participants acknowledged that AI has become an indispensable resource in graduate education; however, they consistently emphasized that its use must never compromise the principles of honesty, originality, transparency, and scholarly accountability. Unlike the first category, which centered on individual ethical consciousness, this conception introduced explicit academic standards as the primary basis for determining whether AI use is ethically acceptable.

Participants viewed academic integrity as the defining boundary between responsible and irresponsible AI utilization. They argued that generative AI should function only as an academic support mechanism rather than as a substitute for independent scholarship, intellectual effort, or authentic knowledge creation.

*"Artificial intelligence should assist the researcher, but it should never become the researcher. Graduate students must remain the authors of their own ideas." (Participant 5)*

*"The ethical question is not whether AI is used but whether honesty and originality are preserved throughout the research process." (Participant 9)*

*"Transparency is very important. Students should openly disclose how AI contributed to their work because academic integrity depends upon honesty." (Participant 12)*

Several participants emphasized that responsible AI use requires clear disclosure, proper attribution, and continued accountability for all scholarly outputs. They believed that while AI may improve grammar, organize ideas, or facilitate preliminary literature searches, intellectual ownership must always remain with the researcher. Consequently, participants rejected practices in which AI-generated content replaces critical analysis, original interpretation, or scholarly judgment.

From the perspective of deontological ethics, this conception strongly reflects the moral duty to uphold academic honesty regardless of technological convenience or educational benefits. Participants consistently maintained that originality, truthfulness, fairness, and respect for intellectual property are non-negotiable obligations that should govern every stage of graduate research. Their understanding aligns closely with Kantian ethics, wherein moral duties are regarded as universal principles that cannot be violated even when doing so may produce desirable outcomes. In this context, responsible AI use is not determined by efficiency or productivity but by unwavering adherence to ethical standards governing scholarship.

Viewed through consequentialist ethics, participants also recognized that violations of academic integrity carry significant long-term consequences for students, institutions, and society. They expressed concern that excessive dependence on AI-generated outputs could weaken critical thinking, diminish research competence, reduce scholarly credibility, and erode public trust in graduate education. Conversely, when AI is used transparently and responsibly, it may enhance research quality, improve academic productivity, and support more effective learning. Thus, participants evaluated academic integrity not only as a moral obligation but also as a necessary condition for ensuring positive educational outcomes.

This conception is strongly supported by existing literature emphasizing that academic integrity remains the cornerstone of responsible AI integration in higher education. Holmes et al. (2022) argued that AI should augment rather than replace human cognition and that educational institutions must preserve authentic learning despite increasing technological capabilities. UNESCO (2023) similarly emphasized that transparency, accountability, and disclosure are essential principles for trustworthy AI implementation, particularly within higher education where originality and intellectual ownership remain fundamental academic values. Floridi and Cowls (2019) further contend that responsible AI governance requires maintaining human agency and accountability, ensuring that technology supports rather than supplants ethical human decision-making.

The findings likewise reinforce the preliminary phenomenographic investigation conducted by Lunar et. al (2026), wherein faculty members consistently described academic integrity as a non-negotiable ethical duty regardless of AI's educational advantages. Faculty participants in the preliminary study emphasized that graduate education is not merely concerned with producing outputs but with cultivating ethical scholars capable of independent thought and responsible research practices. The present investigation extends this understanding beyond classroom instruction by demonstrating that graduate education leaders likewise perceive academic integrity as the central ethical principle upon which institutional AI governance should be constructed. Rather than viewing integrity solely as an instructional concern, participants recognized it as a strategic governance principle that informs institutional policies, faculty expectations, and research standards across graduate programs.

The progression from the first to the second category illustrates an expansion of awareness from general ethical consciousness toward explicit adherence to institutional academic values. While ethical awareness establishes the individual's recognition of

moral responsibility, academic integrity provides the normative framework that governs acceptable AI use in graduate education. Participants therefore understood that responsible AI governance cannot be achieved through technological regulation alone but requires unwavering commitment to the enduring principles of honesty, originality, transparency, and scholarly accountability. This conception represents a more comprehensive understanding of ethical governance by positioning academic integrity as the indispensable foundation upon which responsible AI integration is built.

### **Category 3: AI as a Shared Institutional Responsibility**

The third category of conception reflects a significant shift from viewing ethical AI use as primarily an individual obligation toward recognizing it as a collective institutional responsibility. Participants acknowledged that while educators and students are individually accountable for the ethical use of generative AI, sustainable governance cannot depend solely on personal integrity. Instead, they emphasized that ethical AI governance requires the active participation of institutional leaders, faculty members, research offices, graduate schools, ethics committees, and students in creating an environment where responsible AI use is consistently practiced, monitored, and supported. In this conception, ethical governance becomes a shared organizational commitment rather than merely an individual ethical choice.

Participants consistently described the institution as playing a central role in establishing ethical expectations, providing guidance, and fostering a culture of accountability. They argued that without coordinated institutional efforts, individual interpretations of ethical AI use would inevitably vary, resulting in inconsistent academic practices across graduate programs.

*"Ethical AI governance should never depend solely on the integrity of individual faculty members. Institutions must establish a common direction that everyone follows." (Participant 2)*

*"Graduate schools, research offices, and faculty should work together because ethical governance is everyone's responsibility, not only the student's responsibility." (Participant 8)*

*"Institutional leaders should provide guidance before problems occur. Governance is more effective when it educates rather than simply disciplines." (Participant 13)*

Several participants emphasized that graduate education institutions should create collaborative structures involving academic administrators, faculty members, ethics committees, information technology offices, and research leaders to develop coherent AI governance practices. Rather than relying exclusively on detection tools or disciplinary measures, participants advocated proactive initiatives such as faculty development programs, AI literacy training, policy orientation, and continuous dialogue among stakeholders. These initiatives were viewed as essential in fostering a culture of responsible AI use throughout graduate education.

From the perspective of deontological ethics, this conception extends moral responsibility beyond individuals to institutions themselves. Participants believed that higher education institutions possess an ethical duty to establish clear policies, promote fairness, ensure consistency, and protect the integrity of graduate education. Institutional leadership was therefore viewed not merely as an administrative function but as a moral obligation to uphold academic values and create environments where ethical conduct is supported and reinforced. The institution becomes accountable for ensuring that governance structures enable individuals to fulfill their ethical responsibilities.

Viewed through consequentialist ethics, participants likewise recognized that collaborative governance produces more desirable educational outcomes than isolated individual decision-making. Institutions that actively coordinate policies, training, and stakeholder engagement are more likely to reduce ethical ambiguities, promote consistency across academic programs, strengthen public trust, and encourage responsible innovation. Conversely, fragmented governance characterized by inconsistent expectations may create confusion, inequitable treatment of students, and diminished confidence in institutional academic standards. Thus, shared responsibility was perceived as a practical strategy for maximizing the collective benefits of AI while minimizing institutional risks.

These findings align with UNESCO's (2023) recommendation that AI governance should be based upon collaborative institutional ecosystems involving educators, administrators, policymakers, and learners. UNESCO emphasizes that responsible AI implementation requires shared accountability among stakeholders rather than assigning responsibility to individual users alone. Similarly, the European Commission (2019) identified accountability, transparency, and organizational oversight as fundamental characteristics of trustworthy AI governance. Holmes et al. (2022) further argue that higher education institutions should adopt whole-of-institution approaches that integrate leadership, policy development, faculty capacity building, and ethical oversight into AI governance frameworks.

The current investigation broadens this perspective by demonstrating that graduate education leaders conceptualize institutional responsibility as a collaborative governance system involving multiple organizational units working collectively toward ethical AI implementation. This progression reflects a broader organizational understanding of governance that transcends classroom practice and encompasses institutional leadership, policy coordination, and stakeholder engagement.

The emergence of this category illustrates a substantial expansion of awareness within the outcome space. Whereas the previous categories emphasized ethical awareness and academic integrity at the individual level, this conception recognizes that ethical governance ultimately depends upon collective institutional commitment. Participants understood that ethical AI integration cannot be sustained solely through individual compliance; rather, it requires coordinated leadership, shared accountability, continuous communication, and organizational support. Consequently, ethical governance evolves from a personal ethical obligation into an institutional culture in which responsibility is collectively owned and actively practiced across all levels of graduate education.

#### **Category 4: AI as a Catalyst for Educational Transformation**

The fourth category of conception represents a transition from viewing ethical governance as primarily a protective mechanism toward understanding generative artificial intelligence as a catalyst for educational transformation. Participants recognized that ethical governance should not merely prevent misuse but should also enable graduate education institutions to maximize AI's transformative potential. Rather than perceiving governance as restrictive, they viewed it as an enabler of innovation that empowers institutions to improve research quality, instructional delivery, academic productivity, and organizational effectiveness while maintaining ethical standards. This conception reflects a broader institutional perspective in which AI is regarded as an essential driver of educational development rather than simply a technology requiring regulation.

Participants consistently emphasized that graduate education should proactively embrace AI to strengthen teaching, research, and knowledge generation. They argued that institutions that fail to responsibly integrate AI risk becoming less competitive in an increasingly digital academic environment. Ethical governance, therefore, should encourage innovation while ensuring that technological advancements remain aligned with the mission and values of graduate education.

*"Artificial intelligence is transforming higher education. Institutions should not be afraid of innovation but should learn how to govern it responsibly." (Participant 1)*

*"Our responsibility is not only to regulate AI but also to help faculty and students maximize its educational value." (Participant 6)*

*"Graduate education must prepare future researchers to work responsibly with AI because this technology will become part of their professional and academic lives." (Participant 10)*

Participants also described AI as a strategic educational resource capable of enhancing curriculum development, improving research productivity, facilitating interdisciplinary collaboration, strengthening institutional decision-making, and expanding access to learning opportunities. However, they consistently emphasized that these benefits can only be realized when innovation is accompanied by appropriate ethical safeguards, faculty development, and institutional leadership.

From a deontological perspective, this conception maintains that educational transformation must remain anchored on enduring ethical principles. Participants asserted that institutions have a moral obligation to ensure that technological innovation does not undermine academic integrity, intellectual honesty, or respect for human dignity. Innovation was therefore viewed not as an independent goal but as an ethical responsibility that should contribute positively to educational quality and societal development. Institutional leaders were perceived as having a duty to create environments where technological progress serves human learning rather than replacing authentic intellectual engagement.

Viewed through consequentialist ethics, participants focused on the positive educational outcomes that responsible AI integration could generate. They believed that when supported by effective governance, AI could enhance research efficiency, improve instructional quality, strengthen evidence-based decision-making, expand access to academic resources, and increase institutional competitiveness. Conversely, failure to embrace AI responsibly could hinder educational innovation, reduce graduate competitiveness, and limit opportunities for academic advancement. Participants therefore regarded ethical governance as a mechanism for maximizing the benefits of AI while mitigating its associated risks.

The findings are consistent with Holmes et al. (2022), who argued that artificial intelligence has the potential to transform education by supporting personalized learning, improving instructional practices, and enhancing institutional effectiveness when implemented responsibly. Similarly, UNESCO (2023) emphasized that AI governance should promote innovation while ensuring that technological development remains human-centered, inclusive, and ethically accountable. Bozkurt et al. (2023) likewise observed that generative AI has become a transformative educational technology whose value depends on institutions' capacity to integrate innovation with responsible governance rather than viewing technological advancement and ethical responsibility as competing priorities.

The present findings further extend the preliminary phenomenographic investigation conducted by Lunar et.al, (2026). In the earlier study, faculty members acknowledged generative AI as a valuable pedagogical support tool capable of enhancing learning, brainstorming, academic writing, and research productivity when used transparently and responsibly. Faculty participants emphasized that AI should augment rather than replace human cognition. The current investigation broadens this understanding by demonstrating that graduate education leaders conceptualize AI not merely as a pedagogical support technology but as a transformative institutional resource capable of reshaping graduate education itself. This expanded conception reflects a shift from classroom-level instructional innovation toward institution-wide educational transformation driven by ethical leadership and strategic governance.

The emergence of this category signifies another progression within the phenomenographic outcome space. Earlier conceptions emphasized ethical awareness, academic integrity, and shared institutional responsibility primarily as mechanisms for regulating AI use. In contrast, this category recognizes governance as a strategic enabler of educational transformation. Participants understood that responsible AI governance should not simply prevent unethical behavior but should actively facilitate innovation, organizational learning, and continuous institutional improvement. Consequently, ethical governance evolves beyond regulatory compliance and becomes a proactive leadership strategy that empowers graduate education institutions to responsibly harness the transformative potential of generative artificial intelligence while preserving the fundamental values of higher education.



## Category 5: AI as a Technology Requiring Balanced Ethical Judgment

The fifth category of conception reflects a more sophisticated understanding of ethical governance in which participants viewed generative artificial intelligence as a technology requiring balanced ethical judgment. Unlike the preceding categories that emphasized ethical awareness, academic integrity, institutional responsibility, and educational transformation individually, participants in this category recognized that responsible governance requires the integration of multiple ethical perspectives. They argued that neither strict adherence to rules nor sole consideration of educational outcomes is sufficient in governing AI. Instead, ethical decision-making should involve balancing duty-based principles with pragmatic evaluations of consequences. This conception illustrates a higher level of ethical reasoning in which institutional leaders continuously weigh competing values before determining appropriate courses of action.

Participants acknowledged that AI-related decisions are rarely absolute. They emphasized that the ethical acceptability of AI depends upon the educational context, intended purpose, potential consequences, institutional values, and the extent to which transparency and accountability are maintained. Consequently, governance should remain flexible enough to respond to evolving technological developments without compromising fundamental academic principles.

*"There is no single answer to every AI-related ethical issue. Leaders must balance institutional policies with the realities of graduate education." (Participant 4)*

*"Some uses of AI clearly improve learning, while others undermine scholarship. Ethical leadership requires sound judgment rather than rigid rules." (Participant 9)*

*"Good governance means asking not only whether something is allowed, but whether it is educationally and ethically appropriate in a particular situation." (Participant 14)*

Several participants emphasized that institutional leaders should avoid both extremes of unrestricted AI adoption and excessive prohibition. Instead, they advocated contextual decision-making that carefully considers educational objectives, academic standards, stakeholder welfare, and long-term institutional implications. Participants regarded ethical judgment as a dynamic process that requires continuous reflection as AI technologies evolve.

From the perspective of deontological ethics, participants maintained that certain ethical principles—including honesty, transparency, fairness, and academic integrity—must remain constant regardless of technological advancement. These principles serve as the moral boundaries within which AI may be responsibly utilized. Participants argued that institutional leaders have a duty to ensure that decisions never violate these fundamental ethical obligations even when AI offers substantial educational advantages.

Conversely, consequentialist reasoning was equally evident in participants' conceptions. They believed that governance decisions should also consider the educational benefits, institutional impacts, and potential risks associated with AI implementation. Participants

recognized that responsible governance involves maximizing opportunities for innovation, research productivity, and learning effectiveness while minimizing risks related to plagiarism, misinformation, overdependence, inequitable access, and diminished critical thinking. Thus, ethical governance was understood as an ongoing balancing process between protecting institutional values and promoting educational advancement.

These findings closely align with Floridi and Cowls' (2019) ethical framework for artificial intelligence, which argues that AI governance should reconcile multiple ethical principles rather than rely upon a single moral philosophy. Likewise, UNESCO (2023) advocates a balanced governance approach that integrates accountability, human oversight, transparency, fairness, and innovation to ensure responsible AI implementation in education. Holmes et al. (2022) similarly emphasized that educational institutions should adopt flexible governance systems capable of adapting to rapidly evolving technologies while maintaining ethical consistency and public trust.

The present investigation extends instructional-level conceptions to institutional leadership by demonstrating that graduate education leaders conceptualize balanced ethical judgment as a governance competency. Rather than merely evaluating classroom practices, participants emphasized that institutional leaders must continually reconcile ethical principles, educational objectives, stakeholder expectations, and organizational realities when formulating AI-related policies. This broader conception illustrates the evolution of ethical reasoning from individual instructional decisions toward institution-wide governance and strategic leadership.

The emergence of this category represents one of the highest levels of conceptual complexity within the outcome space. Earlier categories focused on awareness, integrity, responsibility, and innovation as distinct aspects of governance. In contrast, this conception integrates these elements through balanced ethical judgment, acknowledging that effective AI governance requires continuous reflection, contextual sensitivity, and thoughtful decision-making. Participants recognized that no single ethical framework adequately addresses the complexities introduced by generative AI. Instead, responsible governance requires institutional leaders to harmonize deontological commitments to academic integrity with consequentialist considerations of educational benefit, thereby enabling graduate institutions to respond responsibly and adaptively to the opportunities and challenges presented by artificial intelligence.

### **Category 6: AI as a Strategic Resource Requiring Adaptive Governance**

The sixth and most comprehensive category of conception represents the highest level of understanding identified in the phenomenographic outcome space. Participants viewed generative artificial intelligence not merely as an instructional technology or an innovation requiring ethical oversight, but as a strategic institutional resource whose responsible utilization depends upon adaptive governance. Unlike the preceding categories that focused on individual ethics, academic integrity, institutional responsibility, innovation, or balanced ethical judgment, this conception emphasized the capacity of higher education institutions to continuously evolve their governance

structures in response to rapidly advancing AI technologies. Participants recognized that AI governance is not a static policy but an ongoing institutional process requiring strategic leadership, organizational learning, continuous policy refinement, stakeholder engagement, accountability, transparency, and human oversight.

Participants consistently described AI governance as an institutional leadership function that must anticipate future developments rather than merely respond to emerging ethical issues. They emphasized that because AI technologies continue to evolve rapidly, governance frameworks must likewise remain dynamic, evidence-based, and responsive to changing educational contexts.

*"Artificial intelligence is changing faster than our policies. Governance should therefore be adaptive, allowing institutions to revise guidelines as technology continues to evolve." (Participant 5)*

*"Good governance is not simply having a policy. It means continuously evaluating whether our policies remain relevant, ethical, and effective." (Participant 8)*

*"Graduate education institutions should prepare not only for today's AI but also for future technologies that we cannot yet fully anticipate." (Participant 12)*

Participants further emphasized that adaptive governance requires collaboration among institutional leaders, research offices, graduate schools, faculty members, ethics committees, information technology specialists, and policymakers. Rather than relying solely on written policies, participants advocated governance systems supported by continuous professional development, periodic policy reviews, institutional monitoring, stakeholder consultation, and evidence-based decision-making. They viewed governance as an iterative process that evolves alongside technological innovation while consistently preserving the ethical principles of graduate education.

From the perspective of deontological ethics, participants believed that institutional leaders possess an enduring moral duty to protect academic integrity, fairness, transparency, and accountability regardless of future technological developments. Although governance mechanisms may evolve, these ethical principles remain constant and should serve as the normative foundation for all institutional decisions. Participants argued that adaptive governance should never compromise the institution's ethical obligations but instead strengthen its capacity to uphold these principles amid technological change.

From a consequentialist perspective, adaptive governance was viewed as essential for ensuring that AI continues to generate positive educational outcomes while minimizing emerging risks. Participants recognized that rigid governance structures may quickly become obsolete as AI capabilities expand. Consequently, institutions should continuously evaluate the effectiveness of their policies, monitor technological developments, assess unintended consequences, and revise governance strategies accordingly. Adaptive governance was therefore understood as a proactive approach that

enables institutions to maximize innovation, strengthen research quality, enhance educational competitiveness, and sustain public trust in graduate education.

These findings are strongly supported by international literature advocating adaptive and human-centered AI governance. UNESCO (2023) emphasized that AI governance frameworks should remain flexible, continuously evolving to address emerging ethical, legal, and educational challenges while maintaining transparency, accountability, and human oversight. Similarly, the OECD (2024) highlighted adaptive governance as an essential characteristic of trustworthy AI ecosystems, encouraging educational institutions to adopt governance systems capable of responding to technological uncertainty through ongoing evaluation and stakeholder collaboration. The European Commission (2019) likewise emphasized that trustworthy AI requires continuous monitoring, accountability mechanisms, and institutional adaptability rather than static regulatory compliance. Holmes et al. (2022) further argued that sustainable AI governance in higher education depends upon leadership that integrates technological innovation with continuous organizational learning and ethical stewardship.

While the preliminary study by Lunar, et.al (2026) concluded that faculty members regarded institutional policies as moral and organizational imperatives necessary for responsible AI integration, participants primarily emphasized the need for clear guidelines, transparency, and consistency across academic programs. The current investigation advances this understanding by demonstrating that graduate education leaders no longer perceive governance merely as policy formulation but as an adaptive strategic function that requires continuous institutional learning, collaborative leadership, and organizational resilience. Rather than advocating static policies, participants envisioned governance systems capable of evolving alongside technological developments while preserving the ethical mission of graduate education. This represents the highest level of conceptual development within the outcome space because governance is understood not simply as institutional regulation but as strategic leadership that continually balances innovation, accountability, ethical responsibility, and organizational sustainability.

The emergence of this final category completes the hierarchical progression of conceptions identified in the study. Participants' understanding evolved from recognizing AI as an innovation requiring ethical awareness, to emphasizing academic integrity, institutional responsibility, educational transformation, and balanced ethical judgment, ultimately culminating in adaptive governance as the most comprehensive conception of ethical AI governance. This progression illustrates that effective governance is neither solely technological nor purely ethical; rather, it is a dynamic institutional capability that integrates moral principles, educational objectives, strategic leadership, and continuous organizational adaptation. The findings therefore demonstrate that ethical governance of generative AI in graduate education requires institutions to move beyond compliance-based regulation toward adaptive governance systems characterized by accountability, transparency, human oversight, evidence-informed decision-making, and responsible innovation. These higher-order conceptions collectively provide the conceptual foundation for the Ethical Governance Framework for Generative AI in Graduate Education proposed by this study, offering graduate education institutions a strategic

roadmap for sustaining ethical excellence amid the continuing evolution of artificial intelligence.

## **Implications**

The findings of this phenomenographic study demonstrate that ethical governance of generative artificial intelligence in graduate education is a multidimensional and evolving institutional responsibility rather than merely a matter of technological regulation or individual ethical behavior. The hierarchical outcome space revealed that graduate education leaders conceptualize AI governance through progressively sophisticated understandings, beginning with ethical awareness and culminating in adaptive institutional governance characterized by accountability, transparency, human oversight, and responsible innovation. This progression indicates that effective governance requires institutions to move beyond compliance-oriented approaches toward dynamic governance systems capable of responding to the rapidly changing landscape of artificial intelligence.

The study likewise affirms the complementary roles of deontological and consequentialist ethics in guiding institutional decision-making. Participants consistently emphasized that enduring ethical principles—including academic integrity, honesty, transparency, fairness, and intellectual responsibility—must remain the foundation of AI governance regardless of technological advancement. Simultaneously, they recognized that governance decisions should consider the educational benefits, organizational impacts, and long-term consequences of AI integration. These findings suggest that effective governance cannot rely exclusively on either duty-based or outcome-based reasoning but must instead integrate both ethical perspectives in institutional policy formulation and leadership practice.

From an institutional perspective, the findings underscore the need for graduate schools to establish comprehensive governance structures rather than isolated policies on AI use. Governance should encompass institutional vision, strategic leadership, policy development, faculty capability building, student AI literacy, ethical oversight, continuous monitoring, and periodic policy review. Such a comprehensive approach ensures that AI becomes a strategic educational resource that strengthens graduate education without compromising its scholarly and ethical foundations.

The findings also carry important implications for educational leadership. Graduate deans, research directors, ethics committees, and academic administrators emerge as key actors in fostering cultures of responsible AI use. Their responsibilities extend beyond policy enforcement to include promoting ethical awareness, facilitating stakeholder engagement, supporting faculty development, encouraging responsible innovation, and ensuring organizational accountability. Consequently, leadership preparation programs should incorporate AI governance competencies as an essential component of educational leadership in the digital age.

Finally, the study contributes to the growing body of knowledge on AI governance in higher education by extending existing research from instructional-level concerns to institution-wide governance. The proposed Ethical Governance Framework for Generative AI in Graduate Education provides an evidence-based model that may assist graduate institutions in developing adaptive governance systems capable of balancing technological innovation with academic integrity, institutional accountability, and ethical responsibility. The framework offers practical guidance for policy formulation while contributing to the broader discourse on responsible AI integration in higher education within the Philippine context and beyond.

## **Future Directions**

The findings of this study point to several important directions for future policy, practice, and research that may further strengthen the ethical governance of generative artificial intelligence in graduate education.

First, graduate education institutions should develop comprehensive and adaptive AI governance policies that clearly define acceptable AI use in teaching, research, academic writing, thesis preparation, assessment, and administrative functions. These policies should emphasize transparency, disclosure, accountability, human oversight, and responsible innovation while remaining flexible enough to accommodate future technological developments.

Second, higher education institutions should establish structured faculty and student development programs on AI ethics and responsible AI use. Continuous professional development initiatives should focus not only on the technical capabilities of generative AI but also on ethical reasoning, academic integrity, intellectual property, data privacy, prompt engineering, critical evaluation of AI-generated outputs, and responsible research practices. Such initiatives will strengthen institutional AI literacy and cultivate a culture of ethical innovation.

Third, institutional leaders should create interdisciplinary AI governance committees composed of graduate deans, research directors, ethics committee members, faculty representatives, legal experts, information technology specialists, and student representatives. These committees should periodically evaluate institutional AI practices, monitor emerging technologies, review governance policies, and recommend evidence-informed improvements that align with evolving ethical standards and educational priorities.

Fourth, future research should examine the implementation and effectiveness of the proposed Ethical Governance Framework for Generative AI in Graduate Education across diverse institutional contexts. Mixed-methods, longitudinal, and comparative studies may evaluate its influence on institutional policy development, academic integrity, faculty practices, research productivity, and student learning outcomes in both public and private higher education institutions.

Fifth, future investigations should expand the range of stakeholders included in AI governance research by exploring the perspectives of graduate students, thesis advisers, university executives, quality assurance officers, information technology personnel, ethics review boards, and policymakers. Such studies would provide a more holistic understanding of institutional AI governance and contribute to the refinement of comprehensive governance models.

Finally, considering the rapid evolution of artificial intelligence, future scholarship should continue examining emerging ethical issues associated with advanced AI technologies, including autonomous research agents, multimodal generative AI, AI-assisted scientific discovery, algorithmic accountability, intellectual property rights, data governance, and human-AI collaboration. Continuous research in these areas will ensure that governance frameworks remain responsive, sustainable, and aligned with the evolving mission of graduate education in the age of artificial intelligence.

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# **DEVELOPMENT AND ACCEPTABILITY OF SOCIAL AND EMOTIONAL LEARNING (SEL) – BASED ACTIVITIES IN ARAL-READING FOR ENHANCING STUDENT ENGAGEMENT IN ELEMENTARY SCHOOLS**

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## **Abstract**

This study developed and determined the acceptability of Social and Emotional Learning (SEL)-Based Activities for integration into the Academic Recovery and Accessible Learning (ARAL)-Reading Program to enhance student engagement among elementary pupils in the East District of Ibajay, Aklan. A mixed-methods descriptive-developmental research design with an embedded qualitative component was employed. Quantitative data were gathered from 93 respondents composed of teachers, school heads, and ARAL coordinators, while qualitative data were obtained through interviews with 15 purposively selected key informants. Teacher observations assessed student engagement in terms of behavioral, emotional, and cognitive dimensions, while developed materials were evaluated based on content, format, and presentation and organization. Findings revealed that pupils demonstrated a generally high level of engagement, with behavioral engagement obtaining the highest rating, followed by emotional and cognitive engagement. Based on the identified needs, seven SEL-based activities presented through educational comic strips were developed to strengthen resilience, self-regulation, and reading engagement. The developed activities were rated Very Highly Acceptable across all evaluation dimensions, indicating their relevance, appropriateness, and usability for ARAL-Reading implementation. Qualitative findings further emphasized the importance of teacher professional development, adequate resources, accountability mechanisms, and whole-school collaboration for sustainable implementation. The study concludes that integrating SEL-based activities into the ARAL-Reading Program offers a practical and acceptable approach to promoting both literacy development and socio-emotional learning among Grades 4 to 6 pupils.

**Keywords:** ARAL-Reading Program, Social and Emotional Learning (SEL), Student Engagement, Reading Literacy, Mixed-Methods Research

## **Introduction**

Education in the early years serves as a critical period for shaping learners' foundational skills, particularly in reading, which is essential for all subsequent learning. Despite various literacy interventions implemented in elementary schools, a significant number of learners continue to experience reading difficulties accompanied by low motivation, poor classroom participation, reading anxiety, and limited confidence. These challenges

reduce learners' engagement during reading activities and hinder the effectiveness of academic recovery programs designed to improve foundational literacy skills. Beyond cognitive development, learners' ability to engage meaningfully in reading activities is significantly influenced by their social and emotional competencies. In contemporary educational settings, increasing attention is being given to approaches that address not only academic gaps but also the emotional and behavioral factors that affect learning. Social and Emotional Learning (SEL) has increasingly been recognized as a critical foundation for effective teaching and learning, particularly in the elementary years. SEL refers to the process through which learners develop self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2020). These competencies are essential in enabling young learners to participate actively in classroom activities, manage academic challenges, and sustain engagement in learning tasks. In reading instruction, where early experiences often shape learners' long-term attitudes toward literacy, SEL plays a vital role in fostering confidence, motivation, and a positive disposition toward learning.

Globally, the integration of SEL into academic programs has gained renewed importance in the context of learning recovery. International reports highlight that many children experienced not only academic learning loss but also increased emotional stress and reduced motivation due to prolonged disruptions in schooling (UNESCO, 2021). In early-grade literacy, these challenges often manifest as reading anxiety, low self-confidence, and disengagement, especially among learners who struggle with basic reading skills. Consequently, education systems worldwide now emphasize the need for recovery initiatives that address both academic competencies and socio-emotional well-being. Despite these global initiatives, many recovery programs continue to prioritize academic remediation while providing limited structured support for learners' social and emotional development. As a result, student disengagement, low confidence, and emotional withdrawal remain persistent barriers to literacy improvement, particularly among struggling readers. This situation underscores the need for interventions that intentionally integrate social and emotional learning with reading instruction.

In the Philippines, these global concerns are reflected in national efforts to address persistent gaps in reading proficiency among elementary learners.

The Department of Education (DepEd) implemented the Academic Recovery and Accessible Learning (ARAL) Program, with ARAL-Reading as a major intervention aimed at strengthening foundational literacy skills among learners from Kindergarten to Grade 10. The program provides structured and targeted reading support to help learners who are below grade-level expectations recover lost competencies and progress toward expected learning standards. Although the ARAL Program provides structured reading interventions, many learners continue to demonstrate inconsistent participation, reading anxiety, low self-confidence, and limited persistence during reading sessions. These concerns suggest that improving reading proficiency requires not only cognitive remediation but also systematic support for learners' social and emotional needs.

Recent educational research underscores the strong connection between Social and Emotional Learning (SEL) and student engagement, particularly in literacy instruction. Jones and Kahn (2017) explain that social, emotional, and cognitive skills develop in an integrated manner, suggesting that academic recovery efforts are more effective when learners' emotional and social needs are addressed alongside cognitive instruction. Similarly, OECD (2018) reports that students who feel emotionally supported and socially connected in school demonstrate higher levels of attention, participation, and persistence. However, in the Philippine context, persistent challenges in reading proficiency among elementary learners continue to be reported, particularly among those identified as struggling readers in intervention programs. The Department of Education, through its reading assessments and recovery initiatives such as the ARAL–Reading Program, has acknowledged that many learners not only experience difficulty in decoding and comprehension but also exhibit low confidence, anxiety, and disengagement during reading activities. These issues are especially evident among Kindergarten to Grade 6 learners who are still developing emotional regulation and social skills necessary for sustained academic engagement. This situation highlights the need to integrate SEL into reading interventions to address both the academic and socio-emotional dimensions of learner engagement.

Despite the intent of the ARAL-Reading Program, challenges in learner engagement continue to be observed during its implementation. Teachers report that some pupils, particularly those who struggle with reading, show limited participation, low motivation, and emotional withdrawal during ARAL-Reading sessions. These challenges are evident across grade levels in the elementary stage, from Kindergarten to Grade 6, suggesting that reading difficulties are often intertwined with socio-emotional factors such as fear of making mistakes, low self-efficacy, and difficulty managing frustration.

At the local level, particularly in selected public elementary schools in the District of Ibajay, Western part of the Province of Aklan, similar concerns have been noted. Teachers implementing ARAL-Reading have observed that many learners require not only explicit instruction in reading skills but also emotional support and positive social interaction to remain engaged. Many pupils hesitate to participate in oral reading activities, become discouraged after making mistakes, and demonstrate low persistence when confronted with difficult reading tasks. These classroom realities suggest that existing interventions may not sufficiently address the socio-emotional barriers affecting reading engagement.

Integrating Social and Emotional Learning (SEL)-based activities into the ARAL-Reading Program offers a viable approach to enhancing learner engagement. Recent studies suggest that embedding SEL within academic instruction helps learners develop confidence, resilience, and positive attitudes toward learning tasks, which in turn support improved academic outcomes (Taylor et al., 2017; OECD, 2018). In the context of ARAL-Reading, SEL-based activities may help learners view reading as an achievable and

meaningful activity, thereby increasing their willingness to participate and persist across reading sessions.

However, despite the growing recognition of SEL's importance, existing studies have primarily focused on the relationship between SEL and general academic performance or classroom behavior, while limited attention has been given to the development of structured SEL-based activities specifically designed for integration into the ARAL-Reading Program. Furthermore, empirical studies examining the acceptability of such activities among teachers and school heads in public elementary schools remain scarce, particularly in rural districts such as Ibajay, Aklan. Likewise, schools often lack localized school-based policies that systematically guide the integration of SEL into academic recovery initiatives.

In light of these considerations, this study focuses on the development and acceptability of Social and Emotional Learning (SEL)-based activities designed to support the implementation of the ARAL-Reading Program in elementary schools. Specifically, it aims to develop structured and contextually appropriate SEL-based activities that respond to the socio-emotional and academic needs of Kindergarten to Grade 6 learners. Furthermore, the study seeks to assess the acceptability of these developed activities among teachers and school heads in terms of content, format, and presentation and organization. By addressing both the developmental and evaluative dimensions, this study intends to provide an evidence-based intervention that enhances student engagement during ARAL-Reading sessions. Ultimately, the findings of this study are expected to inform the formulation of school-based policies that support the systematic integration of SEL into academic recovery programs, thereby contributing to more responsive, sustainable, and learner-centered reading interventions in elementary education. By developing and evaluating contextually appropriate SEL-based activities, this study seeks to address the existing gap between literacy remediation and socio-emotional support, providing educators with evidence-based instructional materials that can enhance student engagement and strengthen the effectiveness of the ARAL-Reading Program.

## **Theoretical Framework**

This study is anchored on the Social and Emotional Learning (SEL) Framework of the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2020) and the Student Engagement Theory advanced by Fredricks, Blumenfeld, and Paris (2016). These complementary theories provide a sound theoretical basis for examining how Social and Emotional Learning (SEL)-based activities can be developed, evaluated, and institutionalized to enhance student engagement within the Academic Recovery and Accessible Learning (ARAL) - Reading Program.

The CASEL SEL Framework posits that learning is most effective when students are supported across five interrelated competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2020). These

competencies are foundational in helping learners understand their emotions, regulate behavior, build positive relationships, and make constructive choices in learning situations. In the context of elementary reading instruction, these competencies are particularly important, as young learners who struggle with reading often experience anxiety, frustration, and low confidence, factors that negatively affect participation and persistence.

The Student Engagement Theory complements the SEL framework by explaining how learners' involvement in learning occurs across three dimensions: behavioral, emotional, and cognitive engagement (Fredricks et al., 2016). Behavioral engagement refers to learners' active participation in tasks and activities; emotional engagement reflects learners' interest, enjoyment, and sense of belonging; while cognitive engagement involves effort, persistence, and the use of learning strategies. This theory emphasizes that academic success is unlikely when any one of these dimensions is weak or absent.

These theories explain the core assumption of the study: student engagement in reading improves when social and emotional needs are addressed alongside academic instruction. Based on these theoretical foundations, the study consists of four interrelated variables. The first variable is student engagement during ARAL–Reading sessions, operationalized through behavioral, emotional, and cognitive engagement as explained by Student Engagement Theory. The second variable is the development of Social and Emotional Learning (SEL)-based activities grounded in the CASEL Framework to address the identified engagement needs. The third variable is the acceptability of the developed SEL-based activities as evaluated by teachers and school heads in terms of content, format, and presentation and organization. The fourth variable is the proposed school-based policy intended to sustain the implementation of SEL-based activities within the ARAL–Reading Program. These variables collectively explain how socio-emotional interventions can strengthen learner engagement and support sustainable literacy recovery.

The CASEL Social and Emotional Learning Framework and Student Engagement Theory complement one another in explaining the phenomenon under investigation. The CASEL Framework provides the social and emotional competencies that learners need to become confident, resilient, and self-regulated participants in reading activities. Student Engagement Theory explains how these competencies are manifested through learners' behavioral, emotional, and cognitive engagement. Consequently, the study assumes that integrating SEL-based activities into ARAL–Reading sessions strengthens learners' social and emotional competencies, which in turn enhances their overall engagement in reading tasks.

This theoretical integration is concretely illustrated in the Input–Process–Output (IPO) paradigm presented in Figure 1.

**Figure 1.** *Input-process-output (IPO) paradigm of the study*

| INPUT                                                                            | PROCESS                                                        | OUTPUT                                                                                                                                           |
|----------------------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Analysis of the Level of Engagement of Students during the ARAL-Reading Sessions | Developed Social and Emotional Learning (SEL)-Based Activities | Acceptability of the Social and Emotional Learning (SEL)-Based Activities                                                                        |
|                                                                                  |                                                                | Proposed School-Based Policy for the Sustainable Integration of Social and Emotional Learning (SEL)-Based Activities in the ARAL Reading Program |

As shown in Figure 1, the Input–Process–Output (IPO) Paradigm illustrates the theoretical relationship among the study variables. Guided by the CASEL Social and Emotional Learning Framework and Student Engagement Theory, the paradigm demonstrates that the identified level of student engagement serves as the basis for developing responsive SEL-based activities. The developed activities are then evaluated for their acceptability and translated into a proposed school-based policy to support their sustainable integration into the ARAL–Reading Program. The paradigm therefore reflects the sequential and interdependent relationship of the study variables rather than merely the procedural steps of the research.

The Input phase focuses on the analysis of the level of student engagement during ARAL-Reading sessions. Guided by Student Engagement Theory, this analysis examines learners’ behavioral, emotional, and cognitive engagement during existing ARAL-Reading implementation. This stage establishes the baseline condition of learner engagement and identifies specific engagement gaps that may be influenced by social and emotional factors such as anxiety, low motivation, or limited confidence in reading.

The Process phase involves the development of Social and Emotional Learning (SEL)-based activities grounded in the CASEL framework. Drawing from the identified engagement needs, SEL-based activities are designed to intentionally support learners’ emotional regulation, motivation, social interaction, and learning persistence during reading sessions. In this phase, SEL principles are not treated as separate lessons but are embedded within ARAL-Reading activities to create a supportive and learner-centered reading environment.

The Output phase consists of two interrelated outcomes. First is the acceptability of the developed SEL-based activities, as evaluated by teachers and school heads in terms of content, format, and presentation. This evaluation ensures that the activities are developmentally appropriate, aligned with DepEd learning standards, and feasible for

classroom implementation. Second is the proposed school-based policy for the implementation of the developed SEL-based activities, which serves to institutionalize SEL integration within the ARAL-Reading Program. This policy component reflects the understanding that sustained academic recovery requires organizational support, clear guidelines, and shared responsibility among school stakeholders.

Anchored in the CASEL SEL Framework and Student Engagement Theory, the IPO paradigm illustrates how SEL-based activities function as a bridge between reading instruction and student engagement. By systematically analyzing engagement, developing responsive SEL-based interventions, and ensuring their acceptability and policy support, the framework highlights that effective reading recovery is both an instructional and socio-emotional process.

The CASEL Framework and Student Engagement Theory are complementary. The CASEL Framework outlines the socio-emotional competencies that can be intentionally developed through classroom activities, while Student Engagement Theory explains the observable outcomes of these competencies in learners' behavioural, emotional, and cognitive participation. Thus, improvements in social and emotional competencies are theoretically expected to enhance student engagement during ARAL-Reading sessions.

The theoretical framework therefore, assumes that student engagement is not solely influenced by reading instruction but also by learners' social and emotional competencies. By intentionally embedding SEL principles into ARAL–Reading activities, learners are expected to become more behaviorally active, emotionally connected, and cognitively persistent during reading sessions. The acceptability of these activities and the establishment of school-based policies further support the institutionalization and sustainability of SEL integration in literacy instruction.

This theoretical framework affirms that enhancing student engagement in ARAL–Reading requires more than the remediation of reading skills. It necessitates the intentional integration of social and emotional learning that empowers learners to participate actively, feel emotionally safe, and persist cognitively in reading tasks. Through the interaction of the study variables, student engagement, SEL-based activities, acceptability of the developed materials, and school-based policy interventions, the framework supports a holistic, inclusive, and sustainable approach to literacy recovery in public elementary schools.

## **The Problem**

This study sought to determine the level of student engagement during Academic Recovery and Accessible Learning (ARAL)–Reading sessions, develop Social and Emotional Learning (SEL)-Based Activities responsive to learners' identified needs, evaluate the acceptability of the developed activities as assessed by teachers and school heads, and formulate school-based policy interventions to support their sustainable integration into the ARAL–Reading Program among elementary schools in the District of Ibajay, Province of Aklan, during the School Year 2026–2027.

## **Statement of the Problem**

This study aimed to develop and determine the acceptability of Social and Emotional Learning (SEL)-Based Activities for integration into the Academic Recovery and Accessible Learning (ARAL)–Reading Program in enhancing student engagement among elementary pupils in the District of Ibajay, Province of Aklan, during the School Year 2026–2027.

Specifically, this study sought to answer the following questions:

1. What is the current level of student engagement during ARAL-Reading sessions in terms of:
  1. Behavioral engagement,
  2. Emotional engagement, and
  3. Cognitive engagement?

How can Social and Emotional Learning (SEL)-Based Activities be developed to align with the needs and reading competencies of elementary learners?

To what extent are the developed Social and Emotional Learning (SEL)-Based Activities deemed acceptable by teachers and school heads in terms of:

1. Content,
2. Format; and
3. Presentation and organization?

What school-based policy interventions can be proposed to support the sustainable integration and implementation of the developed SEL-based activities within the ARAL–Reading Program

## **Method**

### **Research Design**

This study used a mixed-methods approach, specifically a descriptive-developmental design with an embedded qualitative component, to develop and check the acceptability of SEL-based activities for the ARAL-Reading Program. It aimed to see how these activities could help improve student engagement among elementary pupils in the District of Ibajay, Province of Aklan.

The quantitative component of the study utilized a descriptive survey method to determine the level of student engagement during ARAL–Reading sessions and to assess the acceptability of the developed SEL-Based Activities in terms of content, format, and presentation and organization. Descriptive research was appropriate because its primary purpose was to systematically describe existing conditions, perceptions, and behaviors



without manipulating variables, particularly in natural classroom settings (McMillan, 2016). This approach allowed the researcher to gather measurable data on student engagement and program acceptability while preserving the authenticity of actual learning environments (Creswell, 2014).

The developmental component of the study focused on the systematic design, validation, and refinement of SEL - Based Activities aligned with the objectives of the ARAL - Reading Program and the developmental needs of elementary learners. Developmental research designs were suitable for studies that aimed to create and improve instructional materials or interventions based on identified learner needs and contextual demands (Richey & Klein, 2007). The development process was guided by established Social and Emotional Learning frameworks that emphasized self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2020), as well as empirical evidence demonstrating the positive effects of SEL on student engagement and learning outcomes. (Durlak et al., 2011).

To address the fourth statement of the problem concerning the formulation of a school-based policy for implementing the developed SEL-Based Activities, the study embedded a qualitative approach through key informant interviews with principals or school heads, ARAL coordinators, reading teachers, the district supervisor, and the schools division superintendent of Aklan. Qualitative methods will be appropriate for policy-oriented research because they enable an in-depth exploration of participants' professional experiences, contextual realities, and implementation challenges (Patton, 2015). Qualitative methods were appropriate for policy-oriented research because they enabled an in-depth exploration of participants' professional experiences, contextual realities, and implementation challenges (Creswell & Plano Clark, 2018).

Colaizzi's method was used in analyzing the qualitative data gathered from the interviews. The responses were transcribed verbatim, read repeatedly to gain a comprehensive understanding, and then significant statements were extracted. Meanings were formulated from these statements and organized into clusters of themes. These themes were further refined, compared with the original transcripts, and validated to ensure accuracy and consistency. This process allowed the researcher to capture the essence of the participants' views regarding institutional readiness, sustainability concerns, and policy considerations for the ARAL - Reading Program.

The integration of quantitative and qualitative approaches strengthened the study through methodological triangulation, thereby enhancing the credibility and trustworthiness of the findings. Quantitative data yielded measurable indicators of student engagement and acceptability, while qualitative data explained how SEL-Based Activities influenced instructional practices and learner responses within the ARAL-Reading context. This integration aligned with the view that mixed-methods approaches are valuable in evaluating complex educational interventions, particularly those addressing learning recovery and learner well-being Creswell (2014).

The mixed-methods descriptive-developmental design was considered the most appropriate approach for this investigation because it supported the dual objectives of evaluating the effectiveness and acceptability of SEL-Based Activities and generating evidence-informed, school-based policy recommendations. By combining descriptive

measurement, systematic instructional development, and contextual qualitative analysis, the research design ensured that the findings were both empirically grounded and practically relevant to educators and policymakers involved in academic recovery initiatives such as the ARAL–Reading Program (Department of Education, 2024; UNESCO, 2021).

## **Research Setting**

The study was conducted in the District of Ibajay, Province of Aklan, Philippines, specifically covering the East District of Ibajay. Ibajay is a large municipality characterized by a mix of coastal, lowland, and upland barangays, with communities that vary in accessibility and socioeconomic conditions. This diversity provided an appropriate context for examining the implementation of the Academic Recovery and Accessible Learning (ARAL)–Reading Program across different school environments and learner populations.

The research involved seventeen (17) public elementary schools in the East District of Ibajay, namely: Antipolo Elementary School, Ondoy Elementary School, Batuan Elementary School, Aquino Elementary School, Ibajay Integrated School, Yawan Elementary School, Mabusao Elementary School, Laguinbanwa Elementary School, Ibajay Central School, Capilijan Elementary School, Agbago Elementary School, Sta. Cruz Elementary School, Tul-ang Elementary School, Agutay Elementary School, Malindog Elementary School, and Maloco Elementary School. These schools served learners from Kindergarten to Grade 6 level and represented a range of contexts, including poblacion-based schools and those situated in geographically dispersed barangays.

### **Figure 2. Geographical Location of the Public Elementary Schools Included in the Study**

All participating schools had officially implemented the ARAL–Reading Program as part of the Department of Education’s academic recovery initiatives. Each school had designated ARAL coordinators and trained teachers who facilitated structured reading intervention sessions for identified struggling readers. Standardized assessment tools such as the Philippine Informal Reading Inventory (Phil-IRI) and curriculum-based literacy assessments were utilized to ensure consistent identification of learners needing intervention across schools. Illustrated in Figure 1 shows the geographic distribution of the included schools.

The participating schools exhibited diverse learner profiles, often reflecting varying levels of access to learning resources, particularly among pupils from low-income households. These contextual differences provided a meaningful setting for analyzing learner engagement and for designing Social and Emotional Learning–based activities responsive to both academic and emotional needs. Overall, the East District of Ibajay offered an authentic educational landscape for investigating literacy interventions and school-based program implementation. The district and its public elementary schools provided a setting that allowed the study to capture classroom dynamics, school-level practices, and contextual factors relevant to literacy intervention and school-based policy formulation.

## Respondents of the Study

The respondents of this study were teachers, school principals/school heads, and coordinators from seventeen (17) selected public elementary schools in the District of Ibajay, Province of Aklan, during School Year 2026–2027. They were purposively selected because of their direct involvement in the implementation, supervision, evaluation, and policy direction of the Academic Recovery and Accessible Learning (ARAL)–Reading Program, particularly in the integration of Social and Emotional Learning (SEL)-based activities.

For the quantitative phase, 93 respondents participated in the evaluation of the developed SEL-based activities. This group was composed of 79 teachers, 11 school principals/school heads, and 3 coordinators. Their responses were used to assess the acceptability of the activities in terms of content, format, and presentation and organization. As implementers and school leaders, they provided informed judgments on the relevance, suitability, and practicality of the materials for the ARAL–Reading Program.

The teacher-respondents also provided observations on student engagement during the implementation of the ARAL–Reading sessions. Through their direct interaction with learners, they assessed pupils’ behavioral, emotional, and cognitive engagement, particularly their participation, attention, persistence, and responsiveness during reading interventions.

For the qualitative phase, key informant interviews were conducted to obtain deeper insights into the school-based policy interventions needed to support the sustainable integration of the developed SEL-based activities. Although the original plan included all 11 school principals/school heads and a larger number of ARAL teachers, only 15 key informants participated: 10 school principals/school heads and 5 ARAL teachers. Some school heads were unavailable due to administrative schedules, division and regional meetings, supervisory tasks, and other official responsibilities. Likewise, only five ARAL teachers were able to participate because others were handling multiple teaching assignments, attending professional development activities, or were unavailable during the scheduled interviews. Even so, the 15 key informants were considered sufficient because data saturation had already been reached, with participants giving repeated and meaningful insights about implementation, sustainability, and policy support.

**Table 1.** Distribution of Respondents

| <b>Respondents Category</b>    | <b>Number of Target Respondents</b> | <b>Participants in the Quantitative</b> | <b>Key Informants (Qualitative)</b> |
|--------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|
| Teachers                       | 79                                  | 79                                      | 5                                   |
| School Principals/School Heads | 11                                  | 11                                      | 10                                  |

|              |    |    |    |
|--------------|----|----|----|
| Coordinators | 3  | 3  | 0  |
| Total        | 93 | 79 | 15 |

Table 1 presents the distribution of respondents in the study. Among the 93 quantitative respondents, teachers formed the largest group, with 79 respondents, reflecting their direct role in implementing the reading interventions and SEL-based activities. School principal's/school heads accounted for 11 respondents, while coordinators comprised 3 respondents.

For the qualitative component, 15 key informants took part in the interviews, consisting of 10 school principal's/school heads and 5 ARAL teachers. Their participation provided a balanced perspective from both classroom and administrative levels, helping generate meaningful recommendations for the institutionalization of SEL-based activities in the ARAL–Reading Program.

The participation of teachers, school principals'/school heads, and coordinators ensured that the study captured the perspectives of those directly involved in planning, implementing, supervising, and evaluating reading interventions. Their collective input contributed to the development, validation, and proposed institutionalization of the SEL-based activities.

### **Data Gathering Tool**

This study employed three research instruments to gather the quantitative and qualitative data necessary for assessing student engagement during ARAL–Reading sessions, evaluating the acceptability of the developed Social and Emotional Learning (SEL) - based activities, and generating inputs for school-based policy interventions. These instruments include a Student Engagement Questionnaire, an SEL-Based Activities Acceptability Rating Scale, and a Semi-Structured Interview Guide.

The *Student Engagement Questionnaire* were administered to ARAL-Reading teachers to determine the level of student engagement during ARAL–Reading sessions. The instrument consists of two parts: Part I collects background information about the teacher-respondents, while Part II contains statements describing observable learner behaviors related to behavioral, emotional, and cognitive engagement. Responses were rated using a 5-point Likert scale with the following legends: 5 – Strongly Agree means Very High Engagement which means that the pupils is almost always actively involved, interested, and mentally invested in the activity, 4 – Agree means High Engagement which this means that the pupils is usually involved, attentive, and shows strong interest and effort, 3 – Moderately Agree means Moderate Engagement which means that the pupils participates occasionally, involvement and interest are average or inconsistent, 2 – Disagree means Low Engagement which means that the pupils rarely participates, show little interest, and exerts minimal effort, and 1 – Strongly Disagree means Very Low

Engagement which means that the pupils is almost never involved, shows very little or no interest, and is largely disengaged. The score ranges were interpreted as 4.21-5.00 Very High Engagement; 3.41-4.20 High Engagement; 2.61-3.40 Moderate Engagement; 1.81-2.60 Low Engagement; and 1.00-1.80 Very Low Engagement. These indicators were developed based on Student Engagement Theory and supported by related literature on reading engagement.

The researcher developed or designed an *SEL-Based Activities* specifically for the ARAL–Reading Program. The development process began by analyzing the results of the Student Engagement Questionnaire to identify areas where student engagement is lowest. These lowest-rated dimensions of engagement (whether behavioral, emotional, or cognitive) served as the primary focus for the SEL-based activities, ensuring that the interventions address the most critical needs of the learners. In designing the activities, the researcher carefully reviews the CASEL Social and Emotional Learning Framework and existing Department of Education guidelines to ensure alignment with key social-emotional competencies and literacy objectives. The activities were systematically structured to develop specific SEL skills, tailored to the developmental levels of kindergarten to Grade 6 learners, and integrated seamlessly into ARAL–Reading sessions. Draft activities were undergoing iterative refinement based on expert feedback and pedagogical standards, guaranteeing that they are both educationally sound and feasible for classroom implementation. Before the implementation of the study, the developed SEL-Based Activities and all research instruments underwent content validation by five (5) validators composed of school heads and experienced ARAL–Reading teachers. The validators evaluated the developed activities and research instruments in terms of content accuracy, relevance, clarity, developmental appropriateness, alignment with the objectives of the ARAL–Reading Program, and suitability for the target learners. Their comments, recommendations, and suggested revisions served as the basis for improving the activities and research instruments before their final administration.

The *SEL-Based Activities Acceptability Rating Scale* was used to evaluate the developed SEL-based instructional materials. This instrument was answered by selected ARAL – Reading teachers and school heads and is organized into three sections: content, format, and presentation. Each section contained indicators that assessed the relevance, clarity, developmental appropriateness, and usability of the activities. Responses were rated using a five-point Likert scale with the following interpretation: 5 – Highly Acceptable, 4.21–5.00; 4 – Acceptable, 3.41–4.20; 3 – Moderately Acceptable, 2.61–3.40; 2 – Slightly Acceptable, 1.81–2.60; and 1 – Not Acceptable, 1.00–1.80.

The *Semi-Structured Interview Guide* was administered to 15 key informants, including school principals or school heads, and ARAL–Reading teachers. Although the original plan also included the Coordinators, District Supervisor and the Schools Division Superintendent, they were not available during the interview period and were therefore not included in the actual conduct of the interview. In total, five (5) ARAL–Reading

teachers and ten (10) school heads participated in the interview sessions. This instrument was included to gather in-depth explanations and contextual insights that could not be fully captured through survey questionnaires alone, particularly in relation to implementation challenges, best practices, and policy considerations for integrating SEL-based activities into the ARAL–Reading Program.

All research instruments and the developed SEL-Based Activities were researcher-developed and aligned with the objectives of the study, the CASEL Social and Emotional Learning Framework, Student Engagement Theory, and the existing Department of Education guidelines for the ARAL–Reading Program. Prior to data collection, these instruments and instructional materials underwent content validation by five (5) validators composed of school heads and experienced ARAL–Reading teachers. The validators assessed the instruments and developed activities in terms of content validity, relevance, clarity, appropriateness, and alignment with the study objectives. Their recommendations were carefully incorporated through revisions in the wording of questionnaire items, organization of the activities, and presentation of the instructional materials. After all suggested modifications had been made, the research instruments and the developed SEL-Based Activities were considered valid and suitable for implementation in the study.

### **Data Gathering Procedure**

The data gathering procedure was carried out in a systematic and ethical manner to ensure the validity, reliability, and credibility of the data collected. Prior to the conduct of the study, the researcher secured approval from the appropriate authorities, including the Schools Division Office and the school heads of the selected public elementary schools. Upon approval, coordination was undertaken with school administrators and ARAL–Reading coordinators to explain the purpose of the study, the research instruments to be used, and the proposed schedule of data collection.

### **Statistical Treatment of Data**

The data gathered in this study were analyzed using appropriate statistical and qualitative techniques to answer each research problem. Both quantitative and qualitative data were utilized to provide a comprehensive understanding of student engagement, the acceptability of the developed Social and Emotional Learning (SEL)-based activities, and the proposed school-based policy interventions.

To determine the level of student engagement during ARAL-Reading sessions, the responses from the Student Engagement Questionnaire were analyzed using the weighted mean. Mean scores were computed for each item and for each engagement dimension, namely behavioral, emotional, and cognitive engagement. The computed means were interpreted using the established descriptive scale to determine whether the level of engagement was very high, high, moderate, low, or very low. The engagement dimensions were likewise ranked according to their weighted mean, with Rank 1 representing the highest level of engagement and the last rank indicating the lowest level of engagement.

The weighted mean results obtained from the Student Engagement Questionnaire served as the basis for the development of the Social and Emotional Learning (SEL)-Based Activities. The engagement dimensions and indicators with the lowest mean scores were identified as priority areas for intervention. These findings guided the design and development of the seven SEL-based activities to ensure that the instructional materials addressed the identified behavioral, emotional, and cognitive engagement needs of learners during ARAL–Reading sessions.

To determine the acceptability of the developed SEL-based activities, the responses from the SEL-Based Activities Acceptability Rating Scale were analyzed using the weighted mean. Mean scores were computed for the three evaluation criteria: content, format, and presentation and organization. The computed means were interpreted using the established acceptability scale to determine whether the activities were very highly acceptable, highly acceptable, moderately acceptable, slightly acceptable, or not acceptable. The evaluation criteria were also ranked according to their weighted mean to identify the strongest and least-rated aspects of the developed instructional materials.

The qualitative data gathered through the semi-structured interviews were analyzed using thematic analysis. Interview responses were transcribed, coded, categorized, and organized into emerging themes and subthemes. Similar responses were grouped to identify common patterns, ideas, and recommendations related to the sustainable integration and implementation of the developed SEL-based activities in the ARAL–Reading Program. The resulting themes served as the basis for formulating the proposed school-based policy interventions.

## **Results**

This chapter presents, analyzes, and interprets the data on the development and acceptability of Social and Emotional Learning (SEL)–based activities for integration into the Academic Recovery and Accessible Learning (ARAL)–Reading Program. The study focuses on how these SEL activities can enhance student engagement among Grade 4 to Grade 6 pupils in selected elementary schools, particularly in the District of Ibajay, Province of Aklan.

### **Level of Student Engagement during ARAL – Reading Sessions**

This portion examines the current level of student engagement during ARAL–Reading sessions as perceived by the respondents. It focuses on three key dimensions: behavioral engagement, emotional engagement, and cognitive engagement. The data are analyzed to describe how engaged Grade 4 to Grade 6 pupils are in each of these areas during ARAL–Reading activities. Seventy-nine (79) Grade 4 to 6 ARAL teachers from seventeen (17) public elementary schools participated in this study.

## Behavioral Engagement

Table 2 gives the results of behavioral engagement of pupils during the ARAL sessions. Grade 4-6 students engaged at a high level in terms of behavioral engagement (Overall Weighted Mean 3.89), thus exhibiting good overall involvement and focus in all activities. Participation at high levels in ARAL-Reading activities appeared to be the highest rated behavior (WM = 4.17, Rank 1), followed closely by on-task behavior during the ARAL-Reading sessions (WM = 4.06, Rank 2) and following instructions with frequent reminders (WM = 4.04, Rank 3).

**Table 2.** *Behavioral Engagement of Pupils During ARAL-Reading Sessions*

|    | <b>Behavioral Engagement</b>                                     | <b>WM</b> | <b>Interpretation</b> | <b>Rank</b> |
|----|------------------------------------------------------------------|-----------|-----------------------|-------------|
| 1  | Pupils actively participate in ARAL-Reading activities.          | 4.17      | High engagement       | 1           |
| 2  | Pupils stay on task during ARAL-Reading sessions.                | 4.06      | High engagement       | 2           |
| 3  | Pupils willingly respond to questions during reading activities. | 3.96      | High engagement       | 4           |
| 4  | Pupils complete assigned reading tasks during ARAL-Reading.      | 3.80      | High engagement       | 8           |
| 5  | Pupils follow instructions without frequent reminders.           | 4.04      | High engagement       | 3           |
| 6  | Pupils volunteer to read aloud when given opportunities.         | 3.81      | High engagement       | 6.5         |
| 7  | Pupils cooperate with classmates during reading activities.      | 3.76      | High engagement       | 9           |
| 8  | Pupils demonstrate appropriate behavior during sessions.         | 3.65      | High engagement       | 10          |
| 9  | Pupils show readiness to begin reading tasks.                    | 3.86      | High engagement       | 5           |
| 10 | Pupils consistently participate in ARAL-Reading sessions.        | 3.81      | High engagement       | 6.5         |
|    | Overall Weighted Mean                                            | 3.89      | High engagement       |             |

*Legend:*

| <b>Scale Range</b> | <b>Descriptive Interpretation</b> |
|--------------------|-----------------------------------|
| 4.21–5.00          | Very High Engagement              |
| 3.41–4.20          | High Engagement                   |
| 2.61–3.40          | Moderate Engagement               |
| 1.81–2.60          | Low Engagement                    |
| 1.00–1.80          | Very Low Engagement               |



As perceived by the ARAL teachers, Grade 4 to 6 pupils also highly engage by having the willingness to answer all the questions during reading activities (WM = 3.96, Rank 4), having the readiness to begin reading the assigned tasks (Weighted Mean 3.86, Rank 5), and volunteering to read aloud when given opportunities as well as consistently participate in ARAL-Reading sessions (WM = 3.81, Rank 6.5). This was followed by learners completing assigned reading tasks during ARAL – Reading sessions.

There are a few areas with the lowest-rated behavior, these were: cooperation with peers during reading activities (WM = 3.76, Rank 9), and demonstrating appropriate behavior during reading sessions (WM = 3.65, Rank 10). The results show that, Grade 4 to 6 pupils were generally very engaged, and attentive during the ARAL Reading sessions. They actively engaged and followed instructions well, but some areas, like completing tasks and showing proper behavior still need improvement.

### **Emotional Engagement**

Table 3 presents the emotional engagement of Grade 4 to 6 pupils during ARAL Reading session was generally high, with an overall weighted mean of 3.77. This indicates that the Grade 4 to 6 pupils are usually interested, encouraged, and emotionally connected to the reading activities.

The highest-rated indicator was pupils show interest and enjoyment during the reading sessions (WM = 4.09, Rank 1), followed by pupils feel encouraged during ARAL reading session (WM = 3.97, Rank 2). Other high-rated indicators include pupils feel emotionally safe during reading sessions (WM = 3.93, Rank 3), followed by pupils respond positively to teacher feedback (WM = 3.85, Rank 4), and pupils appear confident while reading (WM = 3.82, Rank 5), showing that the ARAL reading sessions create a supportive and positive learning atmosphere.

With the same ratings, indicators with a high rating that pupils display positive emotions while reading (WM = 3.77, Rank 6), pupils show reduced anxiety when asked to read, and pupils show pride in completing the reading tasks (both have WM = 3.64, Rank 7.5), pupils show positive attitude toward reading (WM = 3.61, Rank 8) indicate that while emotional engagement is generally strong, some learners may still need more confidence-building support.

However, one indicator received lower ratings, shows pupils are willing to try even after making mistakes (WM = 3.37, Rank 9), having Moderate engagement, which suggests that resilience still needs strengthening. Overall, the findings suggest that ARAL–Reading sessions foster a positive emotional environment, but SEL-based activities may further strengthen confidence, persistence, and positive attitudes toward reading.

**Table 3.** *Emotional Engagement of Pupils during ARAL – Reading Sessions*

|    | <b>Emotional Engagement</b>                                 | <b>WM</b> | <b>Interpretation</b> | <b>Rank</b> |
|----|-------------------------------------------------------------|-----------|-----------------------|-------------|
| 1  | Pupils show interest and enjoyment during reading sessions. | 4.09      | High engagement       | 1           |
| 2  | Pupils appear confident while reading.                      | 3.82      | High engagement       | 5           |
| 3  | Pupils show reduced anxiety when asked to read.             | 3.64      | High engagement       | 7.5         |
| 4  | Pupils feel encouraged during ARAL–Reading.                 | 3.97      | High engagement       | 2           |
| 5  | Pupils display positive emotions while reading.             | 3.77      | High engagement       | 6           |
| 6  | Pupils show pride in completing reading tasks.              | 3.64      | High engagement       | 7.5         |
| 7  | Pupils are willing to try even after making mistakes.       | 3.37      | Moderate engagement   | 9           |
| 8  | Pupils respond positively to teacher feedback.              | 3.85      | High engagement       | 4           |
| 9  | Pupils show positive attitudes toward reading.              | 3.61      | High engagement       | 8           |
| 10 | Pupils feel emotionally safe during reading sessions.       | 3.93      | High engagement       | 3           |
|    | Overall Weighted Mean                                       | 3.77      | High engagement       |             |

*Legend:*

| <b>Scale Range</b> | <b>Descriptive Interpretation</b> |
|--------------------|-----------------------------------|
| 4.21–5.00          | Very High Engagement              |
| 3.41–4.20          | High Engagement                   |
| 2.61–3.40          | Moderate Engagement               |
| 1.81–2.60          | Low Engagement                    |
| 1.00–1.80          | Very Low Engagement               |

The results are supported by the literature showing that interest, enjoyment, confidence, emotional safety, and positive teacher feedback strengthen reading engagement and persistence. CASEL (2020), Pekrun (2021), and Skinner, et al. (2016) emphasized that learners who feel emotionally supported are more likely to engage actively, take reading risks, and maintain effort in literacy tasks. The finding that pupils were most engaged in interest and enjoyment, while the lowest indicator involved willingness to try after mistakes, is also consistent with Eriksen (2025), UNESCO (2021), DepEd (2023), which note that SEL had emotionally responsive instruction help reduce anxiety and build confidence. Overall, the result indicates that ARAL- Reading creates a supportive emotional climate, but SEL-based activities are still needed to further strengthen resilience, positive attitudes, and sustained engagement in reading.

## **Cognitive Engagement**

Cognitive engagement of Grade 4 to 6 during the ARAL reading sessions was presented in Table 4. The presented data shows that the pupils' cognitive engagement during the ARAL-reading sessions was generally high, with an overall weighted mean of 3.52. This shows that the pupils are usually willing to think, focus, and make an effort to understand the ARAL - reading activities.

The highest-rated indicator was pupils show improved focus during ARAL – reading sessions (WM = 3.83, Rank 1), followed by pupils exerting effort to understand reading materials (WM = 3.81, Rank 2). Other high-rated indicators include pupils showing willingness to improve their reading skills (WM = 3.66, Rank 3), followed by pupils asking for help when they do not understand (WM = 3.54, Rank 4), pupils showing curiosity about reading content (WM = 3.51, Rank 5), and pupils use reading strategies during ARAL reading sessions (WM = 3.50, Rank 6), showing that many Grade 4 to 6 pupils are mentally involved in the reading process.

Despite the generally high level of cognitive engagement, several indicators received comparatively lower ratings, particularly those related to learners' use of reading strategies, curiosity about reading content, and seeking assistance when encountering difficulties. These findings suggest that while Grade 4 to Grade 6 pupils are mentally engaged during ARAL–Reading sessions, they still require greater support in developing higher-order thinking skills, self-regulated learning, and strategic reading behaviors. Strengthening these aspects through targeted instructional interventions and Social and Emotional Learning (SEL)-based activities may further enhance pupils' cognitive engagement, enabling them to become more reflective, independent, and confident readers.

However, several indicators received only moderate engagement, among were pupils persist in tasks even when reading is difficult (WM = 3.39, Rank 7), pupils reflect on their reading performance (WM = 3.38, Rank 8), pupils apply learned skills in ARAL reading activities (WM = 3.31, Rank 9), and pupils try to correct reading mistakes when guided (WM = 3.27, Rank 10). This indicates that while pupils are generally attentive and willing to learn, deeper cognitive processes such as persistence, self-correction, reflection, and transfer of learned skills still need strengthening. Generally, the results suggest that ARAL–Reading supports pupils' cognitive engagement, whereas SEL-based activities may further develop self-regulation, reflection, and problem-solving in reading.

**Table 4.** *Cognitive Engagement of Pupils during ARAL – Reading Sessions*

|    | <b>Cognitive Engagement</b>                                   | <b>WM</b> | <b>Interpretation</b> | <b>Rank</b> |
|----|---------------------------------------------------------------|-----------|-----------------------|-------------|
| 1  | Pupils exert effort to understand reading materials.          | 3.81      | High engagement       | 2           |
| 2  | Pupils persist in tasks even when reading is difficult.       | 3.39      | Moderate engagement   | 7           |
| 3  | Pupils use reading strategies during ARAL – reading sessions. | 3.50      | High engagement       | 6           |
| 4  | Pupils ask for help when they do not understand.              | 3.54      | High engagement       | 4           |
| 5  | Pupils show improved focus during ARAL - reading sessions.    | 3.83      | High engagement       | 1           |
| 6  | Pupils try to correct reading mistakes when guided.           | 3.27      | Moderate engagement   | 10          |
| 7  | Pupils show curiosity about reading content.                  | 3.51      | High engagement       | 5           |
| 8  | Pupils show willingness to improve their reading skills.      | 3.66      | High engagement       | 3           |
| 9  | Pupils apply learned skills in ARAL reading activities.       | 3.31      | Moderate engagement   | 9           |
| 10 | Pupils reflect on their reading performance.                  | 3.38      | Moderate engagement   | 8           |
|    | Overall Weighted Mean                                         | 3.52      | High engagement       |             |

*Legend:*

| <b>Scale Range</b> | <b>Descriptive Interpretation</b> |
|--------------------|-----------------------------------|
| 4.21–5.00          | Very High Engagement              |
| 3.41–4.20          | High Engagement                   |
| 2.61–3.40          | Moderate Engagement               |
| 1.81–2.60          | Low Engagement                    |
| 1.00–1.80          | Very Low Engagement               |

The findings of this study are consistent that structured instruction, metacognitive strategies, and encouraging learning settings increase cognitive engagement. According to Pekrun (2017), pupils who feel supported are more likely to stay focused, persevere through difficult assignments, and apply higher-order thinking abilities. A study conducted by Bautista and Ramos (2024) also demonstrated that activities like peer cooperation, guided reading, and reflective practices improve understanding, perseverance, and strategic thinking. It also shows that while SEL-based exercises can improve self-regulation, introspection, and reading problem-solving skills, ARAL – reading generally promotes cognitive engagement.

As a whole, the students showed strong engagement during the ARAL–Reading sessions, especially in their visible participation and emotional response. Behavioral engagement (OWM=3.89) received the highest rating, followed by emotional engagement (OWM=3.77), while cognitive engagement (OWM=3.52) was slightly lower, though still interpreted as high engagement.

The results suggest that pupils were most successful in following directions, staying on task, and responding positively to the sessions. However, they were less consistent in cooperation, self-monitoring, and pushing through difficult reading tasks. This means that while the classroom climate was supportive and enjoyable, some learners still struggled with resilience, especially when they made mistakes or faced more demanding passages.

The findings point to an important gap between outward compliance and deeper academic persistence. In other words, Grade 4 to 6 pupils may appear attentive and cooperative, but some still need support in building confidence, strategic thinking, and the willingness to try again when reading becomes challenging. This shows that reading remediation should go beyond drill and practice and include socio-emotional support.

To address this, the seven SEL activities can help create a more encouraging and responsive learning environment. Strategies such as the Calm and Ready Check-In, Behavior Booster Charts, Mistake-to-Success Cards, etc., can help learners feel calmer, more supported, and more willing to keep trying. When these are presented through sequential educational comics, pupils in Grades 4 to 6 are more likely to understand the process, manage reading anxiety, and develop the confidence needed for lasting improvement.

The overall engagement results align with literature showing that learner engagement has behavioral, emotional, and cognitive dimensions, and that these are shaped by both academic and socio-emotional conditions. Fredricks, Blumenfeld, and Paris (2004) explain that behavioral engagement is the most visible, which helps explain why it ranked highest in your findings, while cognitive engagement requires deeper persistence and self-regulation. Skinner, Furrer, Marchand, and Kindermann (2008) likewise note that emotional engagement supports sustained participation, but it does not always translate into stronger cognitive effort.

The slightly lower cognitive engagement fits the view of Schunk and DiBenedetto (2020) that many elementary learners still need help with persistence, self-monitoring, and strategy use in reading. This is also consistent with Guthrie and Wigfield (2000), who argue that reading engagement grows when motivation is paired with explicit strategy support. In the same way, UNESCO (2021) and the Department of Education (2023, 2024) stress that literacy recovery must address both learning gaps and socio-emotional needs.

Together, these studies suggest that ARAL–Reading was effective in building participation and positive classroom climate, but that learners still need support in resilience and deeper task engagement. Jones et al. (2021) and Cipriano et al. (2023) show that SEL-based instruction can strengthen self-regulation, perseverance, and academic engagement, which makes the developed SEL activities a fitting response to the gap between surface participation and deeper cognitive persistence.

## **Social and Emotional Learning (SEL) – Based Activities Developed that Align with the Needs and Reading Competencies of Grade 4 to 6 Pupils**

Based on the results from the previous tables, cognitive engagement got the lowest overall weighted mean of 3.52 considered “high engagement”. Among the indicators found to have “moderate engagement” with the lowest mean were pupils try to correct reading mistakes when guided (WM = 3.27), pupils apply learned skills in ARAL reading activities (WM = 3.31), pupils reflect on their reading performance (WM = 3.38), and pupils persist in tasks even when reading is difficult (WM = 3.39), suggesting that these areas still need further development.

For emotional engagement, with an overall weighted mean of 3.77, indicating “high engagement”. With “moderate engagement,” considered the lowest means, pupils are willing to try even after making mistakes (WM = 3.37), showing that this area still needs further strengthening.

**Table 5.** *Summary of Identified Student Engagement Needs as Basis for the Development of the SEL-Based Activities*

| <b>Area of Engagement</b> | <b>Overall Weighted Mean</b> | <b>Overall Interpretation</b> | <b>Lowest-Rated Indicator(s)</b>                                      | <b>Weighted Mean</b> | <b>Indicator Interpretation</b> | <b>Identified Need</b>                                                                                       |
|---------------------------|------------------------------|-------------------------------|-----------------------------------------------------------------------|----------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------|
| Behavioral Engagement     | 3.89                         | High Engagement               | Pupils demonstrate appropriate behavior during ARAL–Reading sessions. | 3.65                 | High Engagement                 | Strengthen classroom self-management, discipline, and positive learning behaviors during reading activities. |
| Emotional Engagement      | 3.77                         | High Engagement               | Pupils are willing to try even after making mistakes.                 | 3.37                 | Moderate Engagement             | Enhance resilience, confidence, emotional regulation, and willingness to persevere                           |

|                      |      |                 |                                                         |      |                     |                                                                                               |
|----------------------|------|-----------------|---------------------------------------------------------|------|---------------------|-----------------------------------------------------------------------------------------------|
|                      |      |                 |                                                         |      |                     | despite reading errors.                                                                       |
| Cognitive Engagement | 3.52 | High Engagement | Pupils try to correct reading mistakes when guided.     | 3.27 | Moderate Engagement | Improve guided self-correction and reading accuracy.                                          |
|                      |      |                 | Pupils apply learned skills in ARAL–Reading activities. | 3.31 | Moderate Engagement | Reinforce the transfer and application of learned reading skills.                             |
|                      |      |                 | Pupils reflect on their reading performance.            | 3.38 | Moderate Engagement | Develop reflective thinking and self-monitoring during reading.                               |
|                      |      |                 | Pupils persist in tasks even when reading is difficult. | 3.39 | Moderate Engagement | Strengthen persistence, self-regulation, and growth mindset during challenging reading tasks. |

*Legend:*

| <b><i>Scale Range</i></b> | <b><i>Descriptive Interpretation</i></b> |
|---------------------------|------------------------------------------|
| 4.21–5.00                 | Very High Engagement                     |
| 3.41–4.20                 | High Engagement                          |
| 2.61–3.40                 | Moderate Engagement                      |
| 1.81–2.60                 | Low Engagement                           |
| 1.00–1.80                 | Very Low Engagement                      |

For behavioral engagement, with an overall weighted mean of 3.89 as “high engagement”. However, among the indicators, pupils who demonstrate appropriate behavior during ARAL reading sessions obtained the lowest mean (WM = 3.65), suggesting that this still needs further improvement.

Based on the above-mentioned results, the researcher developed a SEL – Based Activities that align with the needs and reading competencies of Grade 4 to 6 pupils. Among the identified activities aligned with pupils' needs and reading competencies were Calm and Ready Check-In, Behavior Booster Chart, Try Again Reading, Guided Error Correction, Mistake-to-Success Cards, I Can Improve Board, and Starts at the End. The above-mentioned activity was designed because it addressed a specific engagement need identified in the results and supported pupils' reading performance at the same time.

### **Calm and Ready Check-in**

These SEL-based activities developed by the researcher based on the results of student engagement were used as an SEL-based strategy at the beginning of each ARAL–Reading session to help pupils become emotionally settled and mentally prepared before engaging in reading tasks. The activity was introduced because the engagement results showed that pupils still needed structured support in confidence, persistence, attention, and self-correction during reading activities. Although many learners willingly participated in classroom discussions and reading exercises, some continued to experience anxiety when reading aloud, became distracted during lessons, or hesitated to engage actively in reading tasks. These observations suggested the need for a routine that would help pupils manage their emotions, focus their attention, and prepare themselves for learning.

The Calm and Ready Check-In Activities addressed this need by providing a brief but purposeful opening routine before every ARAL–Reading session. The activity included simple practices such as deep breathing exercises, emotional check-ins, body awareness activities, and positive affirmations that encouraged pupils to become aware of their feelings and readiness to learn. Through these routines, learners developed strategies for regulating emotions and maintaining focus before participating in reading activities. As a result, the classroom environment became more supportive, enabling pupils to approach reading tasks with greater confidence and emotional stability.

To enhance engagement and ensure developmental appropriateness, the researcher created different comic stories for each grade level. These stories were designed to match the cognitive, emotional, and reading characteristics of the learners and served as engaging introductions to the check-in activities. By presenting realistic situations that reflected common emotions experienced before reading, the comics allowed pupils to identify with the characters and recognize their own feelings. In this way, the stories provided meaningful models of how learners could prepare themselves positively for reading.

At the Grade 4 level, the comic stories focused on simple and familiar situations commonly encountered in school. The characters often experienced nervousness, uncertainty, or distraction before participating in reading activities. Using clear language and concrete examples, the stories demonstrated how calming techniques such as deep breathing and positive thinking could help learners become more prepared for reading.



Through these experiences, pupils learned to recognize their emotions and develop habits that encouraged greater focus and participation during ARAL-Reading sessions.

In the next developmental stage (Grade 5), the stories presented situations that required greater emotional awareness and personal responsibility. The characters encountered challenges involving frustration, worry, or difficulty maintaining attention during classroom activities. Through guided reflection, pupils were encouraged to examine their emotional states and identify strategies that would help them remain focused and engaged. These experiences promoted stronger self-regulation and encouraged learners to take a more active role in preparing themselves for successful participation in reading activities.

By Grade 6, the comic stories incorporated more complex scenarios that encouraged deeper reflection on emotions, self-control, and readiness for learning. The characters were often faced with situations that required them to manage stress, overcome hesitation, and develop positive mindsets before engaging in academic tasks. Through these narratives, learners gained a better understanding of the relationship between emotional regulation and academic performance. The stories also encouraged pupils to take greater responsibility for managing their own readiness to learn, a skill that becomes increasingly important as they progress to higher levels of education.

The comic stories were intentionally designed to portray common reading-related experiences such as feeling nervous before reading aloud, becoming distracted during lessons, or losing confidence after making mistakes. Each story illustrated how the characters successfully managed these emotions by practicing calming strategies, strengthening their focus, and maintaining positive attitudes toward learning. While the stories for younger learners emphasized concrete actions and familiar situations, those intended for older pupils encouraged deeper reflection and greater personal responsibility. This developmental progression ensured that the activity remained relevant and meaningful across grade levels.

At all grade levels, the Calm and Ready Check-In Activities were designed to strengthen key Social and Emotional Learning competencies, particularly self-awareness and self-management. Learners were encouraged to recognize their emotions, understand how their feelings influenced their behavior, and apply strategies that helped them become calm and focused before reading. The activities also promoted emotional regulation through breathing exercises, mindfulness practices, and positive self-talk. These skills enabled pupils to approach reading tasks with greater confidence and emotional readiness.

The comic stories further enhanced engagement by allowing learners to connect with characters who experienced challenges similar to their own. By observing how the characters managed their emotions and prepared themselves for learning, pupils acquired practical strategies that they could apply in their own reading experiences. Consequently, the Calm and Ready Check-In Activities not only improved emotional readiness but also contributed to increased participation, concentration, and engagement during ARAL-Reading sessions. When learners entered the classroom feeling calm, secure, and prepared, they were more likely to listen attentively, respond actively, and

remain engaged throughout the lesson, resulting in more meaningful learning experiences and improved reading outcomes.

The effectiveness of the Calm and Ready Check-In Activities is supported by SEL literature, and the benefits of educational comics align with this approach. CASEL (2020) and Schonert-Reichl (2017) show that, self-awareness, self-management, and mindfulness help learners regulate emotions, improve focus, and reduce anxiety. Educational comics also align with these benefits because they make lessons more engaging, relatable, and easier to understand for young learners.

This is also consistent with Cipriano et al. (2023) and Reyes and Mendoza (2023), who found that structured SEL routines, and emotional check-ins strengthen classroom behavior, motivation, and participation. In the same way, educational comics support active engagement by giving pupils a more enjoyable and meaningful way to connect with reading tasks. Taken together, these studies support the activity as a helpful way to prepare Grade 4 to 6 pupils for ARAL - Reading sessions.

### **Behavior Booster Chart**

This chart is a simple visual tool developed by the researcher as a comic-based narrative used to encourage appropriate behavior during the ARAL – reading sessions. Grade 4 to 6 pupils will earn stars, check marks, or points each time they show the appropriate behavior, like listening carefully, waiting for their turn, staying seated, raising their hands before speaking, respecting everyone in the classroom, following directions, keeping the classroom area clean, doing their best every day, and being responsible pupils.

The SEL - based activity was reinforced because the results show that behavioral engagement is high, however having appropriate behavior during ARAL – reading sessions, as they received the lowest mean among the behavioral indicators. This simply means that while pupils are already active and involved, some still need support, particularly in self-control, discipline and proper classroom conduct. By using the behavioral booster chart, expected behaviors were reinforced in a clear and visible way.

This will encourage pupils to listen, follow instructions, stay on task, and participate appropriately in the classroom activities, which can further strengthen their behavioral engagement during the ARAL – reading sessions. This will also create a more organized and motivating classroom environment. In this way, the activity supports both disciplines and active participation.

The behavioral booster chart can respond directly to the behavior needs identified in the findings of this study it is a practical SEL-based strategy that helps Grade 4 to 6 pupils build positive practices, improve classroom behavior, and stay engaged in the ARAL – reading program.

The Behavior Booster Chart is grounded in SEL research, which shows that clear routines and positive reinforcement help learners manage behavior and stay engaged. CASEL (2020), Jones et al. (2021), and Cipriano et al. (2023) all point to the value of self-regulation and structured support in improving classroom conduct and participation.

Dela Peña (2022) and Reyes and Mendoza (2023) show that encouraging classroom environments strengthen cooperation, motivation, and persistence in reading tasks. In

this way, the chart's stars, points, and check marks provide simple but meaningful feedback that encourages self-discipline and helps build a positive ARAL - Reading atmosphere.

### **Try Again Reading Activities**

Based on the results of student engagement, the researcher developed the Try Again Reading Activities as an SEL-based strategy integrated into ARAL–Reading sessions to strengthen pupils' persistence, confidence, and willingness to continue learning after making mistakes. The activity was introduced because the engagement results indicated that, although many pupils actively participated in reading tasks, some still became discouraged when they encountered unfamiliar words, reading errors, or difficult passages. These challenges affected their confidence, and reduced their willingness to continue reading. As a result, pupils needed structured opportunities to view mistakes as part of the learning process and to develop resilience when faced with reading difficulties.

These activities addressed this need by encouraging pupils to reread words, phrases, and sentences after receiving guidance from the teacher. Instead of treating errors as failures, the activity emphasized that improvement happens through repeated practice, corrective feedback, and sustained effort. Through teacher support and opportunities to reread successfully, pupils gradually developed greater confidence in their reading abilities. This approach also helped create a positive learning environment where mistakes were viewed as opportunities for growth rather than reasons to stop trying.

To make the activity more engaging and developmentally appropriate, the researcher designed different comic stories for each grade level. Each comic story was carefully aligned with the reading abilities, interests, and comprehension levels of the pupils. The stories served as meaningful reading materials through which pupils could practice rereading, correcting mistakes, and improving comprehension. By using age-appropriate characters and situations, the comics helped pupils connect the lessons in the stories to their own experiences in reading and learning.

For Grade 4 pupils, the comic story entitled *The Helpful Ant* presented the journey of a small ant carrying a grain of rice home despite the challenges it encountered along the way. The story showed determination, perseverance, and cooperation with friends. The Try Again Reading portion of the activity focused on rereading challenging words such as *grain*, *heavy*, *reached*, and *shared*. Through repeated reading and teacher guidance, pupils learned that persistence and effort help overcome difficulties. The story reinforced the importance of continuing to try even when tasks seem difficult, reflecting the same perseverance required in learning to read.

For Grade 5 pupils, the comic story *The Lost Wallet* centred on Juan, a boy who found a wallet and made the responsible decision to return it to its owner. The story highlighted honesty, responsibility, and good decision-making. During the Try Again Reading activity, pupils reread unfamiliar or challenging words such as *wallet*, *sidewalk*, *return*, and *owner*. Through guided rereading, pupils improved word recognition, reading fluency, and comprehension, while also reflecting on the values demonstrated by the main character. The activity encouraged learners to understand that mistakes in reading can be corrected through effort, just as good decisions require careful thought and action.

For Grade 6 pupils, the comic story *A Drop That Made a Difference* illustrated how a single drop of water contributed to restoring life to a stream and helping plants and animals survive. The story emphasized environmental awareness, cooperation, and the importance of small actions in creating meaningful change. The Try Again Reading component provided opportunities for pupils to reread more complex vocabulary such as *difference*, *stream*, *almost*, and *together*. Through repeated reading and discussion, pupils strengthened both comprehension and confidence, while recognizing that gradual improvement results from consistent effort. The story reinforced the idea that every attempt, no matter how small, contributes to learning and success.

In all grade levels, the Try Again Reading activities were designed to strengthen important Social and Emotional Learning competencies, particularly self-management, perseverance, resilience, and self-confidence. Pupils were encouraged to continue reading after making mistakes, accept corrective feedback positively, and believe in their ability to improve through practice. By providing opportunities to reread and succeed after errors, the activity helped reduce fear of failure and promoted a growth mindset toward learning.

The comic stories further enhanced engagement by presenting relatable situations where characters faced challenges, received support, and eventually succeeded through determination and effort. As pupils followed the experiences of the ant, Juan, and the drop of water, they learned that difficulties can be overcome through persistence and continuous improvement. Consequently, the Try Again Reading activities not only strengthened reading skills but also fostered emotional resilience, motivation, and positive attitudes toward learning. These outcomes contributed to higher levels of engagement during ARAL - Reading sessions, as pupils became more willing to participate, take risks, and continue trying even when faced with reading challenges.

The Try Again Reading Activities are supported by SEL principles that build resilience, confidence, and persistence. CASEL (2020), Jones et al. (2021), and Cipriano et al. (2023) show that self-management and supportive instruction help learners stay motivated, focused, and willing to keep trying when tasks become difficult.

This is also reflected in Schonert-Reichl (2017) and UNESCO (2021), who noted that emotionally supportive learning environments help learners manage frustration and strengthen confidence. Local studies like Sardalla (2022), Palma et al. (2025), and Reyes and Mendoza (2023) further show that supportive reading activities encourage participation and persistence among struggling readers.

### **Guided Error Correction Activities**

In the results of student engagement, the researcher developed another reading activity, the Guided Error Correction Activities, as an SEL-based strategy integrated into ARAL-Reading sessions to improve reading accuracy, self-correction skills, and confidence in responding to reading tasks. The activity was introduced because the engagement results showed that, although many pupils actively participated in reading activities, some still had difficulty recognizing and correcting their own mistakes. Learners sometimes misread words, omit important details, or become hesitant to continue reading after making errors. These behaviors indicated the need for structured support that would help

pupils identify mistakes, accept corrections positively, and improve their reading performance without losing confidence.

The Guided Error Correction Activities addressed this need by providing immediate and supportive teacher guidance whenever pupils made reading errors. Rather than simply pointing out mistakes, teachers guided pupils to reflect on the error, listen to the correct pronunciation or reading pattern, and reread the word, phrase, or sentence accurately. This process helped learners become more aware of their reading performance while developing the habit of self-monitoring and self-correction. Through repeated practice, pupils learned that mistakes are a natural part of learning and that improvement comes from actively correcting them.

To make the activity more engaging and developmentally appropriate, the researcher designed different comic stories for each grade level. Each comic story was aligned with the learners' reading level, vocabulary knowledge, and comprehension abilities. The stories provided meaningful contexts in which pupils could practice identifying errors and applying corrections. By using relatable characters and realistic situations, the activity increased interest in reading while reinforcing persistence, attention to detail, and continuous improvement.

For Grade 4 pupils, the comic story with a title *A Small Act, A Big Change*, used in the activity presented simple and familiar situations suited to developing readers. It contained common words and short sentences that enabled pupils to practice recognizing reading mistakes and correcting them with teacher support. Pupils were encouraged to reread incorrectly pronounced or misunderstood words until they achieved accuracy. This helped strengthen word recognition, decoding skills, and reading confidence, while giving pupils a sense of accomplishment that encouraged further participation.

For Grade 5 pupils, the comic story with a title of *A Second Chance* included more detailed events and slightly more challenging vocabulary that required greater attention to meaning and sentence structure. During the activity, pupils practiced identifying errors related to pronunciation, fluency, and comprehension. Teachers guided learners in analyzing mistakes and understanding why corrections were needed. This encouraged pupils to become more reflective readers and helped them appreciate the value of careful reading. As they successfully corrected their errors, they developed stronger self-confidence and a more positive attitude toward challenging reading tasks.

For Grade 6 pupils, the comic story entitled *The Power of Persistence* featured more complex vocabulary, longer sentences, and situations that required deeper comprehension and critical thinking. The activity challenged pupils to identify and correct errors independently while still receiving teacher guidance when necessary. Through repeated correction and rereading, learners improved their fluency, comprehension, and ability to monitor their own reading performance. The activity also encouraged pupils to view mistakes as opportunities for growth rather than indicators of failure, thereby promoting a growth mindset that supports lifelong learning.

In all grade levels, the Guided Error Correction Activities were designed to strengthen key Social and Emotional Learning competencies, particularly self-awareness, self-management, perseverance, and self-confidence. Pupils learned to recognize their mistakes, accept feedback positively, and take responsibility for improving their

performance. Instead of becoming discouraged by errors, learners were encouraged to approach corrections with a positive attitude and a willingness to improve. This process helped reduce anxiety during reading activities and fostered a classroom environment where mistakes were viewed as valuable learning opportunities.

Furthermore, the comic stories enhanced engagement by presenting situations in which characters encountered challenges, received guidance, and successfully improved their performance. As pupils observed these experiences, they learned that growth occurs through practice, effort, and a willingness to learn from mistakes. The stories reinforced the message that everyone can improve through persistence and corrective feedback. Consequently, the Guided Error Correction Activities not only improved reading accuracy and comprehension but also promoted resilience, motivation, and active participation during ARAL–Reading sessions.

The developed Guided Error Correction Activities are supported by research on SEL and literacy instruction. CASEL (2020), Cipriano et al. (2023), and Jones et al. (2021) show that self-awareness, self-management, and structured support help learners recognize mistakes, stay engaged, and build confidence while improving.

This is also consistent with Schonert-Reichl (2017) and UNESCO (2021), who found that supportive instructional practices reduce anxiety and encourage active participation in reading tasks. Likewise, local studies by Dela Peña (2022), Reyes and Mendoza (2023), and Bautista et al. (2024), show that SEL - based activities strengthen motivation, persistence, and concentration in literacy learning.

### **Mistake-to-Success Cards Activities**

The researcher developed the Mistake-to-Success Card Activities as an SEL-based strategy integrated into ARAL–Reading sessions, informed by student engagement data, to strengthen pupils' self-reflection, resilience, and confidence in learning. The activity was introduced because the engagement results showed that, although many pupils actively participated in reading tasks, some still became discouraged when they made mistakes. Others focused too much on their errors and overlooked their progress and improvement. These responses suggested the need for structured opportunities that would help pupils reflect on their learning experiences, recognize their accomplishments, and develop a more positive view of mistakes and challenges.

The Mistake-to-Success Card Activities addressed this need by asking pupils to identify one mistake they made during reading and explain how they corrected it or how they could improve in the future. Pupils were also encouraged to reflect on how they felt after correcting the mistake and completing the task. Through this process, learners came to understand that mistakes are not failures but opportunities for growth and improvement. The activity promoted self-awareness by helping pupils recognize both their strengths and areas for development while building confidence in their ability to improve through effort and practice.

To make the activity more engaging and developmentally appropriate, the researcher designed different comic stories for each grade level. Each comic story was aligned with the pupils' reading levels, interests, and comprehension abilities. The stories provided meaningful contexts in which learners could observe characters facing challenges, making

mistakes, learning from experience, and succeeding through perseverance and reflection. By relating the characters' experiences to their own reading journeys, pupils gained a clearer understanding of self-improvement and personal growth.

For Grade 4 pupils, the comic story "*A Kind Word, A Happy Day*" used in the activity presented simple and familiar situations suited to young learners. The story featured characters who encountered minor challenges and learned how to overcome them through effort and determination. After reading the comic, pupils completed their Mistake-to-Success Cards by identifying the reading errors they made and describing how they corrected them. This reflection helped learners realize that mistakes are a normal part of learning and that improvement happens through continued practice. As a result, pupils will develop greater confidence in their reading abilities and become more willing to participate in classroom reading tasks.

For Grade 5 pupils, the comic story "*The Hidden Talent*" introduced situations that required more thoughtful decision-making and personal responsibility. The characters faced challenges that encouraged pupils to reflect on their own responses to mistakes and their approaches to improvement. After the reading activity, learners recorded the errors they committed and the strategies they used to improve their performance. They also reflected on how they felt after successfully correcting their mistakes. This process strengthened their self-confidence and encouraged them to become more independent learners who actively monitor and improve their reading skills.

For Grade 6 pupils, the comic story "*The Power of Perseverance*" presented more complex situations that required deeper reflection and critical thinking. The characters demonstrated perseverance, responsibility, and problem-solving in the face of difficulty. Through the Mistake-to-Success Card Activity, pupils analyzed their reading performance, identified specific areas for improvement, and reflected on the lessons they learned from their mistakes. This encouraged learners to develop a growth mindset by understanding that challenges and setbacks can lead to future success. The activity also promoted greater ownership of learning as pupils became more aware of their progress and more motivated to achieve their reading goals.

By all grade levels, the Mistake-to-Success Card Activities were designed by the researcher to strengthen key Social and Emotional Learning competencies, particularly self-awareness, self-management, resilience, and self-confidence. Pupils were encouraged to reflect on their experiences, recognize their progress, and respond positively to mistakes. Rather than becoming discouraged by errors, learners were guided to identify solutions, acknowledge improvement, and build confidence in their ability to learn and grow. This reflective process helped create a supportive learning environment where mistakes were viewed as opportunities for development rather than obstacles to success.

The comic stories further enhanced engagement by presenting relatable situations in which characters experienced challenges, learned from their mistakes, and achieved positive outcomes through persistence and effort. As pupils followed the stories and completed their reflection cards, they developed a deeper understanding of perseverance, responsibility, and continuous improvement. Consequently, the Mistake-to-Success Card Activities not only improved reading engagement and self-reflection but also strengthened emotional resilience and motivation. These outcomes contributed to higher

levels of participation during ARAL–Reading sessions as pupils became more confident, reflective, and willing to embrace challenges as part of the learning process.

The Mistake-to-Success Card Activities are supported by literature on SEL, especially in building self-awareness, resilience, and a growth mindset. CASEL (2020), Jones et al. (2021), Cipriano et al. (2023), and Schonert-Reichl (2017), show that reflective and supportive learning experiences help learners manage mistakes, persist through challenges, and stay engaged.

This is also supported with UNESCO (2021) and local studies conducted by Sardalla (2022), Dela Peña (2022), and Bautista et al. (2024), which found that emotionally supportive and reflective activities strengthen confidence, participation, and self-regulation in literacy tasks. Taken together, these findings support the use of the Mistake-to-Success Card Activities as an effective ARAL - Reading intervention.

### **I Can Improve Board Activities**

Drawing from the student engagement results, the researcher again developed the I Can Improve Board Activities as an SEL - based strategy integrated into ARAL - Reading sessions to encourage pupils to recognize their progress, set personal goals, and develop confidence in their ability to improve. The activity was introduced because the engagement results indicated that, although many learners participated in reading activities, some still lacked confidence in their abilities and became discouraged when they encountered difficulties. Others tended to focus on their mistakes rather than acknowledging their progress and achievements. These observations highlighted the need for a structured activity that would help pupils recognize their strengths, celebrate improvement, and remain motivated to continue learning.

The I Can Improve Board Activities addressed this need by providing opportunities for pupils to reflect on their reading performance and identify specific areas in which they had improved or still needed further development. Through the use of an improvement board, learners recorded their accomplishments, reading goals, and strategies for continued growth. This process encouraged pupils to focus on progress rather than perfection and helped them understand that reading development occurs gradually through consistent effort and practice. By visually displaying their achievements, pupils were able to monitor their growth and develop a stronger sense of confidence and ownership of learning.

To increase engagement and ensure developmental appropriateness, the researcher created different comic stories for each grade level. These stories were designed to match the interests, reading abilities, and emotional maturity of the learners. The comics served as meaningful introductions to the activity by presenting characters who worked hard to improve their skills, overcame challenges, and achieved success through determination and persistence. Through these relatable experiences, pupils were encouraged to believe that they, too, could continue improving through effort and commitment.

At the Grade 4 level, the comic stories “*A Step at a Time Better Every Day*” focused on simple and familiar situations that emphasized effort, practice, and small achievements. The characters faced manageable challenges that required patience and determination before reaching success. Through these stories, learners discovered that improvement



does not happen immediately but develops through continuous practice. The I Can Improve Board gave pupils opportunities to recognize small accomplishments, such as reading difficult words correctly, participating more actively in class, or completing reading tasks successfully. This helped build confidence and encouraged positive attitudes toward learning.

In the Grade 5 materials, the comic stories *“The Reading Challenge”* introduced situations that required greater responsibility and self-reflection. The characters encountered obstacles that challenged them to work harder, stay focused, and persevere despite difficulties. These experiences encouraged pupils to examine their own learning progress and identify specific areas where they could improve. By recording their goals and achievements on the improvement board, learners developed a stronger sense of accountability for their own growth. The activity also reinforced the idea that effort and persistence are essential factors in achieving success.

By Grade 6, the comic stories *“The Power of Small Steps”* incorporated more complex situations that required critical thinking, self-discipline, and long-term goal setting. The characters demonstrated resilience by overcoming setbacks and maintaining their commitment to improvement despite challenges. Through these narratives, learners were encouraged to evaluate their strengths and weaknesses, establish meaningful goals, and reflect on the actions needed to achieve them. The I Can Improve Board became a tool for promoting self-directed learning, helping pupils recognize that personal growth is a continuous process that requires dedication and perseverance.

The comic stories were intentionally designed to demonstrate that improvement is possible for everyone regardless of the challenges they encounter. Each story highlighted the importance of effort, determination, and positive thinking in achieving personal goals. While the stories intended for younger learners focused on immediate accomplishments and simple successes, those designed for older pupils emphasized reflection, responsibility, and long-term growth. This progression ensured that the activity remained relevant and meaningful across the different grade levels.

Within the ARAL - Reading sessions, the I Can Improve Board Activities were designed to strengthen important Social and Emotional Learning competencies, particularly self-awareness, self-management, self-confidence, and growth mindset. Pupils were encouraged to recognize their achievements, set realistic goals, and monitor their own progress over time. The activity also promoted positive self-perception by helping learners focus on what they had accomplished rather than dwelling on mistakes or difficulties. Through continuous reflection and goal setting, pupils developed greater confidence in their ability to improve and succeed.

The comic stories further enhanced engagement by presenting characters who experienced challenges, learned valuable lessons, and achieved success through persistence and effort. By connecting with these characters, learners gained inspiration and practical examples of how improvement occurs through continuous practice and determination. Therefore, the I Can Improve Board Activities not only strengthened motivation and self-confidence but also contributed to higher levels of engagement during ARAL - Reading sessions. As pupils became more aware of their progress and more

optimistic about their ability to improve, they demonstrated greater participation, persistence, and commitment to achieving their reading goals.

The effectiveness of the I Can Improve Board Activities is supported by SEL literature, especially in building self-awareness, goal setting, and a growth mindset. CASEL (2020), Jones et al. (2021), and Cipriano et al. (2023), show that when learners monitor their progress and recognize improvement, they become more motivated, confident, and engaged.

This aligns with Schonert-Reichl (2017) and UNESCO (2021), who emphasized that reflective and supportive learning experiences strengthen self-regulation, resilience, and persistence. Local studies by Palma et al. (2025) and Bautista et al. (2024) further show that emotionally supportive literacy activities improve participation, concentration, and reading performance.

### **Starts at the End Activities**

Informed by the student engagement results, the researcher developed the Stars at the End Activities as an SEL - based strategy integrated into the ARAL - Reading sessions to provide positive reinforcement, sustain motivation, and encourage continued participation in reading tasks. The activity was introduced because the engagement results indicated that, although many learners participated in reading activities, some still needed additional encouragement to remain interested and persistent, especially when tasks became challenging. Others tended to lose momentum when they encountered difficulties and benefited from recognition that affirmed their effort and progress. These observations highlighted the need for a structured activity that would help pupils feel valued, remain motivated, and continue engaging in learning.

The Stars at the End Activities addressed this need by giving pupils recognition at the end of the reading session for their effort, participation, and improvement. Through the use of a simple reward system, learners received stars as visible symbols of appreciation for completing tasks, showing effort, or demonstrating progress in reading. This process encouraged pupils to focus on improvement and participation rather than on errors or unfinished tasks. By seeing their efforts acknowledged, pupils developed a stronger sense of confidence, satisfaction, and willingness to continue learning.

To increase engagement and ensure developmental appropriateness, the researcher created different comic stories for each grade level. These stories were designed to match the interests, reading abilities, and emotional maturity of the learners. The comics served as meaningful introductions to the activity by presenting characters who worked hard, persevered through challenges, and received recognition for their effort and growth. Through these relatable experiences, pupils were encouraged to understand that consistent effort and positive behavior lead to meaningful rewards and success.

For Grade 4 pupils, the comic stories *“Little Steps Shine Bright”* focused on simple and familiar situations that emphasized effort, cooperation, and small achievements. The characters encountered manageable challenges and learned that their actions were noticed and appreciated. Through these stories, learners discovered that even simple acts of trying their best can lead to positive recognition. The Stars at the End Activity gave pupils opportunities to see that completing reading tasks, participating actively, and

showing good behavior could be rewarded, helping build confidence and positive attitudes toward learning.

At the Grade 5 stage, the comic stories “*New Pages, New Courage*” introduced situations that required greater responsibility, patience, and perseverance. The characters faced obstacles that challenged them to stay committed and continue working toward their goals. These experiences encouraged pupils to reflect on how effort and persistence contribute to success. By receiving stars for their participation and improvement, learners developed a stronger sense of accountability and began to see recognition as a result of consistent effort. The activity also reinforced the idea that motivation grows when progress is acknowledged.

As pupils progressed to Grade 6, the comic stories “*Stronger than Yesterday*” incorporated more complex situations that required self-discipline, resilience, and a deeper understanding of personal growth. The characters demonstrated that recognition is earned through persistence, responsibility, and meaningful contributions. Through these narratives, learners were encouraged to value effort, remain committed to their goals, and appreciate the importance of perseverance in achieving success. The Stars at the End Activity became a tool for reinforcing intrinsic motivation, helping pupils recognize that continued effort leads to improvement and reward.

The comic stories were intentionally designed to demonstrate that recognition is meaningful when it reflects genuine effort and progress. Each story highlighted the importance of persistence, good behavior, and active participation in achieving positive outcomes. While the stories intended for younger learners focused on immediate encouragement and simple accomplishments, those designed for older pupils emphasized responsibility, self-discipline, and sustained effort. This progression ensured that the activity remained relevant and meaningful across the different grade levels.

In the ARAL - Reading sessions, the Stars at the End Activities were designed to strengthen important Social and Emotional Learning competencies, particularly self-confidence, self-management, motivation, and perseverance. Pupils were encouraged to value their effort, stay engaged throughout the session, and continue participating even when tasks became difficult. The activity also promoted positive self-perception by helping learners see that their actions were noticed and appreciated. Through consistent reinforcement, pupils developed greater confidence in their ability to learn and succeed.

The comic stories further enhanced engagement by presenting characters who experienced challenges, worked hard, and received recognition for their persistence and effort. By connecting with these characters, learners gained practical examples of how effort leads to positive outcomes. Consequently, the Stars at the End Activities not only strengthened motivation and self-confidence but also contributed to higher levels of engagement during ARAL - Reading sessions. As pupils became more aware that their effort was valued, they demonstrated greater participation, persistence, and commitment to completing their reading tasks.

The Stars at the End Activities are supported by SEL and learner engagement studies. CASEL (2020), Jones et al. (2021), and Cipriano et al. (2023) show that recognizing learner effort builds motivation, confidence, and persistence, while UNESCO (2021)

emphasizes that supportive environments encourage continued participation in literacy tasks.

Sardalla (2022), Palma et al. (2025), and Reyes and Mendoza (2023) likewise found that positive reinforcement strengthens reading engagement, classroom participation, and motivation. By acknowledging effort and progress, the activity helps learners stay encouraged and engaged throughout ARAL - Reading sessions.

To summarize, the seven SEL-based activities are well supported by research on effective, structured interventions. CASEL (2020) emphasizes that SEL works best when it is explicit, sequential, and connected to academic instruction, which matches the way the activities were designed as one connected framework.

Durlak et al. (2011) found that well-implemented SEL programs improve social behavior, reduce conduct problems, and support academic performance. This supports the use of the Calm and Ready Check-In and Behavior Booster Chart for settling behavior and preparing learners for reading tasks. Mercer and Littleton (2007) also highlight the value of guided support in learning, which aligns with the Try Again Reading and Guided Error Correction activities.

The reflective tools, such as the Mistake-to-Success Cards, I Can Improve Board, and Stars at the End, are consistent with Bandura's (1997) idea that confidence grows through mastery experiences and positive feedback. The use of grade-specific comics also fits Mayer's (2009) multimedia learning principles, since visual narratives can make lessons more engaging and easier to understand for young learners.

### **Extent of Acceptability of the Developed Social and Emotional Learning (SEL) – Based Activities as Evaluated by ARAL – Teachers and School Heads**

The extent of acceptability of the SEL-based activities, as evaluated by ARAL teachers and school heads, was organized into three categories: content, format, and the presentation and organization of the comics.

#### **Content**

Table 6 presents the evaluation rated by the 93 expert respondents, composed of principals, school heads, coordinators, and selected ARAL teachers, on the acceptability of the developed Social and Emotional Learning (SEL) - Based Activities in terms of content. As shown in the table, the domain obtained an overall weighted mean of 4.76, verbally interpreted as Very Highly Acceptable (VHA). This indicates that the content of the developed activities is well accepted by the evaluators and considered highly appropriate for use in upper-elementary language and literacy instruction.

Among the ten items evaluated, Item 3, "Content addresses academic and socio-emotional needs," received the highest rating, with a weighted mean of 4.89 and a verbal interpretation of Very Highly Acceptable, ranked 1. This suggests that the respondents strongly recognized the value of integrating both reading support and socio-emotional development in the materials.

Closely following in ranked 2 was item 6, "Activities promote positive values," with a Weighted Mean of 4.86, also interpreted as Very Highly Acceptable. Item 10, "Content

supports holistic learner development,” ranked 3<sup>rd</sup> with a weighted mean of 4.85, showing that the respondents viewed the materials as effective in supporting not only academic growth but also emotional and personal development.

The remaining items also garnered strong support within the category, all remaining within the Very High Acceptable range. Item 7 “Content support struggling readers” achieved a weighted mean of 4.84, landing in 4<sup>th</sup> rank. Item 9, “Content is relevant to pupils’ experiences,” ranked 5 with a weighted mean 4.83, reinforcing that the school-based scenarios feel authentic to upper-elementary learners (Grades 4 to 6 pupils). This was followed by Item 1 “Content is appropriate to the pupils’ grade level”, which ranked 6 with a weighted mean of 4.82, showing strong developmental alignment. Item 4, “Activities promote learner-centered instruction” secured the 7<sup>th</sup> ranked with a weighted mean of 4.81, emphasizing the highly interactive nature of the worksheets. Item 2, “Activities align with DepEd reading competencies,” finished in 8<sup>th</sup> rank with weighted mean of 4.78, validating its firm foundation in national academic standards.

**Table 6**

*Acceptability of the Developed SEL-Based Activities in Terms of Content*

|    | <b>Content (n=93)</b>                                 | <b>WM</b> | <b>Interpretation</b>  | <b>Rank</b> |
|----|-------------------------------------------------------|-----------|------------------------|-------------|
| 1  | Content is appropriate to the pupils' grade level.    | 4.82      | Very Highly Acceptable | 6           |
| 2  | Activities align with DepEd reading competencies.     | 4.78      | Very Highly Acceptable | 8           |
| 3  | Content addresses academic and socio-emotional needs. | 4.89      | Very Highly Acceptable | 1           |
| 4  | Activities promote learner-centered instruction.      | 4.81      | Very Highly Acceptable | 7           |
| 5  | Content supports inclusive education.                 | 4.42      | Highly Acceptable      | 10          |
| 6  | Activities promote positive values.                   | 4.86      | Very Highly Acceptable | 2           |
| 7  | Content supports struggling readers.                  | 4.84      | Very Highly Acceptable | 4           |
| 8  | Activities complement ARAL-Reading materials.         | 4.46      | Highly Acceptable      | 9           |
| 9  | Content is relevant to pupils' experiences.           | 4.83      | Very Highly Acceptable | 5           |
| 10 | Content supports holistic learner development.        | 4.85      | Very Highly Acceptable | 3           |

|                              |             |                               |
|------------------------------|-------------|-------------------------------|
| <b>Overall Weighted Mean</b> | <b>4.76</b> | <b>Very Highly Acceptable</b> |
|------------------------------|-------------|-------------------------------|

*Legend:*

| <b>Rating</b> | <b>Scale Range</b> | <b>Descriptive Interpretation</b> |
|---------------|--------------------|-----------------------------------|
| 5             | 4.21–5.00          | Highly Acceptable                 |
| 4             | 3.41–4.20          | Acceptable                        |
| 3             | 2.61–3.40          | Moderately Acceptable             |
| 2             | 1.81–2.60          | Slightly Acceptable               |
| 1             | 1.00–1.80          | Not Acceptable                    |

On the other hand, the lowest ratings in this domain were given to item 8, “Activities complement ARAL-Reading materials,” with a Weighted Mean of 4.46, ranked 9, and item 5, “Content supports inclusive education,” with a Weighted Mean of 4.42, ranked 10. Although these indicators were still verbally interpreted as Highly Acceptable, their lower rankings suggest that there is still room to strengthen the alignment of the activities with remedial reading goals and with the diverse needs of learners. Even so, the results show that the content is already perceived as strong and meaningful.

Overall, the findings suggest that integrating socio-emotional learning into reading instruction helps address the challenges many pupils face, such as hesitation, distraction, and fear of making mistakes. The strong ratings across the indicators show that the seven developed SEL - based activities, such as Calm and Ready Check-In, Behavior Booster Chart, Try Again Reading, Guided Error Correction, Mistake-to-Success Cards, I Can Improve Board, and Stars at the End, are viewed as appropriate to the ARAL-Reading program. These activities help pupils begin reading in a calm state, stay focused during lessons, correct errors with guidance, and recognize their own progress.

The use of educational comics makes the activities even more effective because it turns abstract ideas like self-monitoring, persistence, and emotional regulation into concrete and relatable situations. Through the stories and characters, pupils are able to see how mistakes can be corrected, how effort leads to improvement, and how learning can happen in a supportive environment. In this way, the content of the activities does more than teach reading skills; it helps create a classroom experience where pupils feel calm and relaxed, encouraged, and confident to try again.

The high acceptability ratings of the developed SEL - based activities are consistent with previous studies showing that instructional materials are more acceptable when they are learner-centered, relevant, culturally responsive, and responsive to both academic and socio-emotional needs. Cipriano et al. (2023) noted that SEL interventions are more effective when teachers see them as practical, manageable, and supportive of learning goals.

Likewise, Takizawa et al. (2023) and Jones and Kahn (2017) explained that SEL activities are easier to accept when they fit naturally into regular instruction and connect well with literacy objectives. In the local context, Sardalla (2022) and Dela Cruz and Ramos (2023)

found that SEL - based literacy strategies are well received because they reflect learners' experiences, encourage participation, and provide emotional support.

These findings suggest that the developed activities were highly acceptable because they combine literacy and SEL in a way that is meaningful, relatable, and appropriate for Grade 4 to 6 learners.

### Format

Table 7 presents the evaluation ratings given by the expert respondents, composed of principals, school heads, and selected ARAL teachers, on the acceptability of the developed Social and Emotional Learning (SEL)-Based Activities in terms of format. The table shows that the category obtained an overall weighted mean of 4.69, interpreted as Very Highly Acceptable (VHA). This result suggests that the overall structure, organization, and delivery of the activities were viewed positively by the evaluators and considered suitable for use in upper-elementary language and literacy instruction.

**Table 7.** *Acceptability of the Developed SEL-Based Activities in Terms of Format*

|    | <b>Format (n=93)</b>                             | <b>WM</b> | <b>Interpretation</b>  | <b>Rank</b> |
|----|--------------------------------------------------|-----------|------------------------|-------------|
| 1  | Format is easy to understand and follow.         | 4.76      | Very Highly Acceptable | 4           |
| 2  | Activities fit ARAL-Reading schedules.           | 4.72      | Very Highly Acceptable | 6           |
| 3  | Materials are appropriate for elementary pupils. | 4.81      | Very Highly Acceptable | 2           |
| 4  | Format allows teacher flexibility.               | 4.38      | Highly Acceptable      | 10          |
| 5  | Activities encourage interaction.                | 4.79      | Very Highly Acceptable | 3           |
| 6  | Instructions are clear and concise.              | 4.74      | Very Highly Acceptable | 5           |
| 7  | Format supports differentiated instruction.      | 4.70      | Very Highly Acceptable | 7           |
| 8  | Activities are adaptable across grade levels.    | 4.41      | Highly Acceptable      | 9           |
| 9  | Format supports individual and group work.       | 4.73      | Very Highly Acceptable | 5           |
| 10 | Format enhances learner engagement.              | 4.83      | Very Highly Acceptable | 1           |
|    | Overall Weighted Mean                            | 4.69      | Very Highly Acceptable |             |

*Legend:*

| <b>Rating</b> | <b>Scale Range</b> | <b>Descriptive Interpretation</b> |
|---------------|--------------------|-----------------------------------|
| 5             | 4.21–5.00          | Highly Acceptable                 |
| 4             | 3.41–4.20          | Acceptable                        |
| 3             | 2.61–3.40          | Moderately Acceptable             |

|   |           |                     |
|---|-----------|---------------------|
| 2 | 1.81–2.60 | Slightly Acceptable |
| 1 | 1.00–1.80 | Not Acceptable      |

Among the 10 items, Item 10, “Format enhances learner engagement,” received the highest rating with a weighted mean of 4.83, interpreted as Very Highly Acceptable and ranked 1. This indicates that the respondents strongly recognized the value of presenting the activities in a way that captures learners’ attention and encourages active participation. Close behind was Item 3, “Materials are appropriate for elementary pupils,” which obtained a weighted mean of 4.81, also interpreted as Very Highly Acceptable and ranked 2. This reflects the evaluators’ belief that the format matches the developmental level of the learners. Item 5, “Activities encourage interaction,” ranked 3 with a weighted mean of 4.79, showing that the format was also seen as effective in promoting classroom discussion and collaboration.

The remaining items likewise received strong support, all within the Very Highly Acceptable range. Item 1, “Format is easy to understand and follow,” obtained a weighted mean of 4.76 and ranked 4, confirming that the materials are user-friendly and easy to navigate. This was followed by item 6, “Instructions are clear and concise,” which ranked 5 with a weighted mean of 4.74. This suggests that the materials are presented in a clear and straightforward manner, making them easy for teachers and pupils to follow. Item 9, “Format supports individual and group work,” also ranked 6 with a weighted mean of 4.73, reflecting the flexibility of the activities for both independent tasks and collaborative learning.

Item 2, “Activities fit ARAL – Reading schedules,” ranked 7 with a weighted mean of 4.72, showing that the format aligns well with the available instructional time. Item 7, “Format supports differentiated instruction,” followed in 8<sup>th</sup> rank with a weighted mean of 4.70, indicating that the activities can still support learners with varying reading levels.

On the other hand, the lowest ratings were given to Item 8, “Activities are adaptable across grade levels,” with a weighted mean of 4.41, ranked 9, and Item 4, “Format allows teacher flexibility,” with a weighted mean of 4.38, ranked 10. Although both items were still interpreted as Highly Acceptable, their lower rankings suggest that there is room to make the format even more flexible so teachers can adjust the activities more easily when classroom conditions change. Even though the results show that, the structure and presentation of the activities are already viewed as strong and effective.

Overall, the findings suggest that the format of the developed SEL – based activities support the flow of instruction and helps address common classroom challenges such as loss of attention, confusion, and lack of routine. The strong ratings across the items show that the seven SEL – based activities in comics form, such as Calm and Ready Check-In, Behavior Booster Chart, Try Again Reading, Guided Error Correction, Mistake-to-Success Cards, I Can Improve Board, and Stars at the End, are well-organized for implementation in the ARAL-Reading program. Their structure allows pupils to move smoothly from emotional preparation to guided reading tasks and reflective activities without feeling overwhelmed.



The use of educational comics makes the activities even more effective because it presents the lessons in a clear, visual, and child-friendly way. Instead of overwhelming learners with long explanations, the comics break ideas into simple steps that are easier to understand and follow. This helps struggling readers see what to do, how to respond, and how to improve. In this way, the format does more than organize the lesson; it creates a calm, predictable, and supportive learning experience where pupils can move through the reading process with confidence.

The very high acceptability of the format of the developed SEL - based activities is supported by literature showing that instructional materials are more effective when they are well organized, interactive, learner-friendly, and easy to fit into classroom routines. Cipriano et al. (2023) noted that SEL activities are more acceptable when teachers find them practical, clear, and manageable.

Similarly, Takizawa et al. (2023) and Jones and Kahn (2017) explained that structured SEL activities are easier to implement when they align with regular instruction and support literacy goals without disrupting class time. Local findings from the Department of Education Schools Division of Ormoc City (2025) and Alonzo et al. (2024) also showed that, interactive and clearly structured activities improve participation and are viewed by teachers as manageable and effective.

These studies suggest that the format of the developed SEL - based activities contributes to their high acceptability by making lessons engaging, easy to follow, and responsive to the needs of both teachers and learners in the ARAL-Reading program.

## **Presentation and Organization**

Table 8 presents the assessment of the evaluators on the presentation and organization of the developed Social and Emotional Learning (SEL)-Based Activities. The domain obtained an overall weighted mean of 4.75, verbally interpreted as Very Highly Acceptable (VHA). This indicates that the visual design, sequencing, and overall organization of the materials were strongly approved by the evaluators and regarded as highly suitable for upper-elementary reading instruction.

Among the indicators, Item 3, “Visuals are attractive and age-appropriate,” received the highest rating with a weighted mean of 4.92 and ranked 1. This shows that the evaluators found the visual elements effective in capturing pupils’ attention and making the activities more engaging. Item 4, “Presentation is child-friendly,” with a weighted mean of 4.88, also interpreted as Very Highly Acceptable and ranked 2. This suggests that the materials were presented in a way that is comfortable and appropriate for young learners. Item 10, “Overall presentation enhances motivation,” ranked 3 with a weighted mean of 4.87, indicating that the general appearance of the materials helps encourage pupils to participate more actively in the lessons.

**Table 8.** *Acceptability of the Developed SEL-Based Activities in Terms of Presentation and Organization*

|    | <b>Presentation and Organization<br/>(n=93)</b> | <b>WM</b> | <b>Interpretation</b>  | <b>Rank</b> |
|----|-------------------------------------------------|-----------|------------------------|-------------|
| 1  | Activities are logically sequenced.             | 4.78      | Very Highly Acceptable | 7           |
| 2  | Instructions are clear and simple.              | 4.45      | Highly Acceptable      | 9           |
| 3  | Visuals are attractive and age-appropriate.     | 4.92      | Very Highly Acceptable | 1           |
| 4  | Presentation is child-friendly.                 | 4.88      | Very Highly Acceptable | 2           |
| 5  | Organization supports smooth lesson flow.       | 4.81      | Very Highly Acceptable | 5           |
| 6  | Presentation encourages active participation.   | 4.85      | Very Highly Acceptable | 4           |
| 7  | Materials are well-organized.                   | 4.79      | Very Highly Acceptable | 6           |
| 8  | Presentation minimizes confusion.               | 4.76      | Very Highly Acceptable | 8           |
| 9  | Activities are easy to prepare.                 | 4.39      | Highly Acceptable      | 10          |
| 10 | Overall presentation enhances motivation.       | 4.87      | Very Highly Acceptable | 3           |
|    | Overall Weighted Mean                           | 4.75      | Very Highly Acceptable |             |

*Legend:*

| <b>Rating</b> | <b>Scale Range</b> | <b>Descriptive Interpretation</b> |
|---------------|--------------------|-----------------------------------|
| 5             | 4.21–5.00          | Highly Acceptable                 |
| 4             | 3.41–4.20          | Acceptable                        |
| 3             | 2.61–3.40          | Moderately Acceptable             |
| 2             | 1.81–2.60          | Slightly Acceptable               |
| 1             | 1.00–1.80          | Not Acceptable                    |

The other items likewise received very strong ratings. Item 6, “Presentation encourages active participation,” ranked 4 with a weighted mean of 4.85, showing that the layout supports learner involvement during the activities. Item 5, “Organization supports smooth lesson flow,” ranked 5 with a weighted mean of 4.81, suggesting that the materials are arranged in a way that allows the lesson to proceed naturally and without disruption. Item 7, “Materials are well-organized,” ranked 6 with a Weighted Mean of 4.79, while Item 1, “Activities are logically sequenced,” ranked 7 with a weighted mean of 4.78. Item 8, “Presentation minimizes confusion,” ranked 8<sup>th</sup> with a weighted mean of 4.76, indicating that the presentation helps learners understand the tasks more easily.

On the other hand, the lowest ratings were given to Item 2, “Instructions are clear and simple,” with a weighted mean of 4.45, and Item 9, “Activities are easy to prepare,” with

a weighted mean of 4.39. Although both were still verbally interpreted as Highly Acceptable, their lower rankings suggest that there is still room to simplify some written directions and reduce the preparation needed by teachers before implementation. Even so, the results show that the materials are already well-designed, visually appealing, and structurally sound.

Overall, the findings suggest that the presentation and organization of the SEL – based activities help address common challenges in reading instruction, such as anxiety, fatigue, and loss of interest. The strong ratings across the indicators show that the seven activities which were mentioned in the previous table are presented in a way that supports the flow of the ARAL – Reading program. Their structure allows pupils to move from emotional preparation to reading practice and reflection in a clear and manageable sequence.

The educational comic format developed by the researcher pattern to DepEd ARAL-Reading makes the activities even more effective because it presents the lessons in a visual and child-friendly way. Instead of making the activities feel heavy or intimidating, the comics break them into manageable scenes that are easy to follow. This helps pupils understand what to do, see how characters respond to challenges, and learn how to apply the same strategies in their own reading tasks. In this way, the presentation does more than organize the lessons; it creates a supportive and engaging learning experience that helps pupils feel more confident and willing to try again.

The very high acceptability of the presentation and organization of the SEL - based activities is consistent with studies showing that instructional materials are more effective when they are visually engaging, clearly sequenced, and appropriate to learners' developmental level. Cipriano et al. (2023) and Takizawa et al. (2023) noted that structured SEL activities improve participation and implementation when the format is clear, manageable, and easy to follow.

This is also supported by Schonert-Reichl (2017), and OECD (2021), who emphasized that well-organized and visually supportive materials reduce anxiety, improve concentration, and sustain learner engagement. In the local context, the Department of Education (2023, 2024), Mendoza (2022), and Dela Cruz and Ramos (2023), found that learner-friendly, visually appealing, and well-sequenced literacy materials strengthen comprehension, motivation, and participation. The MATATAG Agenda (Department of Education, 2024) further supports the use of inclusive, clear, and developmentally appropriate materials to promote foundational literacy and learner well-being.

These findings explain why the ARAL - Reading SEL activities were rated highly acceptable in terms of presentation and organization. Their structured comic-based flow helps reduce cognitive load, maintain focus, and guide learners smoothly from emotional readiness to reading and reflection.

The overall evaluation of the developed SEL-based activities shows strong consensus among the 93 expert evaluators, with all three domains rated Very Highly Acceptable. Content received the highest mean of 4.76, followed closely by Presentation and Organization with a mean of 4.75, while Format obtained the lowest mean of 4.69, though still within the Very Highly Acceptable range.

These results suggest that the activities are instructionally strong because they combine DepEd language competencies with socio-emotional support, using attractive, age-appropriate, and child-friendly comic-based materials. The lower rating for Format points to a minor need for improvement in cross-grade adaptability and teacher flexibility, but overall, the modules are practical, engaging, and ready for classroom use.

The very high acceptability ratings across Content, Presentation and Organization, and Format are supported by literature showing that instructional materials are most effective when they are relevant, visually engaging, learner-centered, and easy to use in class. CASEL (2020) and Cipriano et al. (2023) emphasize that SEL activities work best when they are integrated into academic instruction and perceived by teachers as practical and manageable.

The strong ratings for Content and Presentation and Organization are also consistent with Mayer's (2009) Cognitive Theory of Multimedia Learning and Schonert-Reichl (2017), both of which highlight the value of clear, attractive, and developmentally appropriate materials. The slightly lower score for Format reflects a common implementation issue: teachers value structured materials, but they also need enough flexibility to adapt them to different learners and schedules, as noted by Takizawa et al. (2023) and Jones and Kahn (2017).

Overall, the findings show that the developed SEL-based activities are well aligned with national priorities and literacy recovery goals. UNESCO (2021) and the Department of Education (2023, 2024) both stress that effective reading interventions should address not only literacy skills but also confidence, resilience, and emotional support, which is exactly what these activities aim to do.

### **School-Based Policy Interventions Proposed to Support the Sustainable Integration and Implementation of the Developed Sel-Based Activities Within the Aral–Reading Program**

To ensure that the developed SEL-based activities and educational comics would be sustained within the ARAL – Reading Program, the key informants proposed school-based policy interventions. These activities were designed as age-appropriate comic-based materials for Grades 4 to 6 to make SEL concepts more relatable and engaging for pupils. Using Colaizzi's method, the responses of the 15 key informants were analyzed and grouped into themes relevant to institutionalizing the intervention.

To ensure a reliable and well-rounded analysis, the testimonies of the 15 participants were examined systematically. This process led to three important themes for sustainable implementation: (1) Institutionalized Time and Curriculum Mapping, (2) Mandated Professional Development through Professional Learning Communities, and (3) Strategic Resource Mobilization and Accountability Frameworks.

#### **Institutionalized Time and Curriculum Mapping**

The first emergent theme highlights the need for clear administrative policies that protect instructional time for SEL-based reading interventions. The key informants emphasized that the seven activities, such as the Calm and Ready Check-In and Stars at the End,

should be formally included in local instructional plans so that they will not be overshadowed by traditional reading drills.

Mario emphasized the need to formalize this integration through an official school order:

“For an intervention like this to survive beyond the research phase, it cannot be left to the teacher’s discretion alone. We need a school policy or memorandum that maps these comic stories directly into our weekly lesson logs. By explicitly budgeting 10 to 15 minutes of the ARAL session for emotional centering and error reframing, we protect the routine from being eaten up by generic reading worksheets.” (SH Mario, Key Informant 3)

This perspective was echoed by ARAL-teachers who face the daily pressure of packed schedules. Grace shared her lived reality:

"The educational comics are highly engaging, but when the examination season approaches, teachers tend to rush through decoding drills. If our instructional leadership issues a concrete policy aligning these SEL components with the DepEd basic literacy blocks, it legitimizes the process. It gives us the administrative permission to pause, let the students reflect on their mistakes using the Mistake-to-Success Cards, and build their confidence without feeling guilty about losing time." (Teacher Grace, Key Informant 12)

Albert agreed that structural inclusion must be written into institutional goals:

shared her lived reality:

"We must institutionalize this by embedding the entire comic-based reading cycle directly into our annual School Improvement Plan (SIP). When it becomes part of the school's official targets, it guarantees that every reading coordinator will allocate protected hours for these activities." (Principal Albert, Key Informant 2)

Elena noted how policy shields the program from shifting priorities:

"Without a written policy directive, good programs disappear whenever there is a change in school leadership. We need to sign a localized policy standardizing the use of the Behavior Booster Chart so that it remains a baseline routine for all future remedial reading sessions." (Principal Elena, Key Informant 6)

Sarah discussed the administrative clarity that structured curriculum mapping provides:

"Having a policy that explicitly shows us where the Try Again Reading exercises fit within our daily lesson objectives removes the guesswork. It makes our teaching organized and ensures that emotional checking-in is not viewed as a waste of academic time." (Teacher Sarah, Key Informant 15)

Roberto focused on the mandate required to shift instructional mindsets:

"A school-level memo must be issued to formalize the transition from traditional reading interventions to this SEL-based approach. This policy creates accountability and

mandates that literacy building can no longer be separated from psychological care." (SH Roberto, Key Informant 9)

Clark shared how curriculum mandates help track school-wide implementation:

"When a policy legally requires the integration of the I Can Improve Board into class routines, it creates a unified school environment. It allows supervisors to verify that reading accuracy is being taught through supportive, non-punitive frameworks." (Principal Clark, Key Informant 4)

Mark emphasized how institutional timing changes pupil responses:

"When the school policy protects our time, we don't have to rush the children through their errors. The kids realize that the first 10 minutes are strictly for them to settle down and relax, which makes them much more confident when it is time to read aloud." (SH Mark, Key Informant 11)

The testimonies of the key informants suggest that, one of the main challenges in sustaining educational innovations in public schools is the absence of clear time allocation and institutional support. The informants consistently pointed out that when SEL-based activities are not formally mapped into school policies, teachers often return to more traditional, test-driven routines that can increase student pressure and reduce reading confidence.

The implication is that the seven developed SEL activities should not be treated as separate enrichment tasks. Instead, they need to be officially integrated into the School Improvement Plan and weekly lesson logs so that teachers have clear guidance and protected time for implementation. When schools formally set aside time for these comic-based activities, teachers are better able to focus on emotional readiness, guided correction, and steady progress rather than rushing pupils through reading tasks.

This need for policy support is consistent with the work of CASEL (2020), which emphasizes that SEL is most effective when it is embedded in school leadership, curriculum planning, and school culture. It is also supported by OECD (2021), which notes that aligning socio-emotional learning with school improvement plans and instructional frameworks helps create more supportive, inclusive, and engaging learning environments.

Locally, this aligns with the Department of Education's (2023) learner-centered reforms and with Dela Cruz (2023), whose findings show that schools with structured SEL policies tend to implement literacy interventions more consistently and encourage greater classroom participation.

### **Mandated Professional Development through Professional Learning Communities**

The second theme highlights the need for continuous capacity building among teachers and facilitators. The informants explained that while the comic-based format naturally engages learners, teachers still need proper training to shift from traditional, corrective

approaches to more supportive strategies that encourage growth, confidence, and self-correction.

John proposed utilizing existing institutional networks to sustain teacher skills:

"Teacher need proper training to effectively use these SEL-based activities during ARAL-Reading sessions. Not all teachers are confident in helping pupils manage reading anxiety, respond positively to mistakes, or encourage them to try again. These topics should be included in our regular School Learning Action Cell (SLAC) sessions so teachers can share effective practices, and learn from one another. Experienced ARAL teachers can also mentor new teachers on how to use the comic-based activities effectively in improving both reading skills and pupils' social and emotional development." (SH John, Key Informant 7)

Teacher Rose highlighted the value of structured collaboration for maintaining instructional quality:

"When we started using the Behavior Booster Charts and the I Can Improve Boards, we ran into unique behavioral situations across different grade levels. Having a policy that mandates monthly reflection meetings among ARAL teachers allows us to troubleshoot together. It keeps our implementation unified, prevents teacher burnout, and ensures we are all using the comic characters consistently to teach resilience." (Teacher Rose, Key Informant 14)

Fernando emphasized the role of official training mandates in maintaining teacher confidence:

"Our school board must mandate a specialized orientation program at the start of every academic year. Teachers need to feel completely equipped in using the Guided Error Correction activities so they can manage decoding mistakes without triggering student defensiveness." (SH Fernando, Key Informant 10)

Alicia discussed building professional networks across nearby schools:

"We should establish an administrative policy that fosters inter-school benchmarking sessions. By allowing our ARAL teachers to share how they utilize the comic narratives to boost cognitive engagement, we create a wider community of practice that keeps the program alive." (SH Alicia, Key Informant 8)

Teacher Mary noted that ongoing professional support directly impacts classroom implementation:

"It's not enough to give us the comics; we need regular coaching on the psychological aspect of the intervention. A policy that provides us with access to guidance counsellors during our monthly SLAC meetings helps us understand how to better support pupils who experience extreme reading anxiety." (Teacher Mary, Key Informant 1)

Clark highlighted the long-term benefit of standardizing instructional toolkits:

"We need to write a master training manual for these seven SEL activities and make it a study a required policy for all newly hired remedial reading instructors. This ensures that even when staff turnover occurs, the quality of our reading support remains consistently high." (SH Clark, Key Informant 4)

Grace shared how collaborative training sessions reduce pedagogical isolation:

"When the administration mandates shared planning periods for ARAL facilitators, it allows us to align our strategies. We can review which comic strips worked best for specific reading difficulties, ensuring that no teacher is left struggling alone." (Teacher Grace, Key Informant 12)

The extract of the key informants' responses suggests that the long-term success of the intervention depends greatly on the continuous professional growth of its facilitators. The informants shared that teachers often feel unprepared or uneasy when addressing the emotional side of reading remediation, especially when pupils need reassurance, patience, and guided self-correction.

The implication for school leadership is the need to move beyond one-time training sessions. Instead, schools should adopt a policy that provides ongoing professional learning opportunities, such as School-Based Learning Action Cell (SLAC) sessions and cross-grade peer mentoring circles. These sustained learning spaces can help teachers use the educational comics more confidently and more effectively, turning them from simple visual materials into meaningful tools for supporting pupils' self-monitoring, resilience, and growth.

This finding is consistent with the work of Darling-Hammond et al. (2020), who emphasized that ongoing teacher training and professional development are essential for strong implementation fidelity and learner engagement. It also aligns with Schonert-Reichl (2017), who noted that institutional support for teacher collaboration is necessary to sustain effective classroom-based SEL initiatives.

The emphasis on teacher support likewise reflects the goals of the DIGI-SEL Project (2024), which found that educators who receive continuous SEL training report greater confidence in handling emotionally supportive and interactive activities. This is further reinforced by the Department of Education Schools Division of Ormoc City (2025), which recommended the creation of school-based SEL committees to strengthen coordination, provide structured peer mentoring, and support consistent implementation across grade levels.

### **Strategic Resource Mobilization and Accountability Frameworks**

The final theme highlights the need for steady resources and clear accountability to keep the intervention going across school years. The informants emphasized that for the program to last, schools must secure funds for printing the materials and also connect its implementation to teacher performance and school monitoring.



Susan discussed the practical financial policies needed to sustain the physical materials:

"The biggest roadblock to any modular or comic-based program is always the cost of ink and paper. To make this sustainable, the school head must take the initiative to integrate the printing costs of these educational comics into the annual Annual Implementation Plan (AIP) funded by the school's Maintenance and Other Operating Expenses (MOOE). When it has its own dedicated line item in the budget, the program won't die when the researcher leaves." (Teacher Susan, Key Informant 5)

To ensure long-term commitment, Tomas operationalized accountability by embedding the strategy into formal teacher evaluations:

"We must tie the implementation of these seven SEL activities to the Individual Performance Commitment and Review Form (IPCRF) under the innovation and literacy targets. When teachers know that their active guidance in error correction and their utilization of these comics are recognized as key performance indicators during appraisals, their commitment shifts from passive compliance to genuine, sustained execution." (SH Tomas, Key Informant 13)

Mark agreed that financial backing changes the dynamic for frontline educators:

"As a teacher, it is deeply encouraging when you don't have to shell out your own money to print colored comics for your struggling readers. A policy that guarantees funded, readily available kits at the start of every quarter change everything. It allows us to focus entirely on helping the children process their reading errors and build their self-esteem." (SH Mark, Key Informant 11)

Roberto suggested establishing partnership policies to augment local budgets:

"Our policy framework should include formal guidelines for Adopt-a-School partnerships or local government sponsorships. Securing external stakeholders who are willing to finance the high-quality, colored printing of our comic booklets ensures that the materials remain attractive and durable for the children." (SH Roberto, Key Informant 9)

Grace noted that institutional recognition reinforces teacher dedication:

"The school administration should pass a policy that creates an awards system for outstanding ARAL reading rooms. When the management formally recognizes classrooms that show excellent student participation and creative uses of the I Can Improve Boards, it keeps the teachers highly motivated." (Grade 5 Teacher, Key Informant 12)

Ma'am Elena discussed the necessity of institutional auditing to verify program integrity:

"We need to set up a regular quality assurance policy where school heads periodically review the Mistake-to-Success Cards. This monitoring ensures that public funds from the

MOOE are directly translating into structured, supportive, and effective self-correction practices in the classroom." (Principal I, Key Informant 6)

Teacher Sarah emphasized the security that comes with permanent material allocation:

"Knowing that the school has a mandated budget for laminating our tracking charts and printing our booklets means we can focus entirely on pedagogy. It shows the teachers that the school administration is genuinely invested in creating a safe space for struggling readers." (Grade 6 Teacher, Key Informant 15)

The analysis of this final theme shows that long-term educational sustainability depends on concrete financial support and clear institutional accountability. The informants explained that interventions often lose momentum when teachers have to shoulder the cost of instructional materials themselves or when the program is not included in the school's regular monitoring and audit processes.

The policy implication is twofold. First, school administrators should officially allocate funds from the school's Maintenance and Other Operating Expenses (MOOE) to cover the printing and production of the educational comics and tracking charts. Second, the implementation of the seven SEL activities should be incorporated into the Individual Performance Commitment and Review Form (IPCRF) so that teachers' efforts are recognized and monitored. When funding is secured and implementation is tied to performance evaluation, teachers are more likely to feel supported and motivated to carry out the reading remediation consistently.

This emphasis on resource support and accountability is consistent with the work of Taylor et al. (2017), who noted that long-term SEL outcomes depend on sustained school support, dedicated funding, and structured tracking systems. It also aligns with UNESCO (2021), which emphasized that equity-focused SEL policies must ensure that essential remedial resources remain funded and accessible to vulnerable learners.

Likewise, the Department of Education's ARAL Reports (2026) highlight that literacy recovery requires strong administrative coordination and school-wide support to sustain remediation efforts. Locally, this finding is supported by Reyes and Bautista (2024), who found that when school leaders provide dependable financial resources and consistent administrative backing, teacher commitment strengthens and reading interventions are more likely to succeed over time.

As a whole, the testimonies of the 15 key informants point to a clear path for sustaining the developed SEL-based reading program. Their responses show that long-term success depends not only on the quality of the seven activities, but also on school policies, teacher preparation, and steady resource support. In particular, they stressed the need to embed the program in school plans, protect time for implementation, and make it part of regular classroom practice rather than a one-time innovation.

Their suggestions are consistent with the literature showing that educational reforms last longer when they are built into school systems and supported by leadership. OECD (2021) and Cipriano et al. (2023) mentioned that SEL interventions work best when schools provide clear structures, monitoring, and administrative support. Similarly, Takizawa et

al. (2023) and Darling-Hammond et al. (2017) highlight the importance of continuous teacher development through SLAC sessions, mentoring, and collaborative planning.

The key informants also underscored the need for sustainable funding and accountability. They suggested using the school's MOOE for printing and other materials, and linking implementation to IPCRF indicators to encourage consistency. This aligns with UNESCO (2021), Taylor et al. (2017), and the Department of Education (2023, 2026), which all stress that literacy and SEL initiatives require long-term investment, leadership commitment, and supportive systems to remain effective.

Generally, the findings suggest that the program can be sustained through curriculum integration, teacher training, resource allocation, and clear accountability. Supported by Jones and Kahn (2017), Schonert-Reichl (2017), and the Department of Education MATATAG Agenda (2024), the seven SEL-based activities have strong potential to strengthen not only reading skills but also learners' confidence, resilience, and emotional readiness.

### **Additional Considerations for School-Based Policies Supporting Effective SEL Integration in the ARAL-Reading Program**

To gather additional insights on how school-based policies can effectively support Social and Emotional Learning (SEL) integration within the ARAL-Reading Program, follow-up interviews were conducted with 15 key informants. Their suggestions emerged from this theme and highlight the importance of establishing a whole-school approach to SEL integration within the ARAL-Reading Program.

The key informants emphasized that school-based policies should go beyond classroom implementation and actively involve parents, guidance personnel, community partners, and school leaders in supporting learners' emotional well-being and reading development. According to the participants, SEL integration becomes more sustainable and effective when all stakeholders share a common understanding of the program's goals and work together to create a supportive learning environment.

Susan emphasized the importance of family involvement in strengthening SEL practices:

"The school policy should include regular parent orientation sessions about the SEL activities. When parents understand the purpose of the comics, reflection cards, and behavior charts, they can reinforce the same positive messages at home. Learning should not stop when the child leaves the classroom." (Principal Susan, Key Informant 1)

Principal Albert highlighted the need for stronger collaboration among school personnel:

*"A successful SEL-based reading program requires coordination among teachers, guidance coordinators, and school administrators. A policy should clearly define the roles of each stakeholder so that emotional support becomes a shared responsibility throughout the school." (Principal Albert, Key Informant 2)*

Teacher Grace stressed the importance of parent-school communication:

*"Many pupils gain confidence when their parents know about their progress. A policy encouraging regular feedback between teachers and families would help sustain the positive behaviors and reading habits developed through the SEL activities." (Teacher Grace, Key Informant 12)*

Clark pointed out the value of creating a school-wide SEL culture:

"The activities should not remain exclusive to ARAL sessions. A school policy can encourage teachers across different subject areas to use similar SEL approaches so that learners experience consistent support throughout the day." (SH Clark, Key Informant 4)

Rose emphasized community participation:

"Partnerships with community volunteers and reading advocates can strengthen the program. A policy that welcomes community involvement would provide additional support for struggling readers while promoting positive social relationships." (Teacher Rose, Key Informant 14)

Fernando highlighted the importance of guidance services:

"School policies should provide opportunities for closer collaboration with guidance personnel. Some learners need additional emotional support beyond the classroom, and guidance counsellors can help strengthen the intervention." (SH Fernando, Key Informant 10)

Sarah discussed the need for continuous monitoring of learner well-being:

"Aside from reading performance, schools should regularly monitor pupils' confidence, motivation, and emotional readiness. Policies that encourage periodic SEL assessments would help teachers identify learners who need additional support." (Teacher Sarah, Key Informant 15)

Elena emphasized consistency across grade levels:

"A school policy should ensure that SEL practices are implemented consistently from Grade 4 to Grade 6. When learners experience the same supportive approaches across years, the impact becomes stronger and more sustainable." (Principal Elena, Key Informant 6)

Mark highlighted learner voice and participation:

"Children should also have opportunities to share their ideas about the activities. Policies that encourage learner feedback help us improve the program and make the activities more meaningful for them." (SH Mark, Key Informant 11)

Roberto focused on school leadership support:

"Administrators must regularly communicate that SEL is a priority. When teachers see that school leaders consistently support these initiatives, implementation becomes stronger and more sustainable." (SH Roberto, Key Informant 9)

Tomas emphasized emotional safety:

"Policies should ensure that every reading session remains a safe space where learners can make mistakes without fear of embarrassment. That is one of the most important strengths of the SEL approach." (SH Tomas, Key Informant 13)

Alicia discussed partnerships with external agencies:

"Schools can benefit from collaborating with universities, NGOs, and literacy organizations. Policies supporting these partnerships can provide additional resources and expertise for both teachers and learners." (SH Alicia, Key Informant 8)

John highlighted recognition systems for learners:

"School policies should encourage the recognition of effort and improvement, not just high achievement. This helps struggling readers stay motivated and continue participating." (SH John, Key Informant 7)

Mario emphasized sustainability through school culture:

"The ultimate goal is to make SEL part of the school's identity. Policies should promote practices that continue even when personnel change because the culture itself supports emotional and academic growth." (SH Mario, Key Informant 3)

Teacher Rose summarized the importance of collective responsibility:

"SEL integration becomes successful when everyone—teachers, parents, administrators, and learners—works together. School policies should create opportunities for all stakeholders to contribute to the success of the program." (Teacher Rose, Key Informant 14)

The responses of the key informants suggest that effective SEL integration in the ARAL–Reading Program requires more than classroom activities alone. They emphasized the need for a whole-school culture where teachers, school leaders, parents, guidance personnel, community partners, and learners work together to support both reading development and socio-emotional growth.

This means school leadership should adopt policies that promote shared responsibility for learners' academic and emotional needs. Such policies may include parent engagement activities, stakeholder partnerships, learner feedback systems, school-wide SEL initiatives, and regular monitoring of pupils' well-being. When support is consistent across home, school, and community, learners are more likely to feel valued, secure, and motivated to participate in reading activities.

This finding is consistent with the framework of the Collaborative for Academic, Social, and Emotional Learning, which highlights the importance of coordinated support from families, schools, and communities. It also aligns with the Organization for Economic Cooperation and Development (2021), which emphasized that whole-school approaches strengthen learner well-being, engagement, and achievement. Locally, it supports the Department of Education MATATAG Agenda (2024) and the findings of Reyes and Bautista (2024), who noted that sustained stakeholder support improves the implementation of literacy and SEL interventions in Philippine public schools.

## **Conclusions**

Based on the findings of the study, the following conclusions are drawn:

Grades 4, 5, and 6 showed generally high engagement during the ARAL-Reading sessions, as perceived by their teachers. This suggests that while pupils were active and responsive, many still need stronger support in peer cooperation, resilience, self-regulation, and persistence, especially when reading tasks become hard/difficult.

The identified seven SEL-based activities were appropriately developed by the researcher to address these engagement gaps. The activities were designed to strengthen both literacy and socio-emotional growth through developmentally appropriate comic strips for Grades 4 to 6.

The developed SEL-based activities were very highly acceptable in all dimensions. This shows that the materials are relevant, learner-friendly, and suitable for classroom use in the ARAL-Reading program. As a whole, the activities have strong potential to support both reading recovery and socio-emotional development among upper-elementary pupils (Grades 4 to 6).

The SEL-based ARAL-Reading program can be sustained more effectively when supported by teacher development, adequate resources/materials, accountability mechanisms, and whole-school collaboration. Continuous learning through SLAC sessions, mentoring, and collaboration planning can improve teacher confidence and implementation. At the same time, allocating MOOE funds, including the program in the AIP, integrating it into IPCRF, and strengthening monitoring and quality assurance can help ensure sustainability. The program is further strengthened when school heads/principals, teachers, parents, guidance personnel, and community stakeholders work together to reinforce SEL practices throughout grade levels.

## **Recommendations**

Aligned with the conclusions, the following recommendations are formulated:

Grades 4 to 6 pupils should continue taking part in the SEL-based activities and apply the strategies learned to build resilience, self-regulation, and persistence during reading tasks. These activities are meant to help pupils move from simple participation to more confident and independent reading.

ARAL-teachers should consistently integrate the seven SEL-based activities into ARAL-Reading sessions and use them to strengthen pupils' behavioral, emotional, and cognitive

engagement. Teachers should also give guided feedback, encouragement, and opportunities for re-reading and self-correction.

School heads should provide strong instructional support and supervision to ensure that the SEL-based activities are implemented properly. School heads should help create a school culture that supports both literacy recovery and pupils' socio-emotional growth.

School administrators should allocate resources for the printing and reproduction of the learning materials, include the program in the AIP, and support its inclusion in the IPCRF. These actions will help sustain the program overtime.

Curriculum Planners should consider integrating SEL-based reading activities into the regular literacy curriculum, especially in programs that address reading difficulties of pupils. Curriculum planners should ensure that future instructional materials also promote both academic and socio-emotional growth.

DepEd Officials should support the wider adoption of SEL-based reading interventions by providing policy direction, technical assistance, and monitoring mechanisms. DepEd officials may also encourage the use of learner-centered, emotionally supportive approaches in literacy programs.

Local Government Units of Ibaday must provide possible assistance through funding, additional materials, or community support to help sustain the program. LGU partnership can strengthen the implementation of school-based literacy and SEL initiatives.

Guidance personnel should assist ARAL teachers in monitoring pupils who show low confidence, anxiety, or experiencing difficulty persisting in reading tasks. Their support can help strengthen pupils' emotional readiness and resilience.

Parents or Guardians must reinforce at home the positive habits, behaviors, and confidence developed during ARAL-Reading sessions. Their support can help pupils remain motivated and engaged in reading.

Future researchers should further examine the long-term effect of SEL-based reading interventions and explore how the activities may be adapted for other grade levels or settings. This can help strengthen future literacy and SEL programs.

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# IN HARMONY WITH HANGUK MUNHWA AND HANGUKSIK SAENGHWAL: THE LIVED EXPERIENCES OF OVERSEAS FILIPINO WORKERS ADAPTING TO SOUTH KOREAN CULTURE AND LIFESTYLE

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## Abstract

This phenomenological study explored the lived experiences of Overseas Filipino Workers (OFWs) adapting to South Korean culture and lifestyle, particularly the concepts of Hanguk Munhwa and Hanguksik Saenghwal. Focusing on ten (10) OFWs who reside in South Korea for five to ten years, the study examined their cultural assimilation, workplace adjustment, language struggles, emotional challenges, and coping mechanisms. Using purposive sampling and in-depth interviews analyzed through Colaizzi's thematic method, the research revealed that OFWs experienced difficulties related to language barriers, homesickness, demanding work environments, and cultural differences. Despite these challenges, the participants demonstrated resilience through social support, faith, personal determination, and continuous self-improvement. The findings further showed that migration contributed to identity transformation, emotional growth, and the development of stronger work ethics and intercultural understanding. Moreover, the study highlighted the importance of mental, emotional, and cultural preparation for Filipinos planning to work abroad. Ultimately, the research contributes to a broader understanding of migration, multicultural adaptation, and the experiences of Filipino workers in South Korea.

**Keywords:** Overseas Filipino Workers, Hanguk Munhwa, Hanguksik Saenghwal, Lived Experiences, Cross-Cultural Adjustment

## Introduction

The cultural landscape of South Korea, defined by "Hanguk Munhwa" (the totality of Korean culture) and "Hanguksik Saenghwal" (the specific daily lifestyle), has become a significant site for the Filipino diaspora. According to the Ministry of Justice of South Korea's immigration statistics, as of 2023, approximately 70,392 Filipinos reside in South Korea, driven by the pursuit of "greener pastures". However, the transition is not merely economic; it involves a profound psychological and cultural shift where migrants must learn to "grow, adapt, and transform" alongside their host society.

In recent years, South Korea's influence on the Philippines has grown, impacting media, entertainment, and job markets, and boosting cultural and economic ties between the two countries. According to the article entitled "Top 10 Best Countries for Overseas Filipino Workers 2025: Destinations, Salaries, Living Conditions" published on January 20, 2025,

South Korea was ranked 9th among the top countries of choice for Overseas Filipino Workers. This ranking is attributed to South Korea's strong economy, which heavily relies on exports and attracts a significant number of foreign workers, including Filipinos. Beyond its popularity for its entertainment industry, such as K-pop, K-dramas, and cuisine like samgyeopsal, South Korea is also emerging as a desirable destination for both employment and tourism.

Geographically speaking, South Korea sits at the southern tip of the Korean Peninsula, a place where jagged mountains crash into coastal plains and rivers snake their way through green valleys and scattered islands. About 70 percent of the country is covered in mountains, which means one may get everything from winding forest trails and dramatic cliffs to peaceful national parks. That landscape shapes the way people live, work, and even spend their weekends. (Zatco, 2025). The Joseon Dynasty really shaped the so-called classic Korean culture. They took up Neo-Confucianism, and its fingerprints have been everywhere from how families worked, to schools, to the way the government ran things. One huge leap was King Sejong the Great creating Hangul in 1443. Suddenly, ordinary people could read and write without having to master complicated Chinese characters. Furthermore, South Korea is a prominent country with a diverse culture, traditions, beliefs, norms, and values. The lifestyle of Koreans is more likely to be challenging to follow and pursue. People often cannot fully understand why someone must leave the country of their birth and walk away from their families, loved ones, and even the dreams they once held close.

According to data compiled from Korean government sources, there were approximately 70,392 Filipinos residing in South Korea as of 2023. This includes workers, long-term residents, family members, and other migrants.

The Philippine News Agency in early of 2025 reported about 36,186 Filipinos working in South Korea, with 25,895 of them employed under the Employment Permit System (EPS) (typically labor migrant workers). The said figure reflects those documented as overseas Filipino workers (OFWs) or labor migrants at a specific point in time and does not include all Filipinos residing or temporarily working in South Korea, such as students, spouses, or dependents.

Yet, in the pursuit of greater aspirations and the so-called “greener pasture in the Land of the Morning Calm”, many Filipinos choose to take risks and venture in South Korea, hoping to build a more promising future. As time moves forward and the world continues to change, those who leave their homeland must also learn to grow, adapt, and transform with it. In addition, Overseas Filipino Workers who specifically go to South Korea have faced numerous challenges and struggles due to the different lifestyles they must adapt to fully adjust to their work environment.

As stated by Tadle (2021), as more Overseas Filipino Workers settle in South Korea, it indicates the international acceptance of foreign employment in increasingly widening dimensions between the cultures of the two nations. Adapting involves more than just getting used to the common practices; this now includes culture in expectation of workplace behavior, matters of social norms and stigma, barriers in language use, systematized technological processes, and normal daily things in Korean society.



South Korea has been importing significant numbers of migrant workers since the early 1990s. As of the end of 2007, registered foreigners totalled 1,066,273, accounting for 2.2 per cent of the total population. The number of foreigners in Korea jumped 2.75 times since 1997 from 386,972. If the current trend continues, the number of foreigners in Korea would reach 1.5 million in 2012, 2.5 million in 2020, and 4.1 million by 2050 or 9.2 per cent of the total population, which would be similar to the proportion of foreign-born residents in England (9.7 per cent) in 2005 (Cambridge University Press, 2025), this is clear proof that every year South Korea increased their population because of overseas workers not just Filipinos but also the other nationalities. By 2025, around 51.6 to 51.7 million people will call South Korea home. That makes it one of the world's most densely packed countries. On the money side, South Korea keeps flexing its economic muscle. In 2024, its nominal GDP hit about \$1.87 trillion, and the average person now brings in somewhere between \$36,000 and \$37,000. (Worldometer's elaboration of the latest United Nations data, 2025). The adaptation of Koreans, foreigners, and overseas workers to different lifestyles requires more time to study aspects of culture, tradition, and religion. Adapting to the new lifestyle goes beyond learning a new environment; it involves resiliency, unfamiliar practices, homesickness, racial discrimination, and language barriers.

The growing number of overseas Filipino workers (OFWs) in South Korea underscores the necessity of examining how Filipinos navigate and adapt to a foreign culture. South Korea, with its unique cultural customs, fast-paced lifestyle, advanced work systems, and rigid societal norms, presents a complex environment that offers both opportunities and challenges for OFWs. To thrive in Korean society, Filipinos must continually adapt their daily routines, work habits, social interactions, and personal values.

In the context of the aforementioned situations, this study aims to provide a systematic investigation into the lived experiences of overseas Filipino workers in South Korea, particularly those who have resided in the country for five years or more. It seeks to conduct an in-depth analysis of the emotional, mental, and physical impacts of Korean culture on these individuals, focusing on their experiences, cultural influences, and engagement with local traditions. Furthermore, this research will explore the underlying reasons behind the migration of Filipinos to South Korea. By shedding light on their challenges and achievements, this study endeavors to deepen the understanding of the resilience and adaptability of overseas Filipino workers. Ultimately, this research aims to contribute to a broader understanding of the complexities of cultural adaptation and the long-term implications of migration, offering valuable insights for policymakers, support organizations, and future OFWs.

## **Method**

### **Research Design**

This study employs a phenomenological design to uncover the unique fulfillment and challenges of the co-researchers' lives. Phenomenological research design is a qualitative approach or qualitative research methodology that focuses on exploring and describing the lived experiences of individuals regarding a specific phenomenon (Fellow, 2024). It

also seeks to uncover the unique challenges and fulfillment that OFWs experience while adapting to Korean lifestyles.

### **Selection of Participants**

Ten (10) co-researchers were identified via Purposive sampling, ensuring they possessed the "lived history" necessary for the study. In this methodology, the researcher has reached out to ten (10) co-researchers who are currently deployed in South Korea for five (5) years and beyond. As the proponent of this paper experienced non-attendance from previously verified and vetted co-researchers, several individuals have been onboarded to join as co-researchers if they possess the same credentials and meet the criteria.

Purposive sampling is a technique often used in social research to access hard-to-reach populations. The technique is particularly useful in qualitative research, allowing researchers to gather data from specific groups that may be difficult to identify or access through traditional sampling methods. Co-researchers refer to others, expanding the sample size through personal networks, which is effective for hidden populations (Pasikowski, 2024). This method can reduce costs associated with identifying and recruiting participants, as it relies on existing social connections (Gierczyk et al., 2024). Following the sample selection, each one of the co-researcher data is gathered by the researcher using an interview agreement. To draw inferences regarding the population, the researcher examined and used treatment of data to modify for sample mistakes and unfairness.

### **Instrument Used**

The researcher applied an interview protocol and informed consent to gather information from Overseas Filipino Workers in South Korea.

### **Interview Protocol**

The researcher used interview questions to gather and record the necessary data for the purpose of the study. As a result, the researchers used the interview methodology to establish a relationship between the acquired data and the desired objectives. Face-to-face interviews with co-researchers who had given their consent were conducted in accordance with the interview protocol. The interview protocol includes thirty-six (36) questions. The goal of the interview questions was to acquire information regarding the co-researchers' developmental triumphs and implications while they are adapting the different lifestyles.

### **Informed Consent**

The researcher acquired informed consent from their co-researchers to participate in this study. To provide informed consent, the co-researchers were requested to grant permission for the recording and watching of data collecting. The study's co-researchers willingly participated. The researcher kept all research documents and data confidential, and they would be erased immediately following the final defense.

### **Data Gathering Procedure**

The researcher utilized an interview-style questionnaire with thirty-six (36) items that discussed the challenges the co-researchers had while preparing and the strategies they



used to overcome those. Follow-up questions were included in case the co-researchers needed more details on any of the particular questions. The instrument's handling was selected by the study's co-researchers. To make our co-researchers' lives easier, the interview was conducted in person at their convenience. Furthermore, ethical principles were used. Informed consent was granted to our co-researchers, which was only if they consented to the conditions listed on our permission form. The co-researchers agreed that the researcher had been given informed consent while keeping that ethical consideration in mind. Keeping the responses of the co-researchers private was a top priority for the researcher. The researcher respected and fully protected the co-researchers' privacy rights. Several more factors were considered when completing the surveys and interviews. Among these requirements are face-to-face interviews.

### **Treatment of Data**

Data was gathered by applying structured interview questions to OFWs who stayed and worked in the country for five (5) to ten (10) years and attended worship services in DICM in Yangju. The data was gathered and arranged using Colaizzi's data analysis technique applying the real research data.

By and large, following Thematic Content Analysis, the researcher immersed himself in the transcripts to extract "significant statements" and "formulated meanings," clustering them into overarching themes.

According to Kr (2022), Colaizzi's data analysis procedure consists of seven distinct steps that guide the systematic assessment of qualitative data.

1. Each transcript was reviewed multiple times to gain a deep and comprehensive understanding of the subject as a whole.
2. Significant statements related to the research topic were carefully selected from the transcripts.
3. Key remarks were analyzed and transformed into meaningful interpretations.
4. The extracted meanings were categorized into thematic clusters and topics.
5. The gathered insights were summarized into a detailed and cohesive description.
6. A well-structured and precise explanation of the central concept was delivered, ensuring clarity and comprehensiveness in conveying the main aspects of the phenomenon.
7. The key statement was shared with the co-researchers to ensure that their viewpoints were accurately represented and to confirm the validity of the findings.

### **Ethical Consideration**

The collected information was dealt with strictest confidentiality under the full supervision of the researcher in accordance with Republic Act No. 10173, also known as the Data Privacy Act of 2012. Every co-researcher's data captured voices and answers have been safely saved on the researcher's device and used only for research. The researcher obtained the co-researchers' permission before incorporating any data into the study and make sure that all information be kept safe and secure against unauthorized access or destruction.

## **Results and Discussion**

The summary of findings of this paper delineates that the deployed OFWs in South Korea experience relevant and significant cultural, social, and workplace adjustments that ultimately mold their multicultural and sociolinguistic perspectives, normative practices, and even adjusted identities. In consideration with the employed co-researchers' perspective, their feedback may emphasize the demanding work culture in South Korea primarily dealing with workplace cultural practices and inequalities when it comes to native and foreigner workers relationship. These workplace cultural practices or norms are inclusive of long working hours, strict work ethics, and output-driven environment vis-a-vis the struggles in sociolinguistic aspects of OFWs with native South Korean workers—these differ greatly from the more relaxed, informal work culture norms here in the Philippines. In spite of the challenges identified, the OFWs in South Korea—whom are identified to be active in a local community, peer network group— gradually adapted to several South Korean norms which signifies integration or cultural assimilation due to exigency. This happened due to their continuous exposure and interaction with South Korean workers. The paper also provides the information about the emotional sacrifices the OFWs endure, to wit: homesickness, cultural shock, and physical exhaustion due to long working hours and the agile five-to-six-day workweek.

All of which, these are endured mainly by if not all, majority of the OFWs involved in this research endeavor.

Additionally, the paper highlights that many of the OFWs are lacking or are unprepared for the actualities in working abroad—especially in a non-speaking English country. This posits the risks of language and body language barriers, different work culture and ethics, and workplace expectations and communication styles. Majority of the co-researchers shared their assertion regarding misunderstandings, discrimination, delayed salaries, and difficulty in adjusting in the South Korean workplace environments due to inadequate pre-departure orientation regarding culture and language integration. As a prominent result, the paper discovers that the government here in the Philippines and in South Korea may provide support systems including accessible healthcare for OFWs, welfare monitoring, employer background checks, and localized assistance centers rather than magnifying the support from the embassy per se. The paper further revealed that the glamorous portrayal of South Korea through television series and media differs greatly from the reality. The reality posits for a physically and emotionally demanding and draining environment for OFWs. In relation with this, OFWs, in exigency, demonstrated resiliency, adaptability, and perseverance—driven by their passion to provide livelihood for their families back in the Philippines.

### **For South Korean Employers and Local Peer Communities**

They can promote inclusive, and culturally-sensitive workplaces especially those who employ a significant number of foreign workers. In line with this, this can transform their workplace to provide fair labor practices, anti-discriminative layers, and support system for communication styles and language barriers especially during adjustment phase of newly deployed OFWs. Considering these, strengthening partnership with these employers and peer communities may help manage OFWs' psycho-emotional stress, homesickness, and their on-going cultural assimilation and integration.

The summary of findings of this paper delineates that the deployed OFWs in South Korea experience relevant and significant cultural, social, and workplace adjustments that ultimately mold their multicultural and sociolinguistic perspectives, normative practices, and even adjusted identities. In consideration with the employed co-researchers' perspective, their feedback may emphasize the demanding work culture in South Korea primarily dealing with workplace cultural practices and inequalities when it comes to native and foreigner workers relationship. These workplace cultural practices or norms are inclusive of long working hours, strict work ethics, and output-driven environment vis-a-vis the struggles in sociolinguistic aspects of OFWs with native South Korean workers—these differ greatly from the more relaxed, informal work culture norms here in the Philippines. In spite of the challenges identified, the OFWs in South Korea—whom are identified to be active in a local community, peer network group— gradually adapted to several South Korean norms which signifies integration or cultural assimilation due to exigency. This happened due to their continuous exposure and interaction with South Korean workers. The paper also provides the information about the emotional sacrifices the OFWs endure, to wit: homesickness, cultural shock, and physical exhaustion due to long working hours and the agile five-to-six-day workweek.

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## **Conclusion**

Based on the summary of findings, the following conclusions are hereby provided.

1. The paper provides this conclusion that OFWs in South Korea undergo complex multiculturalism, sociolinguistic, and workplace adjustments that can ultimately shape their thinking, perspectives, and norms integrated with South Korean culture. Despite the demanding workplace conditions and accommodations such as working hours, communication styles and language barriers, OFWs inherently adapt through exposure and interaction with the South Korean workplace environments and norms beyond their workplace. The OFWs' experiences

demonstrate that cultural assimilation becomes a necessity as part of their survivability in navigating their new life and employment abroad.

2. The findings conclude that the lack of preparations in orientation and pre-departure orientation such as language and culture courses contribute to the extreme common challenges hurdled by OFWs in South Korea. Language barriers, communication style differences, and significant shift in South Korean workplace culture were intensified due to inadequate training and orientation prior to leaving for South Korea. Thus, there is a strong need for an agreement or understanding between South Korean and Philippine governments to strengthen their partnership to solidify and actualize the assistance and services for migrant workers.
3. Lastly, the paper concludes that the realities experienced by OFWs in South Korea significantly differ from what is portrayed in Korean dramas and television series as shown in Korean media and pop culture. Behind this, the South Korean culture influence lies a physically exhausting and psycho-emotionally challenging due to extreme differences between Philippine and South Korean cultures and norms in workplaces. The OFWs' enduring commitment, until this moment, highlights their strength, adaptability, and resiliency continue to navigate through hardships while maintaining their equilibrium in maintaining their Filipino identities, not just for them— but for their families here in the Philippines.

## **Recommendation**

The following items are drawn given the set of implications discussed under this chapter. Future Researchers may expand this study to OFWs in Seoul or Incheon to compare urban versus provincial adaptation experiences.

For Philippine and South Korean Government, Bilateral programs initiated by each labor and employment ministries and embassies may transform the implementation of welfare protection, accessible support of services for OFWs deployed in South Korea. This may also enable to expand the orientation and cultural-language training prior to leaving the Philippines. Aside from such, monitoring and evaluation of their workplace statuses, healthcare needs, and localized assistance can be provided effectively and efficiently.

For Educational Institutions and Training Centers, these types of institutions may have a prominent and relevant role in developing enhancement in pre-departure programs integrating South Korean language introduction, sociolinguistic orientation, South Korean workplace culture and ethics, and strategies in adapting to foreign norms. These courses may prepare aspiring OFWs to lessen or mitigate culture shock and provide the pre-departure preparations for better deployment integration.

For South Korean Employers and Local Peer Communities, they can promote inclusive, and culturally-sensitive workplaces especially those who employ a significant number of foreign workers. In line with this, this can transform their workplace to provide fair labor practices, anti-discriminative layers, and support system for communication styles and language barriers especially during adjustment phase of newly deployed OFWs. Considering these, strengthening partnership with these employers and peer

communities may help manage OFWs' psycho-emotional stress, homesickness, and their on-going cultural assimilation and integration.

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# **DRILL IT RIGHT: A MIXED METHODS EXPLORATION OF CONTEXTUALIZED DRILLS AMONG GRADE 8 LEARNERS**

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## **Abstract**

This study investigates the effectiveness of contextualized grammar drills in enhancing the grammar proficiency of Grade 8 students under the Revised K to 12 MATATAG Curriculum. Grounded in sociocultural theory, constructivist learning, and culturally responsive pedagogy, the research employed a mixed-method sequential explanatory design to capture both quantitative outcomes and qualitative insights. A total of 40 students from San Nicolas National High School participated in a five-week intervention using grammar drills embedded in culturally relevant and real-life contexts. Pretest and posttest scores were analyzed using descriptive and inferential statistics, revealing a significant improvement in grammar proficiency, with the mean score increasing from 27.4 (“Beginning”) to 38.80 (“Developing”). The mean difference of 11.4, a t-value of 11.17, and a p-value of 0.001 confirmed the statistical significance of the results. Qualitative data gathered through student reflections and teacher interviews highlighted increased learner engagement, improved comprehension, and positive attitudes toward grammar instruction. Teachers emphasized the practicality and relevance of contextualized materials, while also identifying challenges such as time constraints and resource limitations. The study concludes that contextualized grammar instruction not only improves academic performance but also fosters meaningful learning experiences rooted in students’ cultural identities. Recommendations include integrating contextualized grammar drills into regular instruction, enhancing teacher training, and developing localized learning resources to support inclusive and effective language education.

**Keywords:** Contextualized Grammar Instruction, Grammar Proficiency, Mixed Methods Research, K to 12 MATATAG Curriculum, Culturally Responsive Pedagogy

## **Introduction**

Language plays a vital role in honing learners' creativity, critical thinking, and communicative competence. As Vygotsky (1978) emphasized, language is central to cognitive development, enabling learners to construct knowledge and interact meaningfully with others. In alignment with the Department of Education’s thrust under the Revised K to 12 MATATAG Curriculum, contextualization has emerged as a key pedagogical principle in enhancing learner engagement and understanding, particularly in English instruction. The English Curriculum underscores the need to connect lessons with learners’ real-life experiences, local cultures, and immediate environments to foster



meaningful learning. By embedding grammar instruction within authentic and culturally relevant contexts, teachers can bridge the gap between abstract grammatical rules and practical language use. Contextualized drills, therefore, do not merely reinforce language structures--they serve as purposeful tools that validate students' linguistic and cultural identities. Once learning resources are presented in a contextualized form, learners are more likely to comprehend, retain, and apply language concepts effectively, thereby advancing their communicative competence and academic performance. In the context of 21st-century education, language instruction must be anchored on meaningful, engaging, and age-appropriate strategies. Contemporary scholarship emphasizes that, beyond content knowledge, communication and collaboration form the core of effective 21st-century education. A systematic review (2021) affirms these skills--alongside creativity and critical thinking--as fundamental “learning and innovation” skills required for navigating multicultural, complex global contexts. Additionally, the California Department of Education (2016) recognizes communication and collaboration as essential “4Cs” in its standards for digital and life skills. This includes the use of contextualized learning tasks, multimodal texts, and differentiated instruction to promote motivation, relevance, and inclusivity (Cazden et al., 2016; Richards, 2017). When learners see themselves in the content, their engagement and achievement increase significantly (Gay, 2018).

Despite curricular reforms, Filipino learners continue to struggle in English language proficiency. The Programmed for International Student Assessment (PISA) 2022 showed that only 24% of 15-year-old Filipino students met the minimum proficiency level in reading, with the country ranking among the bottom globally (OECD, 2023). The EF English Proficiency Index (2023) also placed the Philippines lower than in previous years, with performance among youth ages 18–20 declining significantly. These findings reflect classroom observations where students exhibit poor grammar, weak vocabulary, and limited comprehension (Pascual, 2024). Studies suggest that decontextualized and mechanical instruction fails to support retention or deeper understanding (Atondo et al., 2022; Sabio & Gallego, 2024).

Best practices in English language teaching emphasize the use of localized, relevant, and meaningful instructional materials. Republic Act No. 10533 (Enhanced Basic Education Act of 2013) and DepEd Order No. 21, s. 2016 mandate curriculum contextualization to adapt learning experiences to the diverse linguistic and cultural backgrounds of Filipino learners. Contextualized grammar instruction, as supported by Richards and Renandya (2017), promotes practical use of language in authentic situations, bridging classroom knowledge with real-life application. This study is anchored on these principles, aiming to utilize and evaluate existing contextualized English grammar materials available online that are suited to Grade 8 learners of San Nicolas National High School. By selecting appropriate content that reflects local themes, language forms, and familiar contexts, the study seeks to improve learners' language competence and motivation.

Although many quantitative studies highlight the effectiveness of grammar instruction, few explore the experiences and perceptions of teacher--especially in public school

settings. Most prior research focuses on test outcomes, overlooking the implementation challenges teachers face (Underwood, 2017; Cubillas et al., 2021). Teachers are curriculum implementers, yet their voices remain underrepresented in the selection and adaptation of localized learning materials (Pariscal & Gonzales-Aboy, 2022). This study recognizes that meaningful contextualization also depends on teacher engagement and agency. Understanding their perspectives on the use of online contextualized grammar materials can inform more responsive and sustainable instructional practices.

One of the primary reasons for the continued underperformance of students in English is the misalignment between classroom instruction and learners' lived experiences. Traditional grammar drills, while structured, often prioritize rules over relevance. When exercises are divorced from students' sociocultural context, grammar becomes abstract and disconnected. As Freire (1970) noted, education should not be a "banking model" where teachers deposit information into passive students. Instead, learning should be dialogic and rooted in real-life experiences.

Contextualized drills answer this pedagogical need by embedding grammatical structures within familiar themes, local narratives, and culturally relevant examples. These drills are more than exercises—they are tools for bridging students' existing knowledge with new linguistic structures. For example, a grammar lesson on subject-verb agreement becomes more meaningful when applied to sentences about community festivals, local leaders, or Ilocano folktales. When learners can relate grammatical content to their world, the lessons become personally significant and cognitively engaging.

The Department of Education has long recognized the need for contextualization. Republic Act No. 10533 (Enhanced Basic Education Act of 2013) and DepEd Order No. 21, s. 2016 explicitly require the localization and contextualization of the curriculum. This includes adapting teaching strategies, examples, texts, and materials to the needs and culture of learners. Moreover, Richards and Renandya (2017) argue that contextualized grammar teaching does not merely improve linguistic accuracy; it also fosters fluency, learner autonomy, and long-term retention.

Additionally, contextualized drills support differentiated instruction, allowing teachers to cater to varying proficiency levels. By customizing tasks around familiar content, learners who may struggle with abstract grammar rules can still participate meaningfully in the lesson. Contextualization democratizes learning—it levels the playing field by ensuring that content is not only accessible but also empowering.

Although many quantitative studies highlight the effectiveness of grammar instruction in improving test scores, few explore the qualitative experiences of teachers—especially in under-resourced public schools. Most prior research focuses on summative outcomes, overlooking the challenges teachers face in adapting materials and managing classroom diversity (Underwood, 2017; Cubillas et al., 2021). Teachers, as frontline curriculum implementers, are often expected to contextualize without adequate training or resources. Their insights remain underrepresented in academic discourse and policy discussions (Pariscal & Gonzales-Aboy, 2022).

Moreover, there is a lack of attention to freely accessible contextualized grammar drills available online, especially those tailored for Grade 8 learners. This presents a missed opportunity, given the abundance of digital resources that can be filtered, curated, and adapted to fit specific linguistic and cultural needs. The study seeks to evaluate these materials through the lens of actual classroom users, thereby grounding the research in practical classroom realities.

The main goal of this paper is to investigate how contextualized English grammar drills--particularly those available online and adapted to local contexts--can improve language proficiency among Grade 8 learners at San Nicolas National High School. The main purpose of this study is twofold: (1.) Pedagogical Purpose: To evaluate the effectiveness, relevance, and appropriateness of online contextualized grammar materials in enhancing learners' grammatical skills through meaningful, real-life contexts., (2.) Practical Purpose: To incorporate the voices and perspectives of teachers and students in the use and evaluation of these materials, ensuring that grammar instruction is not only aligned with the K to 12 curriculum and RA 10533 but also responsive to the lived experiences and challenges of Filipino classrooms.

Ultimately, the study advocates for a culturally sustaining, learner-centered approach to grammar instruction. It positions contextualized drills not just as academic tools but as instruments for educational equity, motivation, and empowerment.

To sum it up, this study seeks to address both pedagogical and practical gaps by using readily available contextualized English grammar materials for Grade 8 learners and encouraging their use and evaluation by both teachers and students. It aims to improve English language proficiency through culturally relevant, learner-responsive strategies. The research also involves gathering evaluations and feedback from end-users--students and teachers--to assess the effectiveness, appropriateness, and usability of these materials. By integrating teacher perspectives, the study advocates for inclusive curriculum decision-making that values teacher expertise and student experience. Ultimately, the goal is to ensure that English grammar instruction aligns with the principles of the K to 12 curriculum and the mandates of RA 10533--making it academically sound, meaningful, and motivating to Filipino learners.

## **Theoretical Framework**

This study is anchored on the following theories that serve as the foundations of the study. These are Sociocultural Theory (1978), Culturally Responsive Pedagogy (2018), Curriculum Contextualization Framework (2016), and Constructivist Learning Theory (1996)

**Sociocultural Theory (1978).** Lev Vygotsky, a Russian psychologist and education theorist, developed Sociocultural Theory in the early 20th century. His work was published posthumously in 1978 in *Mind in Society*, which popularized his theories internationally. Sociocultural Theory emphasizes that learning is fundamentally a social process. Vygotsky argued that knowledge is constructed through interaction with more knowledgeable others (such as teachers or peers) and that cognitive development is shaped by cultural, historical, and social influences. The core concept is the Zone of Proximal Development (ZPD) – the gap between what a learner can do independently and

what they can do with guidance. Effective teaching targets this zone through scaffolding, where support is gradually removed as learners gain independence.

This study applies Sociocultural Theory in several ways. First, the contextualized grammar drills are designed to provide structured support for learners, especially when they are transitioning from local language structures to standard English grammar. Exercises may begin with guided tasks (e.g., model sentences from local texts) and progress to independent application (e.g., composing original sentences using the same structure). Second, learners engage in peer discussions, pair work, or small group tasks using community-based content (e.g., Ilocano proverbs or local news articles). This fosters dialogue and social interaction, key components in developing grammatical understanding through shared meaning-making. Third, drills draw on learners' lived experiences, such as farming, family roles, or local festivals, aligning with Vygotsky's idea that learning is rooted in one's social and cultural context.

Sociocultural Theory strongly supports this study because it justifies the use of local cultural materials (e.g., Ilocano folktales, community routines) as meaningful contexts for grammar learning. It also reinforces the value of teacher scaffolding and peer interaction in helping learners internalize grammar rules. Furthermore, it aligns with the MATATAG Curriculum's emphasis on functional grammar learning, learner-centered approaches, and communicative competence. By applying Sociocultural Theory, this study ensures that grammar is not learned in isolation but within meaningful social contexts, making grammar instruction more relevant, accessible, and empowering to learners.

**Culturally Responsive Pedagogy (2018).** The theory of Culturally Responsive Pedagogy (CRP) was originally developed by Geneva Gay (2000) and further expanded by scholars like Gloria Ladson-Billings (1994, 2018). In the context of 2018, the continued development of CRP includes Gloria Ladson-Billings' 2018 reflections on the evolution of culturally relevant teaching and emphasis on equity, student identity, and inclusion in diverse classrooms. Culturally Responsive Pedagogy is an educational approach that recognizes and honors students' cultural backgrounds and identities in teaching and learning, uses students' cultural knowledge, experiences, and frames of reference as resources to make learning more effective and promotes academic success, cultural competence, and critical consciousness among learners. "Culturally relevant pedagogy is a pedagogy that empowers students intellectually, socially, emotionally, and politically..." (Ladson-Billings,

In this study on contextualized grammar drills, CRP guides how the drills are designed using local, familiar contexts such as Ilocano literature, festivals, and traditions, made relevant to learners' lives, ensuring that language learning is not abstract or alienating and used to promote student engagement, identity affirmation, and deeper learning. It supports the belief that grammar instruction is more meaningful when rooted in students' lived realities, allowing them to see the value of English in expressing their own culture and ideas.

CRP aligns with these goals by providing a foundation for inclusive, engaging, and equity-driven grammar teaching. It validates the integration of local texts and language practices in instructional design, which is central to this study.

**Curriculum Contextualization Framework (2016).** While not attributed to a single scholar, the Curriculum Contextualization Framework (2016) was formally institutionalized by the Philippine Department of Education (DepEd) through DepEd Order No. 21, series of 2016: "Policy Guidelines on the Adoption of the Kindergarten Education Curriculum (KEC)", which includes principles on contextualization and indigenization under the K to 12 Basic Education Program. It is grounded in broader educational theories and policies, including UNESCO's Education for All (EFA) goals and RA 10533 or the Enhanced Basic Education Act of 2013, which mandates localization and contextualization of the curriculum. The Curriculum Contextualization Framework refers to the systematic process of adapting curriculum content, pedagogy, and materials to the local cultural, social, historical, and linguistic context of learners. Its core principles include aligning national standards with local realities, making learning relevant and relatable, using community-based knowledge, local literature, customs, and language to enhance instruction and empowering teachers to adjust materials while preserving core learning competencies. Contextualization bridges the gap between the curriculum and learners' lived experiences, enabling them to understand lessons in light of their culture and environment.

In this study on contextualized grammar drills, this framework is used to guide the development of grammar activities that embed local texts, events, and culture (e.g., Ilocano language, festivals, folk stories), ensure grammar is not taught in isolation, but through meaningful, localized contexts that resonate with students' day-to-day lives, support differentiated instruction by considering students' diverse backgrounds, thus promoting inclusivity and equity and provides the structural and policy-based rationale for designing contextualized educational materials that are aligned with the MATATAG curriculum goals. Your research aims to develop effective grammar learning resources that are culturally grounded and learner-centered.

The Curriculum Contextualization Framework (2016) is directly related to this by justifying the adaptation of national content to fit the Ilocano context, encouraging the integration of regional culture and language into English instruction, and aligning with the MATATAG Curriculum's direction of making education inclusive, accessible, and meaningful. It validates your approach of using local literature, scenarios, and names in grammar drills, showing that this strategy is institutionally supported and pedagogically sound.

**Constructivist Learning Theory (1996).** The Constructivist Learning Theory is widely attributed to Jean Piaget (cognitive constructivism) and Lev Vygotsky (social constructivism), but the 1996 development of this theory is often associated with Jerome Bruner, who refined and extended constructivist thought in formal education. Constructivist Learning Theory asserts that learners actively construct knowledge through experience and interaction, learning is not passive absorption but a meaning-making process built upon prior knowledge, students learn best when engaged in authentic, relevant, and social learning contexts and teachers are facilitators or guides, not mere transmitters of information. Learning is not simply a technical skill; it is culturally situated and personally constructed (Bruner, 1996).

In this study on contextualized grammar drills, this theory is applied by designing learning activities that activate students' prior knowledge of grammar through familiar

cultural and social contexts, creating tasks that require learners to engage critically with the grammar rules as they appear in authentic local texts (e.g., Ilocano folk tales, local dialogues), and encouraging learners to build their understanding of grammar rules through real-world application, group discussions, and guided discovery. It supports the idea that students learn grammar better when it is embedded in interactive and meaningful experiences, rather than memorization.

This study aims to enhance grammar learning through contextualized materials, and constructivism since it provides the theoretical foundation for why contextualization is effective--because learners build knowledge through meaningful input, justifies the use of local texts and socially relevant contexts in grammar instruction, and aligns with the MATATAG Curriculum's emphasis on learner-centered, meaningful, and experiential learning. Thus, this theory is central to your design of grammar drills that stimulate thinking, cultural awareness, and collaboration, making grammar more than a set of rules--it becomes a tool for communication and identity.

The conceptual framework of the study is visualized through a logical flow of inputs, processes, and expected outcomes. At the center of the research is the mixed-methods study, "Drill It Right", which examines the implementation and effectiveness of contextualized grammar drills. The study focuses on Grade 8 students and their English teachers. These stakeholders engage with grammar activities that are aligned with DepEd's Most Essential Learning Competencies (MELCs) and the goals of the revised K to 12 MATATAG Curriculum, which emphasizes foundational skills and learner-centered approaches.

Initially, the existing contextualized grammar drills—designed with cultural and linguistic relevance--are introduced in selected Grade 8 classes. The drills are not generic worksheets but instead reflect themes and topics meaningful to Filipino learners, such as local celebrations, community issues, and family experiences.

The implementation phase includes classroom-based application and evaluation using both quantitative and qualitative tools. Specifically, the study employs pre- and post-tests to determine learners' improvement in grammar performance. In addition, qualitative feedback is gathered from both students and teachers through interviews or reflective forms to assess perceptions of relevance, clarity, and engagement. This mixed-methods approach ensures that both statistical outcomes and learner experiences are considered in evaluating the effectiveness of the drills.

The final component of the schema represents the continuous usage of effective contextualized grammar drills, assuming the results support their impact. If proven effective, these drills will lead to observable improvement in grammar skills, as reflected in students' post-test scores and writing performance.

More importantly, the study aims to empower learners with the ability to write and publish original literary texts. These outputs may include poems, short stories, personal narratives or memoirs, reflective or expository essays, and scripted dialogues--all of which are encouraged by the K to 12 and MATATAG Curriculum. Through this, grammar becomes a tool not just for correctness, but for expression, identity formation, and creativity.

The schematic presentation of the study's theoretical and conceptual background illustrates how educational theories, national policies, and classroom practices converge to inform a grammar instruction model that is relevant, empowering, and responsive to the needs of Filipino learners. By grounding grammar learning in the learners' context and validating their cultural identities, this study seeks to make language education both academically effective and socially meaningful.

## **Method**

### **Research Design**

This study employed a mixed-methods exploratory design to examine both the effectiveness and the classroom experiences of using contextualized grammar drills. Quantitative data were gathered through pretest and posttest assessments of grammar proficiency, while qualitative data were collected through interviews and classroom observations to capture students' and teachers' perceptions of the intervention. One intact Grade 8 class participated in a 5-week contextualized grammar drill program, after which both sets of data were analyzed to provide a comprehensive understanding of the approach.

#### **Justification for the Design**

##### **1. Natural Classroom Setting**

The study utilizes an existing section, making random assignment or control groups impractical. This is the most realistic design for actual public school class settings.

##### **2. Focus on Learning Improvement Over Comparison**

The study's primary objective is to measure the improvement of the same students over time, not to compare two different groups.

##### **3. Ethically Appropriate**

All students receive the intervention—no one is intentionally deprived of potentially beneficial contextualized grammar instruction.

##### **4. Highly Feasible and Classroom-Friendly**

This design is easy to implement during regular class instruction without altering schedules or splitting classes.

The mixed-methods exploratory design was selected to provide a holistic understanding of the effectiveness and practical application of contextualized grammar drills. Quantitative data from pretest and posttest scores offer measurable evidence of improvement in grammar performance, while qualitative data from interviews and classroom observations capture students' and teachers' perceptions, attitudes, and experiences during the intervention. This integration allows for triangulation, enhancing the validity and depth of findings by addressing both the "what" (effectiveness) and the "how" and "why" (contextual factors influencing outcomes). Such a design is particularly appropriate for educational research, where understanding learner experiences alongside

performance metrics is essential for informed pedagogical decisions (Creswell & Plano Clark, 2018; Mertens & Hesse-Biber, 2012; Turner, Cardinal, & Burton, 2017).

### **Instructional Materials / Instructional Design**

To ensure the effectiveness and relevance of the grammar instruction, a contextualized set of grammar lessons was developed. These lessons were designed to align with real-life themes familiar to the learners, thereby enhancing engagement and comprehension. The matrix below outlines the specific grammar points, the thematic contexts used, and the corresponding learning objectives for each lesson.

| <b>MATRIX OF THE GRAMMAR LESSONS</b> |                    |                                                                                                                                                                                                                                                                                                                                               |  |
|--------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Grammar Points</b>                | <b>Context</b>     | <b>Objectives</b>                                                                                                                                                                                                                                                                                                                             |  |
| 1. Simple Present Tense              | Pet Dogs           | <ul style="list-style-type: none"> <li>• Supply the appropriate present tense form of verbs in given sentences with accuracy.</li> <li>• Identify common time expressions typically used with present tense verbs.</li> <li>• Construct grammatically correct sentences using present tense verbs and relevant time expressions.</li> </ul>   |  |
| 2. Simple Past Tense                 | Childhood Memories | <ul style="list-style-type: none"> <li>• Supply the correct past tense form of verbs in various sentence contexts.</li> <li>• Differentiate regular and irregular verbs by identifying and categorizing examples.</li> <li>• Construct meaningful sentences using the correct past tense form of both regular and irregular verbs.</li> </ul> |  |
| 3. Conjunctions                      | Friendship         | <ul style="list-style-type: none"> <li>• Identify appropriate conjunctions in a given paragraph or text.</li> <li>• Expand simple sentences into compound or complex ones using correct conjunctions.</li> <li>• Construct original sentences that demonstrate proper and effective use of conjunctions.</li> </ul>                           |  |



|                |              |                                                                                                                                                                                                                                                                                                                                     |
|----------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4. Parallelism | Social media | <ul style="list-style-type: none"> <li>• Select suitable words or phrases to maintain parallel structure in sentence construction.</li> <li>• Determine whether parallelism is correctly observed in sample sentences.</li> <li>• Rewrite faulty sentence structures to demonstrate accurate and consistent parallelism.</li> </ul> |
| 5. Modals      | Environment  | <ul style="list-style-type: none"> <li>• Identify modals used in various sentence contexts.</li> <li>• Spot and correct errors in the use of modals in given sentences.</li> <li>• Expand brief ideas into complete and coherent statements using appropriate modals to express necessity, possibility, or obligation.</li> </ul>   |

The grammar lessons presented in the matrix were carefully selected based on their foundational importance, contextual relevance, and alignment with effective pedagogical practices. These lessons--covering the simple present tense, simple past tense, conjunctions, parallelism, and models--are essential components of English grammar that support both basic and advanced language proficiency. They are arranged in a progressive sequence, allowing learners to build upon prior knowledge and gradually develop more complex sentence structures. Each lesson is contextualized within familiar and meaningful themes such as pet care, childhood memories, friendship, social media, and environmental awareness. This approach is supported by Bharathi et al. (2025), who found that contextualized grammar instruction significantly improves students' writing performance and grammar comprehension. Similarly, Saparbayeva (2025) emphasized that teaching grammar through meaningful communication enhances retention and learner engagement. Mag-atas (2025) also highlighted that embedding grammar in real-life contexts increases student motivation and confidence. Yang (2020) further demonstrated that authentic materials and real-world scenarios help learners internalize grammar rules more effectively. These findings align with the principles of Communicative Language Teaching (CLT), which promotes grammar instruction through interactive and meaningful language use (American English Teacher's Corner, n.d.). The inclusion of clear, measurable objectives in each lesson ensures that learning outcomes are targeted and assessable, making these lessons highly effective for grammar instruction in a classroom setting.

*Research Procedure / Phases of Implementation:*

| <b>EXPERIMENTAL PLAN</b>            |                                   |                                                                                                                                                                          |                                                                                                              |                                      |                                                                                                                                         |
|-------------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Phases of the Implementation</b> | <b>Activity</b>                   | <b>Objectives</b>                                                                                                                                                        | <b>Persons Involved</b>                                                                                      | <b>Materials Needed</b>              | <b>Success Indicators</b>                                                                                                               |
| Pre-Implementation                  | 1. Orientation About the Research | <ul style="list-style-type: none"> <li>- Explain the purpose and procedures of the research</li> <li>- Secure informed consent from participants</li> </ul>              | <ul style="list-style-type: none"> <li>- Researcher</li> <li>-Students</li> <li>-English teachers</li> </ul> | Orientation slides, consent forms    | <ul style="list-style-type: none"> <li>- Participants demonstrate understanding</li> <li>-Signed consent forms are collected</li> </ul> |
|                                     | 2. Administration of the Pretest  | <ul style="list-style-type: none"> <li>- Assess students' baseline knowledge in grammar</li> </ul>                                                                       | <ul style="list-style-type: none"> <li>- Researcher</li> <li>- Participating Students</li> </ul>             | Pretest, pens, answer sheets         | <ul style="list-style-type: none"> <li>-100% test completion.</li> <li>-Pretest scores obtained.</li> </ul>                             |
| Implementation                      | Lesson on Simple Present Tense    | <ul style="list-style-type: none"> <li>- Supply correct present tense verbs</li> <li>- Identify time expressions</li> <li>- Construct present tense sentences</li> </ul> | <ul style="list-style-type: none"> <li>-Teacher</li> <li>-Students</li> </ul>                                | Contextualized Drills, Answer Sheets | <ul style="list-style-type: none"> <li>-Students write 3–5 correct sentences.</li> <li>-90% accuracy in drills.</li> </ul>              |
|                                     | Lesson on Simple Past Tense       | <ul style="list-style-type: none"> <li>- Differentiate regular and irregular verbs-Construct past tense sentences</li> </ul>                                             | <ul style="list-style-type: none"> <li>-Teacher</li> <li>-Students</li> </ul>                                | Contextualized Drills, Answer Sheets | <ul style="list-style-type: none"> <li>-90% of students demonstrate correct verb usage in sentences.</li> </ul>                         |

|                     |                                  |                                                                              |                                      |                                                |                                                                                   |
|---------------------|----------------------------------|------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|
|                     | Lesson on Conjunctions           | - Identify conjunctions- Expand and construct sentences using them           | -Teacher<br>-Students                | Contextualized Drills, Answer Sheets           | -Students improve sentence structure<br>-Apply conjunctions correctly in writing. |
|                     | Lesson on Parallelism            | - Determine errors in parallelism<br>- Revise sentences to correct structure | -Teacher<br>-Students                | Contextualized Drills, Answer Sheets           | -90% of students correct faulty structures independently.                         |
|                     | Lesson on Modals                 | - Identify and correct modals- Expand ideas using modals                     | -Teacher<br>-Students                | Contextualized Drills, Answer Sheets           | -Students correctly use modals in 3–5 original sentences.                         |
| Post-Implementation | Posttest                         | - Measure grammar proficiency improvement across all five areas              | -Teacher<br>-Students                | Posttest, pens, answer sheets                  | -At least 90% of students show improved scores compared to pretest.               |
|                     | Interview with Selected Students | - Collect feedback on learning experience, challenges, and perceptions       | - Researcher<br>-5 selected students | Interview guide, voice recorder, consent forms | -Students provide reflective responses.<br>-Common themes identified.             |
|                     | Interview with English Teachers  | - Gather feedback on intervention design, delivery, and student progress     | - Researcher<br>-5 selected teachers | Interview guide, voice recorder, consent forms | -English teachers provide reflective responses.<br>-Common themes identified.     |

The experimental plan of this study was structured into three main phases: pre-implementation, implementation, and post-implementation. During the pre-implementation phase, the researcher conducted an orientation to explain the study's objectives, procedures, and ethical considerations. This step was crucial in ensuring that participants fully understood their roles and responsibilities, aligning with ethical research practices that emphasize informed consent and participant awareness (Creswell, 2014). The orientation was followed by the administration of a pretest to assess the students' baseline knowledge of grammar. This diagnostic tool provided a benchmark for evaluating the effectiveness of the instructional intervention, as supported by Fraenkel and Wallen (2009), who emphasized the importance of pre-assessment in experimental research to measure learning gains accurately.

The implementation phase involved the delivery of five contextualized grammar lessons, each designed around a specific grammar point and a relatable theme. The lesson on the simple present tense, for instance, used the theme of pet dogs to help students identify time expressions and construct grammatically correct sentences. Contextualized instruction has been shown to enhance learner engagement and comprehension. According to Bharathi et al. (2025), grammar lessons embedded in real-life contexts significantly improve students' writing performance and understanding of grammatical structures. The simple past tense lesson, centered on childhood memories, focused on distinguishing between regular and irregular verbs--an approach that aligns with Saparbayeva's (2025) findings that meaningful contexts improve retention and application of grammar rules.

Subsequent lessons on conjunctions, parallelism, and modals were similarly grounded in familiar themes such as friendship, social media, and environmental issues. These themes were chosen to make grammar instruction more relevant and engaging, a strategy supported by Mag-atas (2025), who found that contextualized grammar teaching increases student motivation and confidence. The use of contextualized drills and performance-based tasks allowed students to apply grammar rules in meaningful ways, consistent with the principles of Communicative Language Teaching (CLT), which emphasizes the integration of grammar into authentic communication (American English Teacher's Corner, n.d.). Yang (2020) also highlighted that using real-world scenarios in grammar instruction helps learners internalize rules more effectively, leading to improved language use in both writing and speaking.

Each lesson included clear objectives, appropriate materials, and measurable success indicators, such as achieving 90% accuracy in drills or demonstrating the ability to construct grammatically correct sentences. These indicators ensured that the instructional goals were met and provided a basis for evaluating student progress throughout the intervention.

## **Research Setting**

This study was conducted at San Nicolas National High School (SNNHS), a public secondary school located in the municipality of San Nicolas, Ilocos Norte, Philippines. The school operates under the Department of Education – Ilocos Norte Division and serves students from various barangays within the municipality and nearby areas. Known for its commitment to providing quality basic education, SNNHS offers a learner-centered

curriculum that integrates 21st-century skills, values formation, and contextualized instruction aligned with national standards.

San Nicolas National High School caters to junior and senior high school learners from diverse socio-economic backgrounds. The student population is primarily composed of Ilocano-speaking learners, many of whom come from agricultural or working-class families. This demographic makes the school an ideal setting for implementing contextualized grammar drills--materials and activities that are rooted in local culture, language, and everyday experiences. The rich cultural heritage and strong community identity of the learners provide meaningful contexts that can be tapped into during grammar instruction.

For the purpose of this study, one section of Grade 8 students enrolled in English 8 during the school year 2025–2026 was selected as the primary participants for the quantitative phase. The section was chosen through purposive sampling, based on the teacher's willingness to participate, the availability of scheduled time for consistent implementation of the grammar drills, and the academic level of the students. The selected class consisted of approximately 35 to 40 students with varied levels of grammar proficiency.

In addition to the student participants, the study involved five English 8 teachers from San Nicolas National High School. These teachers had varying years of experience in teaching English at the junior high school level and were involved in the qualitative phase of the study. They observed the implementation of the contextualized grammar drills over a period of five weeks and were later interviewed to share their perspectives on the effectiveness, relevance, and practicality of the materials used. Their insights were valuable in evaluating the alignment of the intervention with the goals of the Revised K to 12 MATATAG Curriculum, particularly in terms of curriculum localization and learner engagement. The school environment at SNNHS is conducive to innovation and research-based instructional practices. It has a functional library, audio-visual equipment, and internet access, which supported the development and delivery of the contextualized grammar drills. The administration was supportive of the research initiative, recognizing its potential to improve literacy instruction and contribute to school-based learning material development.

Overall, San Nicolas National High School provided an appropriate and meaningful context for exploring the impact of contextualized grammar instruction on student learning and teacher practice. The setting allowed the researcher to examine how localized materials influence grammar acquisition and classroom dynamics in a real-world educational environment.

### **Respondents of the Study**

The respondents of this study consisted of two distinct groups: (1) one section of Grade 8 students enrolled in English 8, and (2) five English 8 teachers from San Nicolas National High School, San Nicolas, Ilocos Norte. These groups were selected using purposive sampling based on their direct involvement in the teaching and learning of grammar concepts and their availability for participation throughout the five-week intervention period.

The Grade 8 student participants served as the core group for the quantitative phase of the study. They were subjected to a pretest and posttest designed to measure their grammar proficiency before and after exposure to the contextualized grammar drills. Their performance data provided insight into the impact of the intervention on grammar learning outcomes.

Meanwhile, the five English 8 teachers participated in the qualitative phase of the study. These teachers observed the delivery of the contextualized drills and participated in structured interviews at the end of the implementation period. Their reflections helped evaluate the effectiveness, practicality, and cultural relevance of the materials. The combination of student test results and teacher insights enriched the interpretation of findings and ensured a balanced perspective on the instructional approach.

| <b>Grade 8 Students (n = ~40)</b>  | <b>English 8 Teachers (n = 5)</b> |
|------------------------------------|-----------------------------------|
| One section from SNNHS             | Observed implementation           |
| Participated in Pretest/Posttest   | Participated in interviews        |
| Used contextualized grammar drills | Provided reflections and insights |

This dual-group respondent design allowed the researcher to triangulate findings and better understand not only the effects of the contextualized grammar drills on learners but also how teachers perceived and valued the approach in real classroom settings.

To select the respondents, the researcher employed a convenience sampling technique, targeting one section of Grade 8 students and five English 8 teachers from San Nicolas National High School, located in San Nicolas, Ilocos Norte. This method was selected for its practicality and alignment with the scope of the study.

According to Jawad Golzar et al. (2022), convenience sampling is a non-probability sampling technique wherein participants are chosen based on their accessibility and proximity to the researcher. It is commonly used due to its cost-effectiveness and efficiency in collecting relevant data within a limited timeframe. This technique enabled the researcher to select student participants from her own class section, ensuring ease of communication, monitoring, and data collection throughout the five-week intervention period.

The Grade 8 student respondents, consisting of approximately 40 learners, participated in the quantitative phase of the study. They underwent a pretest prior to the intervention and a posttest afterward to determine the effects of the contextualized grammar drills on their grammar performance. These students were chosen based on their regular attendance, consent to participate, and availability during the study schedule.

The five English 8 teachers, also from San Nicolas National High School, served as participants for the qualitative phase. They observed the implementation of the contextualized grammar drills, provided reflections on the conduct of lessons, and participated in guided interviews to offer insights on the practicality, effectiveness, and contextual relevance of the materials used.

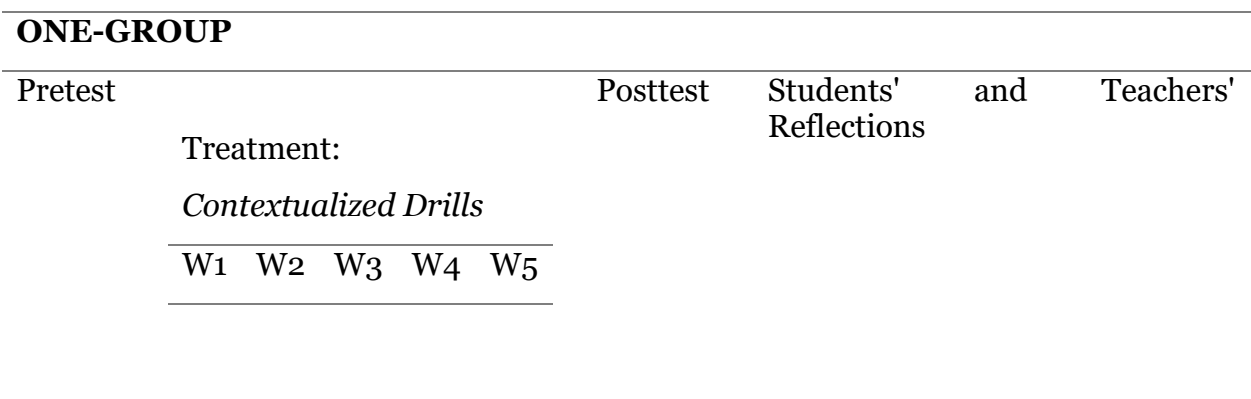
This combination of student and teacher respondents allowed the researcher to triangulate data, capturing both the measurable outcomes of the intervention and the experiential insights of those directly involved in the teaching-learning process.

## Data-Gathering Tool

### Conceptual Framework

The researcher employed the mixed-method sequential explanatory framework, as conceptualized by Pratiwi et al. (2024), to provide a comprehensive analysis of the study. This framework involved two distinct but interconnected phases. The initial phase utilized a quantitative approach, wherein a pretest-posttest design was implemented to measure the students' grammar skills before and after the utilization of contextualized drills. Following the quantitative phase, a qualitative component was conducted, which involved guided reflections from both students and teachers. This phase aimed to capture in-depth insights, perceptions, and experiences that could explain or elaborate on the quantitative results, thereby enriching the overall interpretation of the findings.

**Figure 1.** Mixed-Method Sequential Explanatory Framework



The figure illustrates a Mixed-Method Sequential Explanatory Framework employing a one-group pretest-posttest design. In this study, the researcher targets a single group of student participants who will take part in both the quantitative and qualitative phases. Initially, the group will undergo a pretest to assess their baseline knowledge of specific grammar concepts. Following this, they will engage in a five-week intervention wherein contextualized grammar drills will be administered, one lesson per week, covering topics such as the simple present tense, simple past tense, conjunctions, parallelism, and modals. After the completion of the intervention period, a posttest will be given to evaluate the improvement or progress in their grammar performance.

Subsequently, for the qualitative phase, selected students will be interviewed to gain deeper insights into their experiences with the contextualized drills, including perceived effectiveness and engagement. Concurrently, English teachers will observe the implementation of the drills during the five-week period. After the intervention, these teachers will also be interviewed to provide their reflections on the observed teaching-learning process. The integration of student and teacher feedback aims to further validate the results and enrich the interpretation of the quantitative findings.

## Instrument

The researcher devised a 50-item pretest and posttest anchored on the following grammar points: simple present tense, simple past tense, conjunctions, modals, and parallelism. Each grammar lesson was represented by 10 objective multiple-choice items to ensure adequate coverage and reliability. To establish the validity of the assessments, they were evaluated in terms of content relevance and structural quality by experts in language education and assessment. The validation process utilized the survey tool validation rating scale developed by Oducado (2020), which ensured that each item met the required standards for clarity, appropriateness, and alignment with the intended grammar competencies.

The pretest and posttest were used to determine the students' grammar skills before and after the utilization of contextualized grammar drills. The results were interpreted using an adapted scale with the following categories: highly skilled, skilled, moderately skilled, lacking skills, and without skills.

| <b>Scores</b> | <b>Level of Grammar Skills</b> |
|---------------|--------------------------------|
| 41-50         | Highly Skilled                 |
| 31-40         | Skilled                        |
| 21-30         | Moderately Skilled             |
| 11-20         | Lacking Skills                 |
| 0-10          | Without Skills                 |

For the qualitative phase of the study, the researcher formulated three reflective questions that encouraged the participants to share their experiences and perspectives on the use of contextualization and drills as a means to enhance their grammar skills. These questions were reviewed and validated by language experts, classroom teachers, and qualitative research specialists.

The researcher will develop and utilize a 50-item multiple-choice grammar test to assess the grammar skills of Grade 8 students at San Nicolas National High School. This tool will serve as both the pretest and posttest in the quantitative phase of the study. Each test item will be carefully constructed to target specific grammar points aligned with the lesson focus: simple present tense, simple past tense, conjunctions, modals, and parallelism, with 10 questions allotted per topic to ensure balanced coverage.

To establish the instrument's content validity, the researcher sought evaluation and approval from language education specialists, grammar instructors, and assessment experts. These validators will assess the test for clarity, appropriateness, content relevance, and alignment with the competencies set out in the Revised K to 12 English Curriculum. The Survey Tool Validation Rating Scale developed by Oducado (2020) will be used during this process to ensure quality and alignment with educational standards.



In the qualitative phase, the researcher will employ guided reflective questions to gather insights from both students and English teachers regarding their experiences during the five-week implementation of contextualized grammar drills. A set of three open-ended questions will be designed to explore participants' perceptions of the drills' effectiveness, engagement level, and relevance to their learning or instruction. These questions will also be validated by experts in language instruction and qualitative research to ensure depth, appropriateness, and consistency with the study's objectives.

According to Thompson (2023), incorporating content validation into the tool development process enhances the credibility, reliability, and overall quality of research findings. With both quantitative and qualitative tools subjected to rigorous validation, the study ensures a reliable basis for assessing the impact of contextualized grammar drills on learner performance.

### **Data Gathering Procedures**

Upon the approval of the request letter to conduct the study, addressed to the school principal of San Nicolas National High School, the researcher prepared the necessary instruments for data collection. These instruments included a 50-item pretest and posttest questionnaire and a set of reflective interview questions for both students and teachers.

The quantitative phase began with the administration of the pretest, which assessed students' baseline grammar knowledge. Over a period of five weeks, the researcher implemented contextualized grammar drills aligned with the MATATAG Curriculum, focusing on one grammar topic per week. After the intervention, the posttest was administered to measure learning gains.

The qualitative phase involved selected students responding to reflection questions and teachers participating in interviews. Responses were transcribed, coded, and analyzed thematically to capture insights on implementation experiences, student engagement, and instructional impact.

All test scores and qualitative data were encoded in an Excel spreadsheet and analyzed using descriptive and inferential statistics for the quantitative part and thematic analysis for the qualitative part. The results were presented in tables and narrative discussions to ensure clarity and coherence.

This study employed a mixed-method sequential explanatory design, as conceptualized by Pratiwi et al. (2024). This approach integrated both quantitative and qualitative research phases to provide a comprehensive understanding of the effects of contextualized grammar drills on student performance and engagement, as well as to explore teacher insights on their practicality and effectiveness.

The quantitative phase utilized a one-group pretest-posttest design involving one section of Grade 8 students from San Nicolas National High School, located in Ilocos Norte. A validated 50-item multiple-choice grammar test, aligned with the Revised K to 12 MATATAG Curriculum, was used to assess students' performance before and after the five-week intervention. Each week focused on one grammar topic—simple present tense, simple past tense, conjunctions, modals, and parallelism—taught using contextualized

grammar drills rooted in local culture, language, and experiences. This phase aimed to determine whether the contextualized instruction significantly improved the students' grammar skills.

The qualitative phase followed the intervention, involving guided reflections and semi-structured interviews. Selected student participants from the same Grade 8 section were asked reflective questions to gain insights into their experiences, engagement, and perceptions of the grammar drills. In addition, five English 8 teachers from San Nicolas National High School were interviewed after observing the lessons throughout the five-week period. They provided professional reflections on the practicality, effectiveness, and classroom dynamics of implementing contextualized grammar instruction in their teaching context.

The integration of these two phases enabled the researcher to interpret the statistical data in light of the real classroom experiences of both learners and teachers. While the quantitative results showed measurable changes in grammar proficiency, the qualitative data helped explain how and why these changes occurred by capturing the social and instructional dimensions of the intervention. This research design ensured a deeper and more grounded understanding of the role of contextualized grammar drills in enhancing language instruction at San Nicolas National High School.

### **Statistical Treatment of Data**

To address the research questions, the researcher employed both quantitative and qualitative data analysis techniques.

#### **Quantitative Phase:**

The researcher devised a 50-item pretest and posttest assessing five major grammar points—simple present tense, simple past tense, conjunctions, modals, and parallelism, with each area represented by 10 multiple-choice items to ensure coverage and content balance. The test items underwent expert validation using the Survey Tool Validation Rating Scale developed by Oducado (2020), which ensured clarity, appropriateness, and alignment with the target grammar competencies.

#### **1. Descriptive Statistics**

To determine the students' grammar proficiency before and after the intervention, the following descriptive statistical tools were used:

- Mean – to determine the average performance of the students in the pretest and posttest.
- Standard Deviation – to measure the variability or dispersion of scores.
- Frequency and Percentage – to classify and present the distribution of learners across the levels of grammar skills using the following adapted scale:

#### **2. Inferential Statistics**

To evaluate the significance of the difference between the pretest and posttest scores, the researcher utilized the following inferential statistical test:

- Paired Sample t-test – to determine whether the difference in the students' grammar scores before and after the intervention was statistically significant at a 0.05 level of significance.

This test was appropriate as the same group of students was assessed twice, before and after the implementation of contextualized grammar drills.

#### Qualitative Phase:

To support and enrich the quantitative findings, the study also gathered qualitative data through open-ended reflective questions. These questions encouraged students to express their:

- Experiences with the contextualized grammar drills,
- Insights on how contextualization helped them understand grammar better,
- Perceptions of the effectiveness of the learning strategy.

The qualitative responses were analyzed using Thematic Analysis, following these steps:

1. Familiarization with the data,
2. Initial coding of significant statements,
3. Searching for themes across responses,
4. Reviewing and defining themes, and
5. Drawing conclusions regarding learners' attitudes, challenges, and perceived benefits of the intervention.

To ensure trustworthiness, expert validation was conducted by language teachers and qualitative research specialists.

## Results and Discussion

This study aimed to determine the effectiveness of contextualized grammar drills in enhancing the grammar proficiency of Grade 8 students under the Revised K to 12 Curriculum. A total of 40 students participated in the intervention, which involved the use of grammar drills embedded in meaningful and relevant contexts. The research utilized a pretest-posttest design to measure the students' grammar proficiency before and after the intervention.

The pretest results revealed a mean score of 27.4, which falls under the “Beginning” level of proficiency, indicating that students had limited mastery of grammar concepts prior to the intervention. After the implementation of contextualized grammar drills, the posttest mean score increased significantly to 38.80, categorized as “Developing.” This improvement suggests that students gained a better understanding of grammar and were able to apply it more effectively in context.

Statistical analysis showed a mean difference of 11.4 between the pretest and posttest scores. The t-value of 11.17 and a p-value of 0.001 (which is less than the significance level of  $\alpha = 0.05$ ) confirmed that the improvement was statistically significant. Additionally, the standard deviation decreased from 8.32 to 4.47, indicating more consistent performance among students after the intervention. The correlation coefficient of 0.64 further demonstrated a strong positive relationship between the contextualized grammar drill and the students' improved grammar proficiency.

The findings revealed that students viewed the contextualized grammar drills as engaging, relatable, and helpful in improving their understanding and use of grammar in real-life communication. They became more confident in writing and speaking after using the materials. Teachers likewise found the drills effective, practical, and easy to integrate into daily lessons, noting improvements in students' grammar performance. Both groups agreed that contextualized grammar drills make grammar learning more meaningful and communicative.

## **Conclusions**

Based on the findings of the study, several conclusions were drawn. First, the use of contextualized grammar drills significantly improved the grammar proficiency of Grade 8 students. The increase in mean scores and the statistical significance of the results indicate that embedding grammar instruction within meaningful contexts enhances student learning. Second, the reduction in standard deviation suggests that the intervention not only improved individual performance but also promoted more uniform learning outcomes across the group. Third, the results validate the pedagogical direction of the Revised K to 12 Curriculum, which emphasizes contextualized and learner-centered instruction. The study confirms that when grammar is taught in a way that is relevant to students' experiences and real-life situations, it becomes more accessible and effective. Fourth, the strong correlation between the intervention and the improvement in scores highlights the potential of contextualized grammar drills as a reliable instructional tool in language education. Lastly, the study concludes that contextualized grammar drills are effective in enhancing students' grammatical competence and confidence in language use. By relating grammar lessons to real-life situations, the drills made learning more meaningful and engaging. Both students and teachers recognized their value in improving communication skills and supporting classroom instruction.

## **Recommendations**

In light of the study's findings and conclusions, the following recommendations are proposed. Teachers are encouraged to adopt contextualized grammar instruction as a regular part of their teaching practice. By embedding grammar lessons in real-life contexts, educators can enhance student engagement and comprehension. School administrators and curriculum developers should support this approach by providing professional development opportunities and instructional materials that reflect students' cultural and linguistic backgrounds. Furthermore, future research should be conducted to examine the long-term effects of contextualized grammar instruction across different grade levels and subject areas. Comparative studies involving traditional and contextualized methods may also provide deeper insights into best practices in grammar teaching. Lastly, assessment tools should be refined to evaluate grammar proficiency not

only in terms of rule-based knowledge but also in terms of communicative competence and contextual application. These recommendations aim to strengthen grammar instruction and contribute to the overall improvement of language education in the Philippine school system.

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**OPEN DOORS: AN ANALYSIS OF INCLUSIVE NUMERACY  
READINESS STRATEGIES IN GRADE 1 S.Y. 2025-2026  
CURRICULUM AT TAGBAYA ELEMENTARY  
SCHOOL, IBAJAY, AKLAN**

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**Abstract**

The acquisition of foundational numeracy skills in the early grades was recognized as a critical determinant of learners' long-term academic success and ability to engage meaningfully in everyday problem-solving. This study, *Open Doors: An Analysis of Inclusive Numeracy Readiness Strategies in Grade 1 Curriculum at Tagbaya Elementary School, Iabajay, Aklan*, was conducted to examine the extent to which Grade 1 curriculum materials under the MATATAG program provided scaffolding for numeracy readiness. Specifically, the research analyzed targeted mathematical competencies, instructional methods, assessment tools, and the integration of Bruner's Enactive–Iconic–Symbolic progression and the five mathematics content areas. It also explored challenges encountered by teachers and proposed an enhancement plan to strengthen numeracy readiness instruction. The study employed a qualitative content analysis design, using document review of curriculum guides, Daily Lesson Logs (DLL), Detailed Lesson Plans (DLP), and Rapid Mathematics Assessment (RMA) toolkits, complemented by a survey administered to the Grade 1 teacher of Tagbaya Elementary School. Deductive and inductive coding were applied to categorize instructional strategies according to Bruner's modes of representation and the five content areas of mathematics: Number Sense, Measurement, Geometry, Patterns, and Statistics. Thematic analysis was used to interpret survey responses, particularly regarding challenges and suggested interventions. Findings revealed that the curriculum materials strongly emphasized competencies in whole numbers up to 100 and basic operations, while competencies in measurement and geometry were less frequently addressed. Instructional methods leaned heavily on seatwork and practice drills, with limited use of gamification, storytelling, and localized materials. Assessment practices relied primarily on RMA toolkits and seatwork, reflecting a standardized approach with minimal contextual adaptation. Analysis of Bruner's progression showed that symbolic representation was dominant, iconic strategies were moderately present, and enactive strategies were least emphasized, indicating a tendency to prioritize abstraction over concrete experiences. Integration of the five content areas was uneven, with Number Sense and Patterns receiving greater focus compared to Measurement, Geometry, and Statistics. Survey responses highlighted several challenges in curriculum implementation. Teachers reported large class sizes, limited localized materials, lack of parental support, and heavy documentation requirements as recurring barriers. Learners' varied numeracy levels were identified as a severe challenge, complicating efforts to design inclusive and differentiated instruction. Despite these constraints, teachers suggested practical interventions such as strengthening number

sense through hands-on activities, using low-cost local materials like bottle caps and stones, and embedding community-based scenarios to contextualize mathematics learning. The study concluded that while the Grade 1 curriculum materials provided a foundation for numeracy readiness, they exhibited gaps in developmental progression, contextualization, and content integration. Bruner's framework revealed instructional imbalances that risked reinforcing rote learning rather than conceptual mastery. Addressing these gaps required a localized enhancement plan that emphasized enactive strategies, integrated all content areas more equitably, and leveraged community resources to make mathematics meaningful. This research contributed to the discourse on early numeracy instruction by offering evidence-based insights into curriculum strengths and deficiencies. It underscored the importance of aligning planned curriculum with developmental theory and contextual realities, thereby supporting the MATATAG Agenda's goal of strengthening foundational skills. The proposed enhancement plan served as a practical guide for teachers, administrators, and policymakers in improving numeracy readiness strategies for Grade 1 learners in rural school contexts.

**Keywords:** Numeracy Readiness, MATATAG Curriculum, Inclusive Education, Curriculum Analysis

## Introduction

The acquisition of foundational numeracy skills in the early grades was considered one of the most critical milestones in the cognitive trajectory of a young learner. Numeracy, often defined as the ability to understand, use, and interpret mathematical concepts and processes, was regarded as far more than a technical requirement for academic progression; it was a fundamental tool for making informed decisions and solving problems in the diverse contexts of daily life. In the early grades, specifically within the transition to formal schooling in Grade 1, children developed the essential building blocks of mathematical thinking, commonly referred to as foundational numeracy skills, which encompassed number recognition, counting, basic operations, and spatial reasoning. The significance of this developmental stage could not be overstated, as the proficiency gained during these formative years determined a learner's ability to comprehend increasingly complex mathematical abstractions in later stages of their education. When these foundations were weak, learners were frequently relegated to a cycle of persistent difficulty that often led to academic frustration and eventual disengagement from the education system.

The educational landscape was marked by a profound tension between the aspirational goals of mathematical literacy and the stark reality of learner performance, as evidenced by large-scale assessments across multiple geopolitical levels. This disparity created a "learning crisis" that necessitated a thorough examination of the strategies employed to prepare learners for formal mathematical instruction.

On a global scale, the Program for International Student Assessment (PISA) consistently highlighted a significant deficit in mathematical proficiency among students worldwide. The PISA 2022 results, which provided the first large-scale data collection on student

performance following the COVID-19 disruptions, revealed an unprecedented drop in performance across the Organization for Economic Cooperation and Development (OECD) countries. Compared to 2018, the mean performance in mathematics fell by almost 15 score points, a decline equivalent to approximately three-quarters of a year's worth of learning. This decline was three times greater than any previous consecutive change recorded by PISA. At that time, one in four 15-year-olds was considered a low performer in mathematics, struggling with tasks as fundamental as using basic algorithms or interpreting simple quantitative data. While the pandemic was a significant factor, negative trends in mathematical performance were already apparent in several nations before 2018, suggesting that the problem was rooted in deeper systemic issues related to curriculum implementation and instructional readiness.

In the Philippines, the results of the PISA 2018 and 2022 assessments underscored a persistent and alarming struggle with foundational mathematical concepts. In 2018, the Philippines ranked 78th out of 79 participating nations in mathematics, achieving an average score of only 353 points, significantly below the OECD average of 489. By 2022, the score showed a marginal and statistically insignificant increase to 355 points, resulting in a rank of 76th out of 81 nations. Most concerning, approximately 80% of Filipino students scored below Level 2 proficiency, meaning they lacked the minimum skills required to participate effectively in society. In response to these challenges, the Department of Education (DepEd) initiated the MATATAG Curriculum and the National Learning Recovery Program (NLRP), aiming to de-clutter the curriculum and focus on essential foundational skills in literacy and numeracy.

Within Region VI (Western Visayas), the regional education sector grappled with ensuring that learners met the minimum curriculum standards. The post-test results of the Enhanced Regional Unified Numeracy Test (ERUNT) for the 2024–2025 school year indicated that 8.11% of learners in Key Stages 2 and 3 remained below the 50% proficiency level. While the region as a whole maintained a basic literacy rate of 89.6%, it was marginally lower than the national average of 90%. To address these persistent gaps, the regional office implemented the "Champs Summer Program," a remedial initiative designed to support learners who were classified as "not proficient" or "low proficient" in numeracy assessments.

The Schools Division of Aklan presented a unique case within the region. According to the 2024 Functional Literacy, Education, and Mass Media Survey (FLEMMS), Aklan achieved the highest basic and functional literacy ratings in Western Visayas, with a basic literacy rate of 92.1% and a functional literacy rate of 73.9%. This success was attributed to strong collaboration with local stakeholders and consistent instructional supervision. However, despite these high literacy figures, the division remained focused on closing the gap between basic and functional proficiency, particularly in the context of mathematical operations.

The Ibajay district, where Tagbaya Elementary School was located, reflected the broader provincial trends while facing localized challenges. Data from the district suggested varying levels of school performance, with mean percentage scores (MPS) showing fluctuations across different subject areas. While some schools demonstrated high performance in English and Filipino, the performance in mathematics often lagged, highlighting a need for targeted numeracy readiness strategies at the primary level.

Tagbaya Elementary School served as a critical site for the implementation of the MATATAG curriculum. The school's profile indicated a diverse student population, with learners often coming from families with limited educational resources. Observations and regional assessments showed that many pupils in the early grades exhibited difficulties in "Number Sense"—specifically identifying numerals, comparing quantities, and understanding place value. There was a recognized tendency for learners to rely on rote memorization without developing a conceptual understanding of mathematical processes, which often led to failure when faced with complex problem-solving tasks. The school's local situation, therefore, necessitated a focused analysis of the "readiness strategies" contained within its curriculum materials to ensure they were equipped to move learners from mere memorization to mathematical proficiency.

The primary purpose of this research was to perform a comprehensive analysis of the numeracy readiness strategies embedded within the Grade 1 curriculum materials at Tagbaya Elementary School. By examining existing lesson plans, curriculum guides, and official DepEd materials, the study sought to determine the extent to which these resources provided the necessary scaffolding for learners transitioning into formal primary education.

The relevance of this research was underscored by the urgent need to address the national and global numeracy deficit. In the context of the MATATAG Agenda, which prioritized foundational skills, it was imperative to verify if the "planned curriculum" aligned with evidence-based pedagogical theories. Justification for this research stemmed from the fact that while national policies were in place, the actual instructional strategies utilized at the school level often remained unexamined. Understanding how these strategies were structured allowed the school to identify gaps in instruction, optimize teacher preparation, and ultimately improve learner outcomes in mathematics. Addressing the numeracy problem at the Grade 1 level was considered a preventative measure against long-term academic failure and socio-emotional difficulties.

## Conceptual Framework

The conceptual framework of this study utilizes the Input-Process-Output (IPO) Model to illustrate the systematic analysis of numeracy readiness strategies.

| <b>Input</b>                                                                                                                                                                                                      |           | <b>Process</b>                                                                                                                                                                                                                                    | <b>Output</b>                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Curriculum Profile                                                                                                                                                                                                | Materials | Document Analysis                                                                                                                                                                                                                                 | Findings and Plan                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>Targeted mathematical competencies</li> <li>Instructional methods (CPA approach, gamification, storytelling)</li> <li>Assessment tools (RMA toolkits, seatwork)</li> </ul> |           | <ul style="list-style-type: none"> <li>Library research approach</li> <li>Deductive and inductive coding</li> <li>Bruner's Enactive–Iconic–Symbolic progression</li> <li>Integration of five content areas: Number Sense, Measurement,</li> </ul> | <ul style="list-style-type: none"> <li>Strengths and deficiencies in readiness strategies</li> <li>Identified challenges/gaps in curriculum materials</li> <li>Proposed Enhancement Plan for Grade 1 Numeracy Readiness Instruction at Tagbaya ES</li> </ul> |
| Learner Context                                                                                                                                                                                                   |           |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                              |

- 
- |                                         |                      |           |
|-----------------------------------------|----------------------|-----------|
| • Diverse numeracy levels at Tagbaya ES | Geometry, Statistics | Patterns, |
|-----------------------------------------|----------------------|-----------|
- 

The conceptual framework of this study followed the Input–Process–Output (IPO) model. The Input included Grade 1 numeracy curriculum materials such as competencies, instructional methods (CPA approach, gamification, storytelling), and assessment tools like the RMA and seatwork activities. The Process involved library research and qualitative content analysis, using deductive and inductive coding to examine Bruner’s Enactive–Iconic–Symbolic progression and the integration of the five mathematics content areas. The Output highlighted the strengths and gaps of the readiness strategies and led to the development of an Enhancement Plan for Grade 1 Numeracy Readiness Instruction at Tagbaya Elementary School.

## **Problem**

The general problem of this research was to analyze the numeracy readiness strategies embedded in the Grade 1 curriculum materials at Tagbaya Elementary School in Ibajay, Aklan. This study focused on how the planned instructional activities, documented in lesson plans and DepEd-issued materials for the 2025–2026 school year, aligned with the foundational needs of Grade 1 learners. The investigation sought to uncover whether these strategies provided sufficient cognitive scaffolding to transition learners from the play-based expectations of kindergarten to the formal mathematical competencies required by the MATATAG curriculum.

## **Statement of the Problem**

Specifically, this research aims to answer the following questions:

1. What is the profile of the analyzed Grade 1 numeracy curriculum materials in terms of:
  - Targeted mathematical competencies;
  - Instructional methods (e.g., CPA approach, gamification, storytelling); and
  - Assessment tools (e.g., RMA toolkits, seatwork)?
2. How do the identified readiness strategies in the curriculum materials reflect Bruner’s "Enactive-Iconic-Symbolic" progression?
3. To what extent are the five content areas of the Grade 1 Mathematics curriculum (Number Sense, Measurement, Geometry, Patterns, and Statistics) integrated into the readiness strategies?
4. What challenges or gaps are evident in the curriculum materials regarding their capacity to address the diverse numeracy levels of learners at Tagbaya ES?
5. What enhancement plan can be developed to improve the numeracy readiness strategies for Grade 1 learners based on the findings of the analysis?

## Scope and Delimitation of the Study

This study was limited to the analysis of planned curriculum materials for Grade 1 Mathematics at Tagbaya Elementary School during the School Year 2025–2026. The primary documents examined included the DepEd MATATAG Curriculum Guide, teacher-crafted Daily Lesson Logs (DLL) and Detailed Lesson Plans (DLP), and the official Rapid Mathematics Assessment (RMA) toolkits. The focus was on how these materials addressed numeracy readiness strategies for Grade 1 learners. The research was confined to Tagbaya Elementary School in Ibajay, Aklan. Consequently, the findings could not be generalized to other schools within the division or beyond, as the context was specific to the institution studied. The study employed a qualitative content analysis approach. It did not include classroom observations or direct assessment of student performance. Instead, the analysis was restricted to the strategies documented in the curriculum materials. The scope was limited to the mathematics or numeracy portion of the Grade 1 curriculum. Other subject areas in the MATATAG curriculum were excluded from this investigation.

## Significance of the Study

This study was significant as it provided a systematic analysis of Grade 1 numeracy curriculum materials, offering insights into how readiness strategies were designed and implemented at Tagbaya Elementary School. By examining competencies, instructional methods, and assessment tools, the research highlighted both strengths and gaps that could inform curriculum development and instructional planning.

For learners, the study contributed to improved numeracy readiness by identifying strategies that fostered foundational skills in number sense, measurement, geometry, patterns, and statistics. For teachers, it served as a reference for enhancing lesson planning and adopting effective approaches such as the CPA method, gamification, and storytelling. For school administrators and DepEd officials, the findings provided evidence-based recommendations that could guide policy adjustments and resource allocation. Finally, for future researchers, the study offered a framework and baseline data that could be expanded in subsequent investigations on early numeracy instruction.

## Definition of Terms

To ensure clarity and consistency, the following terms were defined as they were used in this study:

**Bruner’s Modes of Representation** – A learning theory framework consisting of three stages: enactive (learning through action), iconic (learning through images), and symbolic (learning through language and symbols).

**Concrete–Pictorial–Abstract (CPA) Approach** – An instructional method that progressed from hands-on manipulation of objects (concrete), to visual representation (pictorial), and finally to symbolic notation (abstract).

**Content Areas of Mathematics** – The five domains in the Grade 1 curriculum: Number Sense, Measurement, Geometry, Patterns, and Statistics.



**Enhancement Plan** – A proposed instructional improvement strategy developed from the findings of this study to strengthen numeracy readiness instruction at Tagbaya Elementary School.

**Numeracy Readiness** – The foundational ability of Grade 1 learners to understand and apply basic mathematical concepts such as number sense, measurement, geometry, patterns, and statistics.

**Planned Curriculum Materials** – Referred to official documents prepared for instruction, including the DepEd MATATAG Curriculum Guide, teacher-crafted Daily Lesson Logs (DLL), Detailed Lesson Plans (DLP), and Rapid Mathematics Assessment (RMA) toolkits.

**Rapid Mathematics Assessment (RMA)** – A DepEd-developed toolkit designed to measure learners' proficiency in key numeracy domains at the beginning of Grade 1.

## Method

### Research Design

The study employed a Qualitative Content Analysis (QCA) as its primary research design. Content analysis was a systematic method for organizing and interpreting textual or visual data to identify patterns, concepts, and themes within a specific context.

Qualitative Content Analysis was uniquely suited for this study because the primary objective was the analysis of existing lesson plans, curriculum guides, and DepEd materials. This library research approach allowed the researcher to explore the underlying trends and themes within the curriculum documents that a quantitative count of keywords would have overlooked. By using QCA, the researcher stayed close to the participants' language—in this case, the language used by teachers and curriculum designers—to generate credible and defensible insights into the instructional planning process. This design was particularly appropriate for exploring under-theorized topics such as the specific transition strategies from Kindergarten to Grade 1 in a rural school setting. Furthermore, QCA provided a structured yet flexible framework that combined the rigor of systematic coding with the interpretive depth necessary to evaluate alignment with complex psychological theories like Bruner's Modes of Representation.

### Research Procedures

The research followed a structured workflow to ensure validity and reliability:

1. **Data Preparation and Familiarization:** The researcher gathered all relevant documents, including the MATATAG curriculum guides, Grade 1 Daily Lesson Logs (DLL), and RMA toolkits from Tagbaya ES. These were organized into a single project space for systematic review.
2. **Defining the Unit of Analysis:** The unit of analysis was defined as the individual instructional activity or learning strategy described in the lesson plans. This ensured that the coding remained focused on the process of instruction.

3. **Developing the Coding Frame:** A deductive coding scheme was developed based on the theoretical framework (Bruner's modes) and the five content areas of the math curriculum.

**Category 1:** Enactive (Concrete-manipulative activities)

**Category 2:** Iconic (Pictorial/Visual activities)

**Category 3:** Symbolic (Abstract/Numeral-based activities)

**Category 4:** Readiness Domains (Number Sense, Geometry, etc.)

### **Coding and Analysis**

The researcher systematically coded the entire dataset, using reflexive memos to note emerging patterns or uncertainties.

### **Synthesis and Reporting**

The findings were summarized to identify patterns of alignment and existing gaps, which then informed the proposed enhancement plan.

### **Validity and Reliability**

To ensure the credibility of the findings, the researcher maintained a clear audit trail of all coding decisions and supported every claim with illustrative excerpts from the analyzed curriculum materials. The use of a pre-defined coding frame (deductive analysis) ensured that the evaluation remained focused on the research questions and theoretical benchmarks. Validity in this context was equivalent to the researcher's consistency and coherence in following the translation rules from text to code.

### **Research Setting**

The study was conducted at Tagbaya Elementary School, located in Barangay Tagbaya, Ibajay, Aklan. The school was situated within the Ibajay West District under the Schools Division of Aklan. It served a diverse population of young learners, with 28.68% of the local barangay population. As a public elementary institution, it was a primary site for the implementation of the MATATAG Curriculum and the National Learning Recovery Program (NLRP) in the region. The school had a dedicated faculty, including Master Teachers and regular teaching staff, who were actively involved in division-wide assessments like the Rapid Mathematics Assessment (RMA).

**Figure 1.** Map of Aklan Province showing Tagbaya, Ibajay in the northwest, indicating the study site



## Respondents of the Study

The respondents for the survey component of this research were the Grade 1 teacher of Tagbaya Elementary School. The study employed purposive sampling, specifically the teacher who was currently handling Grade 1 Mathematics and was responsible for crafting Daily Lesson Logs (DLL) or Detailed Lesson Plans (DLP) under the MATATAG curriculum. This sampling technique ensured that the

participant possessed the deep-seated understanding of the school's instructional practices and curriculum implementation necessary to provide relevant data. While the study primarily analyzed documents, the insights from this educator served as a basis for triangulating the findings from the content analysis.

## Data Gathering Tool

To address the research questions, the following tools were utilized:

### Qualitative Content Analysis Checklist (Main Tool)

A researcher-made evaluative checklist was used to analyze the Grade 1 MATATAG Curriculum Guide, teacher-crafted lesson plans (DLL/DLP), and the Rapid Mathematics Assessment (RMA) toolkits. This checklist was structured according to Bruner's Three Modes of Representation (Enactive, Iconic, and Symbolic) and the five content areas of Mathematics (Number Sense, Measurement, Geometry, Patterns, and Statistics).

### Survey Questionnaire (Triangulation Tool)

An adapted survey instrument, based on the Individual Performance, Commitment, and Review Form (IPCRF) standards and existing numeracy research, was used to gather data on teachers' perceptions of their strategies and the challenges they faced.

## Data Gathering Procedures

The data gathering process was executed in three phases to ensure ethical compliance and systematic collection:

### **Phase I. Permission and Ethical Clearance:**

The researcher secured a letter of intent and sought approval from the Schools Division Superintendent of Aklan and the School Head of Tagbaya ES. Informed consent was obtained from the teacher-respondent, ensuring their participation was voluntary and their data remained confidential under the Data Privacy Act of 2012.

### **Phase II. Document Collection:**

Following approval, the researcher requested copies of the official MATATAG Grade 1 Curriculum Guides and teacher-crafted lesson plans for the school year. These documents were compiled and prepared for systematic coding.

### **Phase III. Survey Administration:**

The survey was administered to the Grade 1 teacher. To ensure a high response rate and provide immediate clarification on any items, the researcher coordinated with the teacher for a brief face-to-face or digital administration period during non-teaching hours.

### **Statistical Treatment of Data**

**Table 1.** *The data collected from the documents and surveys will be treated using both qualitative methods:*

| <b>Research Question</b>                                                                                                                                                                                                                    | <b>Data Variables</b>                                              | <b>Statistical Tool / Method</b> | <b>Purpose of Analysis</b>                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| What was the profile of the analyzed Grade 1 numeracy curriculum materials in terms of targeted mathematical competencies, instructional methods (CPA approach, gamification, storytelling), and assessment tools (RMA toolkits, seatwork)? | Curriculum materials profile (competencies, methods, tools)        | Thematic Content Analysis        | To identify and categorize competencies, instructional methods, and assessment tools reflected in the curriculum materials. |
| How did the identified readiness strategies in the curriculum materials reflect Bruner's "Enactive–Iconic–Symbolic" progression?                                                                                                            | Lesson plan strategies categorized into Enactive, Iconic, Symbolic | Deductive Thematic Coding        | To classify strategies into Bruner's modes and highlight instructional gaps or strengths.                                   |
| To what extent were the five content areas of the Grade 1 Mathematics curriculum (Number Sense, Measurement, Geometry, Patterns, and Statistics)                                                                                            | Integration of content areas in curriculum materials               | Qualitative Content Analysis     | To examine the presence and depth of integration of each content area within the readiness strategies.                      |

|                                                                                                                                                             |                                                          |                                                      |                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------|
| integrated into the readiness strategies?                                                                                                                   |                                                          |                                                      |                                                                                              |
| What challenges or gaps were evident in the curriculum materials regarding their capacity to address the diverse numeracy levels of learners at Tagbaya ES? | Survey data on challenges encountered                    | Thematic Analysis of Responses                       | To interpret recurring themes and patterns in the challenges faced by teachers and learners. |
| What enhancement plan was developed to improve the numeracy readiness strategies for Grade 1 learners based on the findings of the analysis?                | Synthesized findings from curriculum analysis and survey | Descriptive Qualitative Analysis and Action Planning | To propose a contextualized Enhancement Plan for numeracy readiness instruction.             |

The data collected from curriculum documents and survey responses were analyzed using qualitative methods anchored on Bruner’s Enactive–Iconic–Symbolic framework and guided by thematic rigor. Thematic content analysis was employed to examine the profile of the Grade 1 numeracy curriculum materials, particularly in terms of targeted mathematical competencies, instructional methods such as the CPA approach, gamification, and storytelling, as well as the assessment tools utilized. Deductive coding was applied to classify lesson plan strategies according to Bruner’s progression, thereby highlighting the presence of enactive, iconic, and symbolic modes and identifying instructional strengths or gaps. Qualitative content analysis was also used to determine the extent of integration of the five mathematics content areas—Number Sense, Measurement, Geometry, Patterns, and Statistics—within the readiness strategies. In addition, thematic analysis of survey responses was conducted to interpret recurring challenges and gaps encountered by teachers in addressing diverse learner numeracy levels. Finally, descriptive qualitative analysis and action planning synthesized the findings from both document review and survey data, serving as the basis for a contextualized enhancement plan that strengthened numeracy readiness instruction.

## Results and Discussion

This chapter presented the summary of findings, the conclusions derived from these findings, and actionable recommendations to improve Grade 1 numeracy readiness strategies at Tagbaya Elementary School, Ibajay, Aklan.

### Summary of Findings

This study analyzed the Grade 1 numeracy curriculum, teaching methods, and assessment practices at Tagbaya Elementary School, Ibajay, Aklan. The research examined how

closely these practices aligned with Bruner’s cognitive development theory, the DepEd MATATAG curriculum standards, and the Rapid Mathematics Assessment (RMA) framework.

The key findings were summarized as follows:

### **Demographic & Institutional Alignment:**

The key informant was an experienced educator (15 years of experience, Master’s degree) working in a resource-constrained school environment (“Limited” resources).

### **Curricular & Pedagogical Profile:**

The curriculum focused heavily on arithmetic skills, such as whole numbers up to 100 and basic addition and subtraction (Rating: 5, Always). Measurement concepts were rarely taught (Rating: 2, Rarely). While the school utilized the Concrete–Pictorial–Abstract (CPA) framework frequently (Rating: 4), everyday learning was dominated by traditional written seatwork and drills (Rating: 5). Experiential methods, such as gamification, localized activities, and storytelling, were used only occasionally (Rating: 3, Sometimes).

### **Bruner’s Progression Index:**

The classroom learning progression was inverted ( $BAI = 3.00$ ). Abstract symbolic instruction was used constantly (Rating: 5), and visual representations were used frequently (Rating: 4). However, hands-on, enactive learning was only used sometimes (Rating: 3).

### **Core Content Integration:**

Curriculum integration was uneven ( $CAII = 3.00$ ). While Number Sense and Patterns were highly prioritized (Rating: 4), Measurement and Geometry received minimal focus (Rating: 2, Low).

### **Structural and Pedagogical Challenges:**

The teacher faced moderate challenges, including large class sizes, limited localized materials, and a lack of parental support (Rating: 3). Administrative workloads and managing varied student skill levels were minor challenges (Rating: 2).

### **Qualitative Suggestions:**

The respondent recommended a practical approach: using low-cost, localized materials (such as bottle caps, stones, and sticks) to build number sense through hands-on activities before moving to abstract math symbols.

### **Conclusions**

Based on these findings, the following conclusions were drawn:

### **Professional Capability vs. Material Constraints:**

While the teacher had advanced professional training, her ability to use progressive, hands-on teaching methods was limited by a lack of classroom resources.

### **Inversion of Learning Theory:**

Grade 1 math lessons often bypassed the essential enactive phase (hands-on play and exploration), moving too quickly to abstract numbers and written drills. This ran counter to Bruner’s cognitive development theory and the hands-on diagnostic design of the DepEd Rapid Mathematics Assessment (RMA).

### **Uneven Curriculum Focus:**

The early math curriculum focused heavily on calculations and basic numbers, leaving student development in spatial reasoning, geometry, and measurement lagging behind.

### **Need for Localized Solutions:**

Traditional written worksheets were used primarily because teachers lacked alternative learning materials. To make lessons more interactive and hands-on, schools needed a systematic approach to creating localized learning resources using cheap, readily available items.

### **Recommendations and Actionable Enhancement Plan**

To address these findings and support the numeracy goals of DepEd Aklan (including Project ANGAT and Project ARCHIMEDES), the following recommendations were made:

**Implement a Structured Concrete–Pictorial–Abstract (CPA) Action Plan.** The school should adopt a clear, step-by-step approach for all Grade 1 math lessons:

**Step 1. (Enactive):** Start every new math concept with hands-on activities. Students must physically touch and move objects (e.g., sorting bottle caps or grouping sticks) to understand the concept.

**Step 2. (Iconic):** Transition to visual representations, such as drawing dots, using ten-frames, or analyzing diagrams.

**Step 3. (Symbolic):** Introduce abstract numbers and mathematical signs (+, −, =) only after students have mastered the concrete and visual steps.

**Create an “Ecological Math Kit” (Project E-MATH)** To overcome the lack of learning resources without increasing costs, the school should establish Project E-MATH. This initiative would collect and organize recycled and natural items into structured classroom math kits:

**Sticks:** Tied in bundles of ten to teach place value and counting up to 100.

**Stones and Shells:** Used as tactile counters for addition and subtraction.

**Plastic Bottle Caps:** Color-coded to teach patterns, sorting, and comparison.

**Establish School-Based Learning Action Cell (SLAC) Sessions** The school should organize targeted professional development sessions through local SLAC meetings. These workshops should focus on:

Showing teachers how to transition from diagnostics (like the RMA) to daily, hands-on math lessons.

Sharing strategies for teaching measurement and basic geometry using localized objects (e.g., using handspans to measure desk lengths or using local boxes to teach 3D shapes).

### Design an Institutional Numeracy Enhancement Plan.

The following action plan was recommended to improve numeracy readiness at Tagbaya Elementary School. This plan aimed to implement the recommendations systematically, ensuring that instructional strategies were aligned with Bruner’s developmental theory, DepEd’s MATATAG curriculum, and the localized needs of learners in Ibajay, Aklan.

**Table 9.** Numeracy Enhancement Plan

| <b>Proposed Program Component</b> | <b>Target Competency / Area</b>              | <b>Key Pedagogy / Strategy</b>                    | <b>Required Resources</b>                                          | <b>Timeline</b>             | <b>Responsible Parties</b>                         |
|-----------------------------------|----------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------|-----------------------------|----------------------------------------------------|
| Project E-MATH                    | Number Sense, Counting, and Basic Operations | Hands-on, enactive sorting and grouping           | Recycled bottle caps, dried sticks, stones, and storage bins       | Year-Round (Starting Q1)    | School Head, Math Coordinator, Grade 1 Teachers 1  |
| RMA-Aligned Intervention          | Diagnostics and Targeted Remediation         | Differentiated, play-based small-group activities | Printed RMA Toolkits and progress trackers                         | Post-RMA Diagnostic (Q1–Q4) | Grade 1 Teachers, Remedial Reading/Math Teachers 1 |
| Geometric & Spatial Play          | Early Geometry and Measurement               | Exploring 2D/3D shapes using real-world objects   | Local boxes, recycled containers, and non-standard measuring tools | Integrated into Q2–Q3       | Grade 1 Teachers 1                                 |
| Math-at-Home Initiative           | Place Value and Computational Fluency        | Simple counting games for home learning           | Family math guidelines and cheap localized counters                | Weekly (Starting Q2)        | Parents, Grade 1 Teachers 1                        |



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# CONICS-R: A SELF-REGULATED APPROACH TO ENHANCE THE ACADEMIC PERFORMANCE OF THE STUDENTS ON CONICS SECTIONS

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## Abstract

The application of effective teaching and learning interventions, coupled with the identification of instructional needs, plays a crucial role in improving student outcomes in Pre-Calculus. Results of a diagnostic test on conic sections administered in the previous school year in Sto. Cristo National High School revealed a mean percentage score (MPS) of 29.30, indicating poor mastery of the topic. Furthermore, conic sections accounted for the least mastered competencies in the first-quarter assessment. In response to these findings, the researcher developed the CONICS-R strategy, an instructional intervention grounded in the Self-Regulated Strategy Development (SRSD) framework, aimed at enhancing students' conceptual understanding of conic sections while fostering self-regulated learning skills. This study employed a mixed-methods research design to examine the effectiveness of the SRSD-CONICS-R strategy, integrating quantitative measures of academic performance with qualitative data on students' learning experiences. Thirty (30) heterogeneous students participated in the study, which was conducted over a one-month period during the first semester of School Year 2025–2026. Quantitative data were gathered through pre-test and post-test assessments, while qualitative insights were obtained from students' perceptions and reflections. Findings revealed that students achieved medium normalized gain scores, with a smaller proportion attaining high gains, suggesting that the intervention was effective for most learners while underscoring the need for differentiated scaffolding. A statistically significant difference between pre-test and post-test scores was observed, with a large effect size (Cohen's  $d = 1.86$ ), confirming the substantial impact of the SRSD-CONICS-R strategy on students' academic performance. Additionally, qualitative results indicated high student approval, with participants describing pre-calculus as more engaging, structured, and meaningful. Overall, the study demonstrates that the SRSD-CONICS-R strategy is an effective instructional intervention for improving both achievement and learning experiences in pre-calculus, particularly in the teaching of conic sections.

**Keywords:** CONICS-R, Pre-Calculus, Self-Regulated Strategy Development, Mathematics Education, Academic Achievement

## Introduction

Mathematics is a core subject that is indispensable in day-to-day lives from the simple calculations made in everyday activities to the advanced computation systems that form the backbone of modern society. Apart from its use, mathematics helps in enhancing

critical thinking, problem solving skills and logical reasoning. On the other hand, while mathematics has become an essential element today, it is crucial to address the difficulties that students may face in mathematics learning.

The below par placement of the Philippines in the 2022 Programmed for International Student Assessment (PISA) for the second time call attention to the urgent need for educational reforms according to Philippine Business for Education (n.d.). The latest PISA results underscore the need for comprehensive support for Filipino learners, demanding immediate attention, collaborative efforts, and a steadfast commitment to improvement. Vice President and the former Education Secretary Sara Duterte acknowledged the unsettling reality exposed by the Philippines' low ranking in the PISA assessment, emphasizing the need for change in the nation's educational system (Mangaluz, 2023).

In Alegre's (2022) study of pre-calculus education, the difficulties that senior high school students encountered in the competencies have been outlined. The results of the diagnostic test showed that the students exhibited low attainment on higher order thinking questions, especially those about conic sections. This diagnostic information is imperative for the design of instructions aimed at the least learned of these competencies. Likewise, Dalagan et al., (2024) investigated learning gaps of student responses in pre-calculus through pre- and post-test result of the Grade 11 students. Much of the assessment focused on low mastery topics such as conic sections, series and sequences, and sigma notation.

Mathematics is a subject that requires learners to become independent and capable of regulating their own learning. Self-regulated learning can be defined as a process of students managing the task, goals, resources, and strategies used in learning, monitoring the progress made, and making changes as needed (Nugroho et al., 2021). However, previous research on self-regulated learning (SRL) has produced inconsistent findings. Rahayuningsih et al. (2021) highlighted that SRL had no positive effect on mathematical problem-solving abilities at SMA YP PGRI 3 Makassar. Arigiyati et al. (2023) reported that SRL does not have a significant effect on mathematics learning outcomes for Grade 8 students of SMP Negeri 24 Muaro Jambi, although there is a positive but not significant relationship between SRL and learning outcomes. This contrasts with Losenno et al. (2020), who identified a linear correlation between SRL and problem-solving abilities and Herlina et al. (2022) finds that academic attainment or learning outcomes in mathematics are positively impacted by self-regulated learning. In addition, SRL is essential for reasoning, problem-solving, and understanding complex ideas (Gabriel et al., 2020). Students who are self-regulated are not only proactive, emotional, and cognitive learners but also get to make the right decisions to meet their academic objectives.

Current education systems are still struggling to develop students' mathematical literacy. To solve this problem, it is vital to use new teaching strategies, focus on the conceptual level of learning, and ensure that students receive additional support (Borovik et al., 2022; Balmaceda, 2021). Distinguishing the challenges students face in mastering math skills, the National Research Council recommends personalized approaches to enhance student performance in mathematics (Kilag, et al., 2023). Customizing instruction based on individual learning preferences and needs can improve understanding and proficiency in mathematics. Personalized approaches address diverse learning requirements, assisting

students in overcoming obstacles to mathematical learning and achieving academic success.

The Self-Regulated Strategy Development (SRSD) model is an instructional approach that was specially developed for students with the purpose of directing their attention to different self-regulation methods by providing assessment as well as instruction. Among the goals of this model, there is the idea of creating strategic and purposeful learners through the participation of teachers, peers, and parents in the learning process. Praised for boosting self-regulation coupled with self-learning, SRSD has been found most impactful in teaching and learning of number mathematics. For example, as pointed out by McKeown et al. (2021), when SRSD is used in classrooms, many students improve in solving problems, gain better understanding of concepts, and even record better performance in mathematics. Originally used in writing performance particularly for learners with learning disability (Kokkali et al., 2023), it is now necessary to broaden the application of SRSD into the areas of other subjects – such as core math courses needed in STEM education. For example, Pre-calculus, a course through which students often gain access to universities, poses a significant problem to the learners who come out of it struggling to achieve in their areas of specialization. Use of SRSD in such circumstances might reduce these challenges and promote sustainable mathematics achievement.

Based on the literature reviewed, it is argued that the application of effective teaching and learning interventions and identification of instructional needs may help improve student outcomes in Pre-Calculus. The findings also underscore the need to promote students' knowledge of mathematical concepts, mathematical thinking, and willingness to learn mathematics.

With the above challenges presented, the researcher crafted the CONICS-R strategy as an intervention based on the framework of Self-Regulated Strategy Development. The CONICS-R strategy is designed to support students' understanding of conic sections while promoting self-regulated learning. The objectives are to provide a structured problem-solving framework, enhance a conceptual understanding of conic sections, develop analytical and critical thinking skills, support visual and representational learning, promote self-regulated learning and metacognition, encourage independent and autonomous learning, increase motivation and engagement in mathematics, facilitate real-life application and meaning-making, improve accuracy and performance in problem solving, and develop reflective and resilient learners. These objectives align the CONICS-R strategy with the principles of the SRSD framework, ensuring that students develop not only mathematical competence but also long-term self-regulated learning skills.

### **Theoretical Framework**

The study was anchored in several foundational theories of learning, namely metacognitive theory, self-regulated learning theory, social cognitive theory, and Vygotsky's zone of proximal development (ZPD). These theories provided both the conceptual framework and pedagogical guidance for the design, implementation, and interpretation of the study.

First, metacognition is coined by John Flavell in 1979 and he viewed the ideas as the learner's knowledge of their own cognition. Defined it as "knowledge and cognition about cognitive phenomena". Literature referred metacognition as "thinking about one's own

thinking. This theory focuses on the awareness and control of one's own learning processes. It is directly related to self-regulated learning as it involves teaching students to plan, monitor, and evaluate their own understanding and performance.

Second, Self-regulated learning (SRL) is a theory that was primarily attributed to Barry Zimmerman in 2002 and has become popular in educational psychology because of the light it sheds on students' learning processes and how they can be improved (Ariyanti & Dahlan, 2019). According to this theory, a learner is one who takes control of his/her learning by identifying learning objectives and goals, assessing his/her progress and utilizing the right strategies to achieve the set goals. Self-regulated learning includes a set of cognitive, metacognitive, and motivational strategies which enable students to become the masters of their learning process, and, therefore, achieve better learning outcomes and contribute to the future success (Xiao et al., 2019).

The application of self-regulated learning theory in students is of great significance. First, this theory stresses the role of the learner and his or her desire in the process of learning. The self-regulated learning theory is more appropriate in this case as it goes against the conventional view of students as empty vessels that are to be filled with knowledge given that students are seen as active participants in the process of learning as they plan, monitor and evaluate their learning. In this way, it is possible that such feelings of control will lead students to have a greater investment in the outcomes of educational endeavors and, therefore, be more motivated, persistent, and engaged (Payan-Carreira et al., 2023).

In the same way, self-regulated learning theory underlines metacognitive skills because students know how to think and how to correct and improve their learning (Fauziana et al., 2021). As a result, it enhances the student's capacity for self-regulated and intentional learning, which in turn facilitates the application of newly acquired knowledge and abilities in novel settings.

Third, Social Cognitive Theory places great emphasis on observational learning, self-efficacy, and self-regulation in relation to human behavior. Within the SRSD framework, SCT is particularly important because it gives insight into how people acquire knowledge through observing others, evaluating their own abilities (self-efficacy), and controlling their behaviors and thinking to achieve expected results. SRSD incorporates major features of SCT which are explicit instruction, modeling, and guided practice for writing strategies. Observation of competent writers enables students to understand how best to plan, organize, and revise their work. Furthermore, SRSD stresses the building of self-efficacy by teaching goal-setting procedures, monitoring progress and reflecting upon one's writing achievements. Furthermore, SCT draws attention to social influences on education. SRSD frequently uses collaboration among learners whereby they work together in groups and have peer feedback sessions. By interacting with peers who engage in similar tasks or assignments such as writing projects, students not only learn from each other but also boost their belief in their success at improving written communication skills. Social Cognitive Theory offers a theoretical basis for appreciating SRSD as it supports learners and attracts them to become effective authors by dealing with cognitive, motivational as well as social factors involved during the learning process.

Finally, the Zone of Proximal Development developed by Lev Vygotsky (1978) as the difference between what a learner can perform individually and what he can do with

assistance provided. Looking at SRSD from this angle enables one to see it as a scaffolding process done in students' ZPD as they write mathematically. By providing structured support at various stages of complexity for mathematical tasks, SRSD helps students move toward independence when presenting mathematical concepts through written language. According to this model, beginner mathematics learners could be taken through from starters to experts by using SRSD which provides required scaffolding within their ZPDs.

In summary, these theories collectively informed the study's framework, highlighting the importance of cognitive awareness, autonomy, social interaction, and developmental support in the learning process. By anchoring the study in these learning theories, the intervention was not only evidence-based but also responsive to the diverse cognitive and social needs of learners.

**Figure 1.** *Research Paradigm of the Study*

| <b>Self-Regulation</b>                                                                                       | <b>Post-test</b>                             | <b>CONICS-R Strategy</b>             |
|--------------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------|
| <ul style="list-style-type: none"> <li>• Cognitive</li> <li>• Metacognitive</li> <li>• Motivation</li> </ul> | Enhance academic performance in pre-calculus | Self-Regulated Strategy Development) |

Figure 1 shows the research paradigm which outlines the connections between the SRSD CONICS-R strategy, self-regulation, and Pre-Calculus performance. According to the framework, the educational interventions propose that SRSD CONICS-R Strategy aims at developing students' self-regulation skills which can help in the improvement of students' performance in Pre-calculus. Furthermore, it can be suggested that the action plan can also increase pre-calculus performance directly. By joining cognitive, metacognitive, and motivational aspects in learning strategies provided in the framework, a strategy is offered to enhance learners' performance in Pre-calculus.

## The Problem

The problem is that the researcher at Sto. Cristo National High School faced are comparable to the findings of Alegre (2022) and Dalagan et al. (2024). Students who took a diagnostic test on conics sections last school year received an MPS of 29.30. The topic of conic sections includes the majority of the least mastered competencies during the first quarter assessment based on the percentage of learners who achieved the minimum level of proficiency. These findings provide valuable information to plan instruction and for curriculum development and specification so that instructional techniques utilized are related appropriately to the students in completing arithmetic and algebraic problem solving and progressing towards calculus computation.

In line with this, the researcher will make use of the self-regulated learning approach to enhance the student's academic performance and self-regulation skills which can help them improve their performance in Pre-Calculus. The intended approach which is grounded in the self-regulated strategy development (SRSD) framework will be utilized with a view to addressing the research gap identified in the self-regulated learning as well

as the gaps observed in Pre-calculus concerning conic sections. This research will address these gaps to produce knowledge on steps that teachers can employ to help students to solve complex mathematical problems as well as instill in them basic self-regulation skills for success in academic life.

### **Statement of the Problem**

The general problem of this study is to know how self-regulated approach affects the performance of the students. The researcher would like to delve deeper into how effective the CONICS-R strategy is as a self-regulated approach in enhancing the academic performance of the students in conic sections. Specifically, this study will find answers to the following questions:

1. How may the self-regulation skills of the students before and after exposure to self-regulated learning approach be described in terms of:
  - 1.1 cognitive;
  - 1.2 metacognitive; and
  - 1.3 motivation?
2. To what extent did the implementation of the CONICS-R strategy enhance the students' academic performance and self-regulation skills based on the gathered data?
3. What are the feedback among the experimental group on the utilization of CONICS-R strategy in learning calculus?

### **Hypotheses**

$H_0$ : There is no significant difference in the self-regulation skills and academic performance of students before and after exposure to the CONICS-R strategy.

$H_a$ : There is a significant difference in the self-regulation skills and academic performance of students before and after exposure to the CONICS-R strategy.

### **Scope and Delimitation of the Study**

The respondents of the study were the Grade 11 STEM students of one of the public secondary schools in the City of San Jose Del Monte. A total of thirty heterogenous (30) students will participate in this study, and it will be conducted for one month of the First Semester, School Year 2025 – 2026. The implementation of the strategy will be conducted face-to-face set up during regular schedule time for the subject of Pre-Calculus. The topics to be covered will be the conic sections. The researcher will utilize the most essential learning competencies for the conics for the alignment of the target of the strategy. Pretest, posttest, and survey will be administered and given to the respondents. Moreover, the respondents will answer the self-learning journal every day to record their reflections and feedback on the strategy. This will ensure that all data gathered will be beneficial for answering the specific questions of the study.

## Significance of the Study

**Pre-Calculus Students.** This study may enrich students' learning experiences by incorporating self-regulation strategies with direct instruction. Students may improve understanding of the concepts, boost problem solving skills, develop metacognitive skills, increase motivation and engagement, prepare for advanced mathematics, personalize learning, and build lifelong learning skills. Learning self-regulation skills can help students understand and express their mathematical thinking more effectively, which could improve their academic achievement in this subject. Additionally, it can help develop important self-regulation skills that are relevant to Pre-Calculus, enhancing academic performance and confidence when solving challenging mathematical tasks.

**Mathematics Teachers.** This study may help teachers improve their teaching approaches by providing them with insights about the best ways of integrating self-regulated learning principles into Pre-Calculus. Moreover, teacher support, involvement, cooperation and fairness, direct and indirect numeracy, and spatial ability were all found to enhance the students' learning proficiency in pre-calculus (Valencia and Ching, 2021). This implies that they may know how to make classrooms more involving, exciting, and productive for their students.

**Curriculum Planners.** Curriculum planners have a strong tool for producing self-reliant, resilient students when they incorporate a self-regulated approach into Pre-calculus instruction. Planners can assist students in mastering challenging mathematical ideas with confidence by creating resources that motivate them to set goals, track their progress, and modify their strategy

**Future Researchers.** The results of this study may be useful for future researchers. This can contribute to understanding and addressing educational disparities, promoting equity in math education. Moreover, this can track students' progress beyond the course and examine how self-regulation skills influence success in subsequent math courses and other academic areas. In conclusion, this holds significant promises for advancing educational theory, improving instructional practices, and enhancing student outcomes.

## Definition of Terms

### Academic Performance.

A term that refers to the level of achievement a learner attains in their study. It is typically measured by student's test scores which serves as an indicator for their mastery of the subject matter, ability to apply knowledge and engagements in their studies. (Maqableh et al., 2021). In this paper, it refers to the test scores of the students in the Pre-calculus.

**Cognitive.** The term used in psychology to describe anything related to thinking, learning, and understanding (Cherry, 2024). In this research, it refers to mental processes engaged in learning and problem-solving including attention, memory, understanding, comprehension and reasoning.



**Conic sections.** A lesson in pre-calculus deals with curves formed by the intersection of a plane and a double right circular cone. Learning gaps in this topic is the target of the CONICS-R strategy to be improved.

**CONICS – R Strategy.** A researcher-made new teaching approach which is grounded in the self-regulated strategy development (SRSD) framework with a view of addressing the learning gaps observed in pre-calculus concerning conic sections.

**Metacognitive.** Metacognition is the study of cognitive activities and regulation of these activities for effective functioning. It embraces self-analysis to identify the manner and style in which a person learns and thinks about knowledge during problem solving (Hanslmayr et al., 2019). In this study, it refers to awareness and control of one's cognitive processes like planning for monitoring and evaluating one's learning strategies or comprehending things.

**Motivation.** The process that initiates, guides, and maintains goal-oriented behaviors (Cherry, 2023). In this thesis, it comprises both internal and external factors that inspire engagement, persistence, and effort on the learners' part in studying pre-calculus. These may include intrinsic motivation(interest)and goal orientation.

**Pre-Calculus.** The preparation stage between simple arithmetic and algebra on the one hand and more complicated concepts of calculus on the other. It provides a basis for more complicated lessons in mathematics (Dalagan et al., 2024). In this study, it is treated as an advanced high school math course which provides high school students with a background for calculus by covering functions, and trigonometry.

**Self-Regulated Strategy Development.** An evidence-based instructional program designed specifically to improve children's academic skills and achievement levels (Ray & FitzPatrick, 2022). In this study, it refers to an instructional approach aimed at guiding students on how they'll enhance self-regulation skills such as goal setting and self-monitoring.

**Self-Regulation Skills.** Self-regulation skills explicate the capacities whereby individuals facilitate thinking, feeling, and acting for purposes of fulfilling set objectives. It is for this reason that such skills are vital in managing a range of situations and establishing sustainable realizations (Robson et al., 2020). In this study, it encompasses cognitive, motivation, and metacognitive abilities of students that enable them to manage their learning process effectively.

## **Method**

### **Research Design**

The study made use of mixed method research design which is used to further explain a set of quantitative data with additional qualitative information. The quantitative part was a quasi-experimental design. On this aspect, the researcher gathered data via a survey questionnaire to measure the respondent's self-regulation skills before and after the implementation of the strategy and their respective perceptions on the use of the strategy. Moreover, the qualitative part was the feedback coming from the respondents through

interview. This provided a comprehensive analysis of the research problem. Thus, the use of both quantitative and qualitative approaches enables the researcher to get a complete picture of the research problem by including numerical data and descriptions. Consequently, the techniques provided validate the results of the investigation into how well the self-regulated learning approach, an intervention, supported students' self-learning in conic sections.

## **Research Setting**

The study conducted in a public high school located in San Jose Del Monte City, Bulacan. The school offers junior and senior high school programs which caters to the students living in the area and other nearby places.

## **Respondents of the Study**

The population for this study were the senior high school students. More specifically, Grade 11 students enrolled for school year 2025-2026 and taking up the subject Pre-Calculus, a subject offered for the academic track under the strand of Science, Technology, Engineering, and Mathematics.

The researcher made use of purposive and cluster sampling techniques to identify the respondents of the study. Purposive sampling, a non-probability sampling method where respondents are selected based on their specific knowledge or experience with the research topic. Otherwise known as judgmental sampling, this method of sampling involves the researcher in the judgement in selecting the most appropriate individuals, cases or events that are best suited to provide the necessary information to attain the study's goal (Vijayamohan, 2024). Cluster sampling, a probability sampling method in which the population is divided into clusters and then randomly selects a particular cluster to form a sample.

## **Data Gathering Tool**

**Teacher-Made Pre-Calculus Test.** The Pre-calculus test was used to determine the student's academic performance in the topics of conic sections. The test was constructed and mapped to the most essential learning competencies (MELCs) of the Department of Education. A 30-item multiple-choice Pre-calculus test was prepared, accompanied by a table of specifications aligned with the revised Bloom's taxonomy. This ensures the competencies are clearly defined and the distribution of questions across various topics and cognitive levels is identified. Once the test items were developed, subject matter experts reviewed them for content accuracy, clarity, and appropriateness.

**Student's Self-Regulation Skills Survey.** The researcher adapted statements from the Motivated Strategies for Learning Questionnaire (MSLQ) to cover aspects of cognition, metacognition, and motivation. The survey has a 10-item statement per aspect to assess the student's self-regulation skills before and after the exposure to self-regulated learning approach. The MSLQ is a self-report instrument designed by Pintrich et al. (1991) from the National Center for Research to Improve Postsecondary Teaching and Learning. The instrument was used to assess students' motivational focus and use various learning strategies in a course, based on a common cognitive view of motivation, self-regulation, and learning strategies. The researcher selected items to ensure they are relevant to the

specific context and language of the target respondents. The survey employed a four-point Likert-scale. The survey aims to comprehensively understand students' self-regulation and its effects on their learning process. The survey questionnaire clearly defines the construction of self-regulation to ensure content validity. Additionally, the researcher consulted experts to review the survey items for content validity and relevance.

**Students' Perception Survey.** The researcher developed items to capture students' perceptions of the SRSD CONICS-R. This includes statements addressing the usability, effectiveness, and overall experience with the strategy. The survey consisted of 15 items measuring students' level of agreement on the use of the strategy. The survey employed a four-point Likert-scale. The researcher ensured that the items comprehensively cover various aspects of students' perceptions. The survey aims to critically understand the students' perception of the SRSD CONICS-R strategy and its influence on their learning. Additionally, the researcher sought input from instructional design experts to validate the content of the survey.

### **Validation Procedures**

**Content Validity.** The researcher sought assistance of a panel of experts to evaluate the content of the test and surveys. The experts rated each item for its relevance and alignment with the constructions being measured. The researcher then calculated the content validity index to quantify the proportion of experts who agree on the relevance of each item.

**Reliability.** The researcher calculated Cronbach's alpha for the survey scales to assess the internal consistency of the items and the Kuder and Richardson Formula-20 to check the internal consistency of the choices for the pre-calculus test created for the students. The Kuder and Richardson Formula -20 value of 0.719 suggests acceptable reliability. Likewise, the Cronbach's alpha value of 0.777 is considered acceptable, bordering on good reliability. It suggests that the items on the test or questionnaire are reasonably consistent in measuring the same underlying concept.

Additionally, the researcher administered the test and surveys to the same group of students at two different points in time to check the stability of the measures over time.

**Pilot Administration.** The researcher ensured that the pilot sample represents the target population, including respondents with characteristics like those who participated in the main study. Thirty participants were selected for pilot testing to provide meaningful feedback and statistical analysis. The researcher administered the teacher-made test and surveys in a setting like the main study to ensure realistic conditions. Clear instructions were given to participants about the purpose of the pilot test and how to complete the instruments, ensuring the instructions are easy to understand and follow. The researcher monitored the time taken to complete the test and surveys to identify any issues with length or pacing. Responses from the teacher-made test were collected to analyze item difficulty, discrimination, and overall test performance. Additionally, the researcher gathered responses from the survey assessing self-regulation and perceptions of the CONICS-R.

**Final Refinement.** The researcher modified any test or survey items that show poor difficulty or discrimination indices. The survey items that do not contribute to the reliability or validity of the scale were adjusted, and any confusing or ambiguous items were clarified. The instructions and format were revised as necessary to improve clarity and ease of use. If significant changes are made, a second pilot administration was conducted to ensure that the revisions have addressed the identified issues and that the instruments are reliable and valid. Data from the second pilot were used to make final adjustments before administering the instruments in the main study.

### Data Gathering Procedures

The data-gathering procedure is systematically structured into five stages to ensure thorough and reliable data collection and analysis. Below are the five stages of the study.

**Figure 5.** *Five Stages of Study*

| Stage 1                                                                      | Stage 2                    | Stage 3                 | Stage 4                                                                              | Stage 5                                                                                                                       |
|------------------------------------------------------------------------------|----------------------------|-------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Development and Validation of Research Instruments                           | Administration of pre-test | Implementation          | Administration of Post-test/Learning Experiences                                     | Analysis of the Collected Data<br>Interpretation of the Collected Data<br>Drawing of Conclusions<br>Providing Recommendations |
| Pre-Calculus Test<br>Student's Perception Survey<br>Student Learning Journal | Pre-Calculus Test          | Self-Regulated Approach | Pre-Calculus Test<br>Student's Self-Regulation Survey<br>Student's Perception Survey |                                                                                                                               |
| Adaptation<br>Student's Self-Regulation Survey                               |                            |                         |                                                                                      |                                                                                                                               |

**Stage 1: Development & Validation of Research Instruments**—This initial stage involved creating and validating the tools necessary for data collection. Instruments such as the Pre-Calculus Test, the Student's Self-Regulation Survey, and the interview guide questions to ensure that the items are suited for the study's context. The validation process was ensured that these instruments are reliable and effective for assessing the variables of interest.

**Stage 2: Administration of Pretest**—A pretest was administered using the Pre-Calculus Test before implementing the self-regulated learning approach. This pre-test measured the baseline pre-calculus conceptual understanding of the selected students in conic sections, providing a reference point for later comparison.

**Stage 3: Implementation**—This stage implemented self-regulated learning. After each session, the students were engaged with the teaching approach to learn the concept under conic sections.

**Stage 4: Administration of Posttest/Learning Experiences**—Following the implementation phase, a post-test using the pre-calculus test was given to measure any changes in the student's conceptual understanding. The Student's Self-Regulation survey was also administered to gather data on students' self-regulation skills. In addition, the researcher conducted an interview and collected the students' learning journal to gather additional data on the experiences of the students.

**Stage 5: Analysis of the Collected Data**—In the final stage, the collected data from the pre-test, post-test, Student's Self-Regulation skills, and the interview were thoroughly analyzed. This includes interpreting the data to understand how self-regulated learning approach affects the student's conceptual understanding and self-regulation skills in learning pre-calculus and providing conclusions based on the findings. Recommendations were provided, grounded in the data analysis, to inform future teaching practices and research in self-regulated learning approach in mathematics instruction.

### **The SRSD CONICS-R Strategy**

The researcher intends to present a new teaching approach, namely the CONICS-R strategy, which was grounded in the self-regulated strategy development framework with a view of addressing the learning gaps observed in pre-calculus concerning conic sections. Here, the CONICS-R mnemonic was developed based on the six stages of the SRSD model. Below is the overview of the strategy.

**Table 1.** *CONICS-R Strategy Overview*

| <b>Steps of the Strategy</b>  | <b>Description</b>                                                                                                                                                                                                                                                 |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Check on the Shapes</i>    | The shapes need to be firmly understood to increase the level of geometrical visualization of the characteristics and relations inherent to conic sections. It is important that the learners need to understand the definition of each conic section.             |
| <i>Observe the Properties</i> | Knowledge of properties of conic sections helps to gain more profound understanding of geometrical interconnections and increases the stock of knowledge and concepts of symmetrical configurations and spatial positions as well as possibilities to visualize or |

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         | the likelihood of the shape changes depending on its position.                                                                                                                                                                                                                                                                                                                                         |
| <i>Name the Equations</i>               | Equations which represent conic sections are named in such a way that allows for their type to be identified immediately, as well as for their properties and characteristics to be studied. It has a certain standard form that makes it recognizable. By naming and standardizing equations, one can identify the conic section's form and analyze its geometric and algebraic features efficiently. |
| <i>Include visuals</i>                  | Specific visuals can help the learner to gain a more tangible insight along with algebraic explanation. They are also useful in creating the geometrical notion of conic sections that can help students grasp more conceptually the topic.                                                                                                                                                            |
| <i>Connect to Real-life Application</i> | The real-life application of conic sections makes it easier to grasp and apply such concepts in practical use. It may also help to boost participation, interest and desire to learn since students can comprehend the importance and real-life use of the concept being taught.                                                                                                                       |
| <i>Sit-down Practice</i>                | Practice exercise ensures that the concept learned is well understood and solidly established through applying such concepts to solve problems that are likely to be encountered. Moreover, it might be considered a crucial component of effective idea mastery and successful learning.                                                                                                              |
| <i>Reflection</i>                       | Reflection fosters development of self-awareness as to its relevance when it comes to learning or improvement processes. In this way, the student has an insight into their own learning as well as their abilities and discovers any limitations they may possess.                                                                                                                                    |

## Timetable of Activities

Below is the summary of the timetable of activities in the conduct of the study.

**Table 2.** *Summary of the Timetable of Activities in the Conduct of the Study*

| Day    | Duration | Topic          | Activity                                      | Instrument                                                       | Output                                        |
|--------|----------|----------------|-----------------------------------------------|------------------------------------------------------------------|-----------------------------------------------|
| 1      | 1 hour   | -              | Administration of Pre-test                    | Pre-calculus Test                                                | Pre-test Scores                               |
| 2      | 1 hour   | Conic Sections | Face-to-face Class Discussion                 | Lesson Exemplar<br>Activity Sheets<br>Student Learning Journal 1 | Activity Scores<br>Student Learning Journal 1 |
| 3 - 6  | 4 hours  | Circle         | Face-to-face Class Discussion<br>SRL Approach | Lesson Exemplar<br>Activity Sheets<br>Student Learning Journal 2 | Activity Scores<br>Student Learning Journal 2 |
| 7 - 10 | 4 hours  | Parabola       | Face-to-face Class Discussion<br>SRL Approach | Lesson Exemplar<br>Activity Sheets<br>Student Learning Journal 3 | Activity Scores<br>Student Learning Journal 3 |

|         |         |           |                                                          |                                                                                      |                                                            |
|---------|---------|-----------|----------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------|
| 11 - 14 | 4 hours | Ellipses  | Face-to-face<br>Class<br>Discussion<br>SRL Approach      | Lesson<br>Exemplar<br><br>Activity<br>Sheets<br><br>Student<br>Learning<br>Journal 4 | Activity<br>Scores<br><br>Student<br>Learning<br>Journal 4 |
| 15 - 18 | 4 hours | Hyperbola | Face-to-face<br>Class<br>Discussion<br>SRL Approach      | Lesson<br>Exemplar<br><br>Activity<br>Sheets<br><br>Student<br>Learning<br>Journal 5 | Activity<br>Scores<br><br>Student<br>Learning<br>Journal 5 |
| 19      | 1 hour  | -         | Administration<br>of Post-test                           | Pre-calculus<br>Test                                                                 | Post-test<br>Scores                                        |
| 20      | 1 hour  | -         | Assessment of<br>Student's Self-<br>Regulation<br>Skills | Student's Self-<br>Regulation<br>Survey Form                                         | Student's Self-<br>Regulation<br>Skills                    |
| Total   |         |           | 20 hours                                                 |                                                                                      |                                                            |

### Statistical Treatment of Data

Data processing and statistical treatment are essential for examining, scrutinizing, and interpreting the results comprehensively. This part outlines the processes involved in preparing the data for investigation, the statistical methods used to assess the effectiveness of strategy, and the analysis of the results. Below are the statistical treatments that the researcher will use to analyze the gathered data.



## Results and Discussion

The overall purpose of the study was to know how self-regulated approach affects the performance of the students. The self-regulation of the students in terms of cognitive, metacognitive, and motivation and academic performance were assessed before and after exposure to self-regulated approach. Also, the study delved deeper into how effective the CONICS-R strategy is as a self-regulated approach in enhancing the academic performance of the Grade 11 students in conic sections.

In line with the statement of the problem and the research paradigm of this study, the research hypothesis that there no significant difference in the self-regulation skills and academic performance of students before and after exposure to the CONICS-R strategy was pursued.

The study tried to gauge the self-regulation and academic performance of students. The students involved in the study were the 30 Grade 11 senior high students coming from one of the public schools in San Jose Del Monte. The students were selected using cluster and purposive sampling.

Different indicators like the self-regulation of students in terms of cognitive, metacognitive, and motivation aspects and the pre-test and post-test scores of the students were assessed. In addition, the study investigated the feedback of the students through the perception in the use of the self-regulated approach – the SRSD CONICS-R strategy survey questionnaire. The self-regulation was measured in terms of cognitive aspect, metacognitive aspect, and motivation aspect using a 4 – point Likert scale. The academic performance of the students was assessed through pre-test and post-test using a teacher-made test.

A validated survey questionnaire and pre-calculus test served as the main instruments of the study. A follow-up interview with 10 students was conducted to gather additional information on students' experiences about the self-regulated approach.

The study made use of mixed method research design which is used to further explain a set of quantitative data with additional qualitative information. The quantitative part was a quasi-experimental design. The qualitative part was the feedback coming from the respondents through interview and will analyze using thematic analysis. This provided a comprehensive analysis of the research problem.

Descriptive statistics using frequency distribution, normalized gain scores, percentages, means, and standard deviations were used. Paired Sample T-test was used to check if there is a significant difference between the self-regulation skills and academic performance of students before and after exposure to the CONICS-R strategy. The data were subjected to analysis and synthesis to come up with specific and integrated results.

Based on the results of the statistical analysis of the data, the findings are summarized as follows:

### **Students' Self-regulation before exposure to Self-regulated approach.**

The results indicate that students demonstrate moderate engagement in self-regulated learning strategies, with notable reliance on surface-level approaches, persistence when facing difficulties, and mixed motivational orientations.

Students showed a preference for memorization strategies (WM = 3.27, “Very true of me”) rather than deeper processing strategies such as summarization or elaboration (WM = 2.57). This reflects a tendency toward surface-level learning, which, while useful for short-term recall, is less effective for long-term conceptual understanding. Such reliance on rote memorization is consistent with findings that students often default to lower-order strategies in mathematics when higher-order thinking demands are challenging (Zhang & Li, 2023).

Students' strength in persistence during comprehension challenges (WM = 3.37), suggesting resilience and effort when faced with difficulties. However, their limited use of proactive strategies such as previewing (WM = 2.70) and self-questioning (WM = 2.70) reveal underdeveloped planning and generative learning practices. This imbalance suggests that while students exhibit determination, they may lack the strategic foresight and metacognitive tools necessary for more efficient and autonomous learning (McNamara et al., 2024).

Motivationally, students are strongly driven by both extrinsic goals (grades) and intrinsic goals (valuing subject understanding), with both scoring 3.70 (“Very true of me”). However, they express lower self-efficacy in mastering complex material (WM = 2.77), which may limit their persistence and willingness to engage with higher-order strategies. Recent studies affirm that while achievement goals can sustain effort, low self-efficacy undermines the adoption of advanced self-regulation strategies and deep learning (Luo et al., 2024; Guo et al., 2022).

These findings suggest that students are motivated and persistent, but their study behaviors remain skewed toward memorization and reactive coping rather than proactive, reflective, and higher-order self-regulation. This points to the need for interventions—such as SRSD-CONICS-R—that explicitly teach metacognitive and elaborative strategies, while also fostering students' self-efficacy to engage more confidently in complex problem-solving.

***After Exposure to Self-Regulated Approach.*** The results suggest that students exhibit a moderate to high level of self-regulated learning behaviors, but their approaches are skewed toward surface-level memorization, reactive monitoring, and extrinsically driven motivation, with limited engagement in proactive strategies and self-efficacy.

Students relied most heavily on memorization strategies (WM = 3.50, “Very true of me”), while showing less preference for organizational strategies such as outlining materials (WM = 2.70). This reflects a dependence on surface-level learning, which supports recall but does not necessarily foster higher-order understanding or transfer of knowledge. Similar findings have been reported in recent research, where students often prefer memorization in math and science

contexts due to the perceived difficulty of deeper processing strategies (Zhang & Li, 2023).

Students' strength in reactive monitoring behaviors, such as rereading when encountering confusion (WM = 3.63), which demonstrates persistence and resilience. However, their weaker engagement in proactive generative strategies, like self-questioning (WM = 2.83), points to underdeveloped metacognitive skills. This indicates that while students respond adaptively when problems arise, they lack foresight and strategic planning associated with higher levels of self-regulated learning (McNamara et al., 2024).

In terms of motivation, students reported being highly influenced by extrinsic goals, particularly the desire for good grades (WM = 3.63), alongside valuing subject matter comprehension. Yet, their relatively low self-efficacy in mastering complex material (WM = 2.87) reveals a motivational imbalance. Although achievement orientation sustains effort, limited self-belief in handling difficult tasks can restrict persistence with challenging concepts (Guo et al., 2022). This aligns with findings that high motivation without sufficient self-efficacy often leads to reliance on low-level strategies such as memorization, rather than active construction of knowledge (Luo et al., 2024).

The findings indicate that students are motivated and persistent learners, but their study habits remain oriented toward short-term recall and reactive coping strategies rather than proactive, metacognitively driven approaches. Strengthening self-efficacy, organizational strategies, and generative practices such as self-questioning and summarization may help shift students from surface-level to deeper, more autonomous learning.

## **2. Extent of Implementation of the Self-Regulated Approach - CONICS-R Strategy**

***Enhancing the Students' Self-Regulation.*** The findings reveal that the self-regulated approach positively influenced students' self-regulation skills across cognitive, metacognitive, and motivational domains. Prior to the intervention, students demonstrated only moderate engagement in self-regulated learning, with weighted means ranging from 2.83 to 3.14, interpreted as "True of me." After exposure, all aspects showed an upward shift: cognitive strategies (WM = 3.07), metacognitive strategies (WM = 3.17), and motivational strategies (WM = 3.27), with motivation reaching the level of "Very true of me." These results suggest that the intervention fostered greater student engagement, reflective thinking, and persistence in learning, particularly by strengthening motivational beliefs that sustain academic effort.

The statistical results further confirm these gains. The mean self-regulation score increased from 2.97 to 3.17, with a significant t-value ( $t = 2.41, p = 0.022$ ), indicating that improvements were not due to chance. The effect size (Cohen's  $d = 0.441$ ) suggests a small-to-moderate practical impact, highlighting that while overall progress was achieved, individual variability in responsiveness remains. This reflects the reality that students adopt and internalize self-regulated learning

(SRL) strategies at different rates depending on prior habits, confidence, and context.

These results are consistent with recent studies showing that explicit instruction in SRL strategies leads to measurable gains in learning behaviors and outcomes. Luo et al. (2024) found that SRL interventions significantly enhance students' use of cognitive and metacognitive strategies, while also strengthening motivation and persistence. Similarly, McNamara et al. (2024) emphasized that structured SRL approaches provide students with clear scaffolds for planning, monitoring, and reflecting, thereby improving both strategy use and self-efficacy. Moreover, Zhang and Li (2023) noted that motivation often shows the greatest gains in SRL programs, as students begin to perceive themselves as capable, active learners rather than passive recipients of instruction.

The results suggest that the self-regulated approach is effective in enhancing students' self-management of learning, particularly in motivation and engagement, while also strengthening cognitive and metacognitive regulation. The moderate effect size indicates promising outcomes but also signals the need for sustained implementation and reinforcement to ensure deeper and more consistent adoption of SRL strategies across learners.

**Enhancing the Students' Academic Performance.** The results provide strong evidence that the self-regulated learning (SRL) approach substantially enhanced students' learning outcomes, though with variability in the degree of improvement. The distribution of normalized gain scores (Table 12) shows that a majority of students (60%) achieved medium gains, while 6.67% reached high gains, indicating that the intervention was particularly effective for some learners. However, one-third (33.33%) showed low gains, suggesting that while the SRL approach benefits most students, individual differences such as prior knowledge, motivation, and learning strategies influence its effectiveness. This reflects findings by Dignath and Veenman (2021), who noted that SRL interventions produce varied outcomes depending on students' initial self-regulatory skills and motivational profiles.

The T-test results (Table 13) further confirm the significant impact of SRL on academic performance. Students' mean scores increased from 8.27 (pre-test) to 17.30 (post-test), with a highly significant t-value ( $t = 10.2, p < 0.001$ ). The large effect size (Cohen's  $d = 1.86$ ) underscores the substantial and practically meaningful improvement in performance attributable to the intervention. These findings align with the work of Panadero (2022), who emphasized that structured SRL instruction not only strengthens self-regulation but also translates into measurable gains in academic achievement. Similarly, Luo et al. (2024) demonstrated through a meta-analysis that SRL interventions consistently yield medium to large effects on student learning outcomes across subjects, particularly when cognitive, metacognitive, and motivational strategies are explicitly integrated.

The results suggest that the SRL approach is highly effective in improving both self-regulation and academic achievement, though not all students benefit equally.

The presence of low-gain learners indicates the need for differentiated scaffolding and sustained support to ensure that students with weaker prior skills also achieve meaningful improvements. This is consistent with recent calls in SRL research (Dent & Koenka, 2021; McNamara et al., 2024) to adapt SRL instruction to individual learner profiles for maximum effectiveness.

**Feedback of Students in Self-Regulated Approach Perception Survey.**

The results suggest that students hold a positive overall perception of the SRSD-CONICS-R strategy in learning pre-calculus, particularly in terms of enhancing engagement and interest. The highest-rated item, *“I find pre-calculus to be more interesting and engaging in using SRSD CONICS-R strategy”* (WM = 3.47, *Strongly Agree*), highlights the effectiveness of the strategy in transforming mathematics learning into a more meaningful and motivating experience. This finding is consistent with Xu et al. (2021), who noted that self-regulated approaches foster active engagement and improve students’ attitudes toward challenging subjects. Similarly, Panadero (2022) emphasized that SRSD’s structured framework enhances motivation by providing students with clear steps, scaffolding, and reflection opportunities, which increase their interest and persistence.

Meanwhile, the lowest-rated item, *“I have improved my self-regulation abilities using SRSD CONICS-R, which go beyond Pre-Calculus”* (WM = 3.10, *Agree*), indicates that although students acknowledged gains in self-regulation, they perceived these improvements as context-specific, with limited transfer beyond pre-calculus. This reflects observations by Dent and Koenka (2021), who found that while SRL interventions often enhance strategy use within a given subject, the generalization of these skills across contexts requires sustained practice and explicit cross-disciplinary integration.

The average weighted mean of 3.32 (*Strongly Agree*) affirms that students highly valued the SRSD-CONICS-R strategy as an instructional approach. The findings align with Luo et al. (2024), who reported that interventions integrating cognitive, metacognitive, and motivational supports tend to receive strong learner approval and lead to improved academic outcomes. Thus, the SRSD-CONICS-R not only enhanced pre-calculus learning but also fostered a more engaging, student-centered environment that students perceived positively, even if the transfer of skills beyond the immediate subject area was less pronounced.

**Interview.** The analysis of Tables 15 to 18 reveals that the SRSD-CONICS-R strategy significantly influenced students’ learning experiences in pre-calculus, producing both cognitive and affective benefits while also surfacing challenges that inform future refinements.

On the cognitive level, students reported that the step-by-step, scaffolded structure of the strategy reduced cognitive overload and provided clarity in approaching conic sections. The emphasis on sequencing and visual aids (e.g., graphs and diagrams) enabled learners to connect symbolic equations with graphical representations, thereby deepening their conceptual understanding. These outcomes reflect the findings of Wong et al. (2021), who emphasize that structured,

scaffolded instruction helps students manage complex mathematical concepts, and of Luo et al. (2024), who note that visual and multimodal supports improve comprehension in abstract domains.

On the metacognitive level, students became more aware of their learning processes, actively setting goals, monitoring progress, and reflecting on their strategies. They described improvements in their ability to plan, evaluate, and regulate their own problem-solving approaches. This finding is consistent with Panadero (2022), who highlights that SRSD explicitly cultivates metacognitive awareness, enabling learners to internalize reflective and strategic practices over time.

On the motivational and emotional level, students expressed greater confidence, motivation, and resilience in tackling Pre-Calculus tasks. While some initially reported frustration and difficulty applying the full SRSD sequence under time pressure, the majority described increased persistence, reduced anxiety, and a more positive learning mindset. This aligns with Dent & Koenka (2021), who argue that self-regulated learning interventions not only improve academic outcomes but also enhance motivational beliefs and emotional regulation. Furthermore, Yu et al. (2022) found that learners who adopt SRL strategies demonstrate stronger resilience and are more likely to interpret mistakes as growth opportunities, a pattern echoed in the students' reflections.

Finally, the strategy also fostered greater independence and active engagement. Students moved from passive reliance on teacher guidance to more autonomous, self-directed learning behaviors, supported by reflection and self-monitoring. This transition mirrors findings from Broadbent et al. (2023), who emphasize that SRL-based approaches promote learner autonomy and active participation, essential for long-term academic success.

Hence, the themes across Tables 15 to 18 suggest that SRSD-CONICS-R provided a comprehensive framework that not only supported the mastery of conic sections but also cultivated higher-order skills in self-regulation, motivation, and resilience. However, the challenges noted—such as difficulty transferring strategies to time-constrained contexts or across subjects—point to the need for continued scaffolding and opportunities for cross-contextual application.

## **Conclusions**

The results drawn from quantitative and qualitative analyses provide compelling evidence that the strategy significantly improved students' academic performance, learning strategies, and perceptions of pre-calculus.

The results of the normalized gain scores revealed that a majority of students achieved medium gains, while a smaller portion attained high gains. This indicates that the SRSD-CONICS-R strategy effectively facilitated learning for most learners, though variations in individual gains highlight the importance of differentiated scaffolding. These findings affirm that self-regulated learning (SRL) strategies promote measurable improvement in knowledge acquisition but also suggest that

additional support is necessary for students with lower initial gains (Biwer et al., 2022; Simón-Grábalos et al., 2025).

Statistical analyses further validated the effectiveness of the intervention. A significant difference was observed between pre-test and post-test scores, with a large effect size (Cohen's  $d = 1.86$ ), confirming that SRSD-CONICS-R substantially enhanced students' academic performance. This result aligns with recent research asserting that structured SRL frameworks provide substantial cognitive benefits, especially in mathematics education where complex concepts demand higher-order thinking (Luo et al., 2024).

Students' perceptions demonstrated high approval of SRSD-CONICS-R, with the strategy making pre-calculus more engaging and interesting. Although students recognized improvements in self-regulation beyond mathematics, these were less pronounced. The overall strong perception highlights that student engagement and interest are fostered when instruction is structured, interactive, and strategy based. This echoes contemporary studies underscoring that students' affective responses—such as interest, motivation, and confidence—are critical mediators of effective SRL interventions (Zheng et al., 2022; Biwer et al., 2022).

The thematic analyses revealed nuanced insights into students' strategy use, motivational orientations, and self-efficacy. While many students initially relied on memorization and reactive strategies, exposure to SRSD-CONICS-R guided them toward deeper learning practices such as reflective thinking, self-questioning, and structured organization. Moreover, while students displayed resilience and goal-driven behaviors, moderate self-efficacy sometimes constrained the full application of their motivation. These results suggest that SRL interventions should not only train cognitive and metacognitive strategies but also explicitly target the strengthening of self-belief through scaffolding, feedback, and mastery experiences (Zimmerman & Moylan, 2023; Simón-Grábalos et al., 2025).

Integrating across findings, this study demonstrates that SRSD-CONICS-R is holistically effective. It enhances cognitive performance, fosters metacognitive development, sustains motivation, and promotes positive perceptions toward mathematics. The strategy provides students with structured problem-solving skills, reflective practices, and emotional resilience—critical attributes of lifelong learners. However, results also suggest the necessity for ongoing scaffolding in areas of high cognitive complexity, explicit metacognitive training, and the provision of opportunities for strategy transfer beyond mathematics.

In conclusion, the SRSD-CONICS-R strategy represents a powerful pedagogical approach that addresses the interrelated dimensions of learning—cognition, metacognition, motivation, and affect. Its integration into pre-calculus instruction not only leads to improved academic outcomes but also equips students with transferable self-regulation skills essential for success in higher education and professional contexts. By embedding SRL strategies such as goal-setting, self-monitoring, and reflective evaluation into instruction, educators can cultivate independent, confident, and growth-oriented learners prepared to thrive in

complex academic environments (Biwer et al., 2022; Luo et al., 2024; Simón-Grábalos et al., 2025).

## **Recommendations**

Based on the findings and conclusions drawn from the implementation of the SRSD CONICS-R strategy as a self-regulated approach in pre-calculus instruction, the following recommendations are proposed:

### **1. For Mathematics Teachers:**

It is strongly recommended that mathematics educators adopt the SRSD CONICS-R strategy as an integral part of their instructional approach, particularly in teaching complex topics such as conic sections. The strategy has been shown to enhance students' understanding, self-regulation, and academic performance. Teachers should receive training on how to effectively integrate the SRSD framework, emphasizing its core components such as goal setting, self-instruction, self-monitoring, and self-reinforcement. Embedding these elements into daily lessons can foster a more reflective, motivated, and autonomous learning environment.

### **2. For Curriculum Developers and School Administrators:**

Curriculum developers and school leaders should consider institutionalizing self-regulated learning strategies like SRSD CONICS-R within the senior high school mathematics curriculum. Doing so aligns with 21st-century learning competencies that emphasize metacognitive awareness, motivation, and problem-solving. Administrators are encouraged to provide continuous professional development and instructional support to ensure that educators are well-equipped to implement this approach effectively. Moreover, integrating SRSD across various subjects may yield similar benefits in student engagement and achievement.

### **3. For Students:**

Students are encouraged to actively engage with and apply the SRSD CONICS-R strategy in their study routines. The strategy not only helps improve academic outcomes but also cultivates essential life-long learning skills such as planning, self-monitoring, and critical thinking. Students should be guided on how to independently use the strategy in solving challenging mathematical problems and to reflect regularly on their learning progress.

### **4. For Future Researchers:**

Further research is recommended to explore the long-term effects of the SRSD CONICS-R strategy on students' learning behaviors and achievement in other strands and subject areas. Replication studies with larger and more diverse populations can strengthen the generalizability of findings. Qualitative investigations such as focus group discussions or classroom observations may also provide deeper insights into how different learners respond to each component of the strategy. Additionally, examining the integration of digital tools with SRSD



strategies could further enhance engagement and outcomes in remote or hybrid learning settings.

### **5. For Educational Policy Makers:**

Policymakers are urged to recognize the value of metacognitive and self-regulated learning approaches in mathematics education. Policies that support innovation in instructional practices, such as SRSD CONICS-R, should be encouraged and funded. This includes support for teacher training programs, classroom materials, and research initiatives aimed at fostering independent and motivated learners equipped to succeed in higher education and beyond.

In general, the implementation of the SRSD CONICS-R strategy is a highly promising pedagogical innovation that warrants continued support, expansion, and refinement. Its impact on students' self-regulation and academic performance makes it a valuable model for advancing the quality of mathematics instruction and holistic student development.

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# BEYOND THE MOUNTAINS: THE STRUGGLES AND COPING STRATEGIES OF TEACHERS IN BAGONG BARRIO INTEGRATED SCHOOL

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## Abstract

This qualitative study aimed to explore the lived experiences of public-school teachers assigned in a geographically remote and disadvantaged area, specifically at Bagong Barrio Integrated School in Barangay Bagong Barrio, Makato, Aklan. Guided by the Social-Ecological Model of Teacher Resilience, the research focused on three objectives: (1) to identify the struggles experienced by teachers in the area; (2) to examine the coping strategies that employed; and (3) to determine the support and interventions necessary to enhance the teaching and learning environment. The study used a transcendental phenomenology design and gathered data through semi-structured interviews with five purposively selected participants - permanent DepEd teachers who had served for at least three years at the said school and resided outside the barangay. Thematic analysis of the interview transcripts revealed that teachers regularly faced physical and emotional exhaustion due to early wake-up times, long and risky commutes on unpaved, slippery roads, especially during the rainy season. They also struggled with student-related issues such as hunger, poor attendance, lack of parental support, academic gaps, child labor, and limited access to technology. Despite these, the teachers demonstrated resilience by practicing adaptive pedagogies, offering one-on-one remediation, maintaining disciplined daily routines, and drawing emotional support from family, co-teachers, school heads, and local stakeholders. The study also uncovered critical areas of need including road development to ensure safe and timely travel; provision of ICT equipment, laptops, and learning materials; construction of additional classrooms; consistent curriculum implementation; and livelihood programs for parents to reduce child labor and support student attendance. Teachers also recognized the motivational impact of students' positive behavior, which affirms the relational aspect of resilience. This study concludes that while teachers in remote schools like Bagong Barrio Integrated School face significant and multifaceted challenges, they remain deeply committed to their work. Their experiences call for sustained and context-responsive interventions from the government, education sector, and community stakeholders. The findings of this research serve as valuable input for future policymaking, school improvement planning, and further studies focused on teacher resilience, rural education, and equity in educational access and delivery.

**Keywords:** Geographically Isolated Schools; Teachers' Lived Experiences; Teacher Coping Strategies; Rural Education; Transcendental Phenomenology

## **Introduction**

The challenge of providing equal access to quality education remains a universal problem; however, even in today's world, this problem still poses certain difficulties due to the geographical remoteness and disadvantages of some areas where teachers face numerous obstacles working under unfavorable conditions. The issues of transportation, poor infrastructure, scarcity of teaching resources, and lack of professional networks become obstacles to efficient teaching and teachers' well-being (Darling-Hammond et al., 2020; UNESCO, 2022). However, despite all the existing difficulties, teachers keep demonstrating their resilience and dedication while providing quality education for students living in disadvantaged areas.

In the Philippine context, there is evidence showing that teachers working at geographically isolated schools have constant problems connected with poor accessibility, poor educational resources, insufficient school facilities, and professional overload (Baynosa et al., 2024; Equipado & Gilbas, 2021; Ucag et al., 2024). In order to respond to these problems, teachers use diverse coping strategies and resort to personal resilience, teamwork, and other forms of support in order to teach efficiently regardless of the conditions they face (Cahapay & Bangoc II, 2022; Taga, 2024).

While previous studies examined the struggles and resiliency of teachers in geographically isolated schools, not much information can be found regarding the actual experiences of teachers posted at Bagong Barrio Integrated School in Makato, Aklan, which is one of the geographically isolated schools characterized by certain ecological and contextual conditions. An understanding of their experiences is important in devising context-appropriate interventions and interventions to address the issues faced by teachers in such schools.

Guided by the Social-Ecological Model of Teacher Resilience developed by Gu (2018) and using transcendental phenomenology methodology, this research aimed to explore the lived experiences of teachers in Bagong Barrio Integrated School in terms of their struggles, coping strategies, and recommended interventions. This study has the potential to contribute to the increasing body of literature on rural education and provide evidence that can help formulate policies and initiatives to promote teacher resiliency in geographically isolated schools.

## **Method**

### **Research Design**

This study used a qualitative research design, with transcendental phenomenology as the main method for collecting and analyzing data. According to deMarrais, Roulston, and Copple (2024), qualitative research focused on understanding phenomena from participants' perspectives, emphasizing the meanings they



ascribed to their experiences. This research relied on Clark Moustakas' (1994) transcendental phenomenology, which is a type of qualitative research, to gain insight into the lived experiences of teachers from Bagong Barrio Integrated School. Transcendental phenomenology is concerned with participants' lived experiences regarding a specific phenomenon, and is primarily concerned with participants' lived experiences. The researcher clears his own biases and assumptions in the process of epoche or bracketing. Participants' experiences are explored thoroughly, which allows for identification of significant statements that are organized into groups of statements that share meaning, and that express the essence of their experience. This research is concerned primarily with shared experiences of geographically isolated teachers from resource-poor schools, so the methodology will help explain the typical frustrations that teachers from these schools' experience, and the coping mechanisms employed by these teachers to help them withstand the hardships they experience. (Moustakas, 1994)

The study included semi-structured interviews with the participants. Semi-structured interviews were commonly used in qualitative research because they allowed researchers to ask guided questions while still giving participants the freedom to share more details (Patton, 2021). This method helped gather in-depth stories about the teachers' experiences and how they coped with challenges. The data collected was analyzed using thematic analysis, a method widely used in qualitative studies. It involved identifying, analyzing, and reporting patterns or themes found in the data (Braun & Clarke, 2021). This process helped highlight the common experiences, challenges, and strengths of the teachers.

This research design helped gain a deeper understanding of the challenges faced by the teachers at Bagong Barrio Integrated School and the ways they managed and overcame these challenges. By focusing on their personal stories, this research aimed to add to the ongoing discussion on teacher resilience in rural areas of the Philippines.

### **Participants and Sampling**

The participants were teachers from Bagong Barrio Integrated School (BBIS) who met the following criteria:

1. The participants reside outside Bagong Barrio, Makato, Aklan
2. The participants had at least three years of teaching experience in Bagong Barrio Integrated School
3. The participants were permanent/regular DepEd teachers

A purposive sampling method was used to select participants for semi-structured interviews. Teachers who met the criteria were chosen for their ability to provide meaningful insights into the challenges, coping strategies, and motivations related to teaching in a remote, resource-limited setting.

A total of five participants out of nineteen teachers were selected using purposive sampling. This approach ensured that those chosen could provide rich and relevant

insights into the struggles, coping mechanisms, and motivations associated with teaching in geographically isolated and resource-limited school settings. For confidentiality and ethical considerations, pseudonyms were used to represent each participant.

Informant 1 is a 31-year-old teacher from Tugas, Makato, Aklan. She has a slim and graceful figure. She stands 5 feet 2 inches tall and weighs 39 kilograms. With her fair complexion and soft features, she gives off a calm and gentle presence. Her straight, shoulder-length hair is usually worn down, and she is often dressed in neat and modest attire. She carries herself with poise and is known for her warm smile, which reflects her kind and approachable personality. For five years, she has served as a Teacher I at Bagong Barrio Integrated School, where she continues to dedicate herself to her students and the school community.

Informant 2 is a 29-year-old teacher who has been serving at Bagong Barrio Integrated School for six years as a Teacher I. She stands 5 feet 2 inches tall and weighs 56 kilograms. With her clear, fair skin and round face, she carries a bright and welcoming smile. Her long, straight black hair adds to her neat and professional appearance. She wears her school uniform with pride and carries herself with confidence and grace. Originally from Bulwang, Numancia, Aklan, Ma'am Jane is known in the school community for her strong presence and approachable personality.

Informant 3 is a 30-year-old teacher from Aglucay, Makato, Aklan. She has been teaching at Bagong Barrio Integrated School for five years as a Teacher I. She stands 5 feet tall and weighs 60 kilograms. She has fair skin, expressive eyes, and a bright smile that gives her a friendly and cheerful appearance. Her straight, light brown hair is often worn down, adding to her approachable look. Dressed neatly in her uniform, she presents herself with confidence and warmth, making her a pleasant and reliable figure in the school community.

Informant 4 is a 33-year-old Teacher I from Pudiot, Tangalan, Aklan, who has been teaching at Bagong Barrio Integrated School for five years. She is 4 feet 9 inches tall and weighs 28 kilograms, with long straight black hair, eyeglasses, and a bright, friendly smile. Despite her small frame, she carries a confident and warm presence in the classroom. With five years of teaching experience, she has shown strong dedication to her role, patiently guiding her students and actively supporting the goals of her school and community.

Informant 5 is a 33-year-old Teacher I who has been serving at Bagong Barrio Integrated School for seven years. She lives in Carugdog, Lezo, Aklan. She stands 5 feet tall and weighs 68 kilograms. She has straight, shoulder-length brown hair, a round face, fair skin, and a bright, friendly smile. Her build is fuller, and she carries herself with confidence and ease. She has approachable and warm traits that make her well-loved by both students and colleagues. Her years of experience reflect her dedication to teaching and her commitment to helping learners grow in a supportive environment.

These five educators generously share their experiences and perspectives, which serves as the foundation of this research on the realities of teaching in a remote school setting.

### **Data Gathering Tool**

The main tool for this study was a semi-structured interview guide designed to gather the real-life experiences of teachers at Bagong Barrio Integrated School. Semi-structured interviews were commonly used in qualitative research because they allowed flexible exploration of participants' experiences while still covering key topics (Patton, 2021). The questions were based on the research questions and focused on the challenges teachers faced in remote areas, their coping strategies, and the sources of their resilience. The questions were open-ended to encourage participants to share their stories freely and in their own words. This approach helped capture the depth and meaning of their experiences (Creswell & Poth, 2020).

To ensure reliability and validity, the interview guide was content validated by experts to assess the clarity, relevance, and alignment of the questions with the study's objectives (Lodico, Spaulding, & Voegtle, 2019). A pilot test with a small group of teachers identified unclear questions, and feedback was used to refine the instrument before the main data collection (Yin, 2018). The finalized interview guide provided a flexible structure to gather meaningful data reflecting participants' experiences and perspectives.

### **Data Gathering Procedures**

The data gathering process began upon obtaining approval from the school head of Bagong Barrio Integrated School. Once approval was granted, an invitation letter and informed consent form were personally distributed to the participants, and participation was voluntary, with the right to withdraw at any time without consequence. Once consent was obtained, semi-structured interviews were scheduled based on participant availability, conducted face-to-face in a quiet setting, lasted 45–60 minutes, and were audio-recorded with permission. All recordings were transcribed verbatim, reviewed for accuracy, and sent to participants for member-checking to ensure authenticity. Confidentiality and anonymity were maintained through pseudonyms, and identifying information was removed. Data was securely stored and accessible only to the researcher.

### **Data Analysis Procedure**

The data collected from the semi-structured interviews was analyzed using thematic analysis, which helped identify, organize, and interpret patterns of meaning across data sets (Braun & Clarke, 2021). First, the interview recordings were transcribed, and the transcripts were reviewed multiple times to become familiar with the content (Nowell et al., 2017). Next, key phrases, ideas, and recurring topics were identified to create initial codes. These codes were then

grouped into broader themes that captured the teachers' experiences in coping with extreme challenges, their perseverance and meaningful triumph, and the support and interventions needed for improvement. The themes were carefully reviewed to ensure they accurately reflected the participants' stories. Participants were asked to review the themes to confirm their authenticity and consistency with their experiences (Birt et al., 2016). To ensure the trustworthiness of the analysis, the researcher applied Lincoln and Guba's (1985, as cited in Creswell & Poth, 2020) criteria: credibility, transferability, dependability, and confirmability. Reflexive journaling and peer debriefing were also conducted to minimize bias and enhance transparency. Finally, the findings were interpreted through the Social-Ecological Model of Teacher Resilience, which highlighted how individual, relational, and environmental factors shaped teacher resilience in remote areas.

## **Results and Discussion**

### **Overview of the Emergent Themes**

In line with the transcendental phenomenological theory, the interview transcripts were examined for identifying statements of significance, giving meaning to these statements, and grouping the meanings into themes representing the common lived experiences of the informants. As a result, there were three main themes together with their respective sub-themes which represent the challenges faced by the informants, how they coped with them, and their suggestions on how to improve teaching and learning processes in Bagong Barrio Integrated School. All the themes in totality represent the core of the lived experiences of the informants.

#### **Theme 1. Struggles experienced by the teachers of Bagong Barrio Integrated School**

This main theme provides a look into the problems faced by the teachers in Bagong Barrio Integrated School. It focuses on the shared problems these teachers face, helping one understand the nature of problems that could affect them when performing their tasks inside the school premises.

##### **Theme 1.1: Daily Commute & Physical Strain**

The informants consistently described their daily commute to Bagong Barrio Integrated School as physically demanding. Their narratives reveal the challenges of traveling through difficult terrain as part of their daily teaching experiences.

As shared by Informant 5:

*“Ro challenges siguro nga naeexperience namon hay, sambilog hay pagbugtaw it agahon because makara hay gabiometrics kami, kinahang-eon namon mag bugtaw it timprano pa, gahikot para makaagto iya sa eskwelahan on time, kasi maeayo amon nga ginaulian nga baeay.”*

Translation: One of the challenges we experience is waking up early in the morning because we must do biometrics. We need to get up very early and prepare so we can arrive at school on time, since our homes are quite far.

As described by Informant 4:

*"Ahh of course, do akon abi nga baeay hay igto pa tang gauli sa Tangalan, so para kakon hay medyo maeayo baea, ro challenges kakon hay kailangan ko gid magbugtaw it timprano, mag-eaha, magprepare, ag of course para nakaabot man iya sa eskuylahan nga indi man ako ma late."*

Translation: Ahh, of course. Since I live in Tangalan, the school is quite far from my home. One of the main challenges for me is that I really need to wake up very early, take a bath, prepare myself, and of course, make sure I arrive at school on time and not be late.

As revealed by Informant 1:

*"Ro Bagong Barrio Integrated School abi Ma'am hay 10 kilometers imaw away from the Barangay Poblacion, Makato. So ro number one gid-a nakon nga naeexperience nga challenges hay ruyon nga ro kaeayo gid-a ag kalisod ro daean kapin pa kung mauean hay madanlog gid-a."*

Translation: Bagong Barrio Integrated School is about 10 kilometers away from Barangay Poblacion, Makato. So, the number one challenge I really experience is the distance and how difficult the road is - especially when it rains because it gets very slippery.

The teachers consistently highlighted the challenge of waking up early and preparing for long, difficult commutes to school. As Informant 5 and Informant 4 shared, living far from school requires them to wake as early as dawn to meet biometric check-in requirements. Informant 1 emphasized the physical strain of navigating slippery, muddy roads - especially during rainy days. These daily experiences reflect not just logistical hardship but accumulated fatigue before teaching even begins. This supports Mopuyang (2024) and Ruppar et al. (2024), who assert that remote school terrain contributes to teacher stress and early burnout, ultimately affecting classroom performance and well-being.

As the informants reflected on the physical demands of their daily commute, it became evident that these experiences were inseparable from the unpredictable geographic conditions that shaped and intensified their everyday journeys.

### **Theme 1.2: Geographic Unpredictability & Risk**

The lived experiences of the informants demonstrated that geographic unpredictability was a persistent challenge, as changing weather conditions and hazardous terrain often increased the risks associated with traveling to the school.

As conveyed by Informant 4:

*“Duyon Ma'am, kung mauean hay malisod do pag byahe kasi gapanimbang ka't mayad. Gasakit gid-a ing daywa ka paa mag panimbang kasi madanlog do daean. Naranasan man it ibang maestra nga madanlog. Hay ako hay naranasan ko man nga mag-eumpat sa motor basta eang nga indi ako ma-igpit, ag naranasan man nakon nga naigpit kami't motor kasi ako sa tunga.”*

Translation: Yes, Ma'am. When it rains, traveling becomes difficult because you really have to balance yourself well. Your legs hurt from trying to stay balanced, especially since the road gets slippery. Some teachers have even experienced slipping. In my case, I've experienced jumping off a motorcycle just to avoid getting pinned, and there was also a time when I did get pinned because I was seated in the middle.

As stated by Informant 2:

*“So kung mauean do tyempo hay kalisod-lisod gid-a dahil bisan ako ag ang mga kaibahan man nga teachers, pila eon kalugar karon hay kumbaga ha-ako eot-a namon dahil hapirmahan eota namon - dikaron kami Ma'am naga slide, so kung mag slide man do motor syempre may kurit gida dayon don Ma'am sa daean. So medyo gina joke lang ngani dayon namon Ma'am nga may perma eota kami karon sa daean, may inakoan eota. Rato Ma'am gid-a ro pinakachallenge kamon do daean nga madanlog.”*

Translation: So, when it rained, it became really difficult. Even I, along with my co-teachers had several experiences where we would say we had already “signed” or “marked” the road - because we slipped so often! So, when the motorcycle slid, of course, we would get scratches or minor injuries. We used to joke, Ma'am, that we had already left our signatures on that road. That slippery road was truly one of our biggest challenges.

Teachers shared real and recurring risks from commuting on slippery, muddy roads during rainy weather. Informant 4 recalled painful balancing on a motorcycle, even jumping off to avoid injury. Informant 2 described frequent slips and joked about “leaving their signatures” on the road - evidence of how normalized these hazards have become. These daily threats reflect not just physical danger but a sustained emotional toll. According to Gu's Social – Ecological Model, such harsh environments directly affect teachers' well-being. Mopuyang (2024) affirms that unpredictable terrain in remote areas reduces teacher resilience, creating chronic stress that undermines both safety and teaching morale.

Beyond the risks encountered by the informants during their daily commute, the challenges associated with the school's remote location also affected the students, influencing their attendance, well-being, and academic engagement.

### **Theme 1.3: Student Hunger, Attendance & Academic Challenges**

The informants consistently described how student hunger, irregular attendance, and academic difficulties affected the teaching and learning process. Their narratives reveal the interconnected challenges that hindered students' participation and academic performance.

As disclosed by Informant 5:

*“Do amon eang siguro nga challenges nga naeencounter is do mga unga iya hay short span, uwa it attention due to nagutom, uwa sanda it makaon. Kung imong ituro makara hay pagkaaga hay uwa eota rayon sanda, wa sanda it retention nga ginatawag. ...Sambilog pagid is uwa sanda it follow-up sa andang parents.”*

Translation: One of the main struggles is their short attention span and lack of focus, often because they come to school hungry or haven't eaten anything. So even if you teach them in the morning, they're not mentally present and have poor retention. Another issue is the lack of follow-up from their parents.

As revealed by Informant 3:

*“Duyon eang gid don nga kung amat do mga unga hay indi mo gid baea mapa kompleto it agto kasi hay sa kalisod man it pangabuhi nanda iya hay indi mo gid-a mahambae nga 100% gid-a nga everyday sanda nga gaagto. Especially sa mga higher grades, mas napili nanda nga mag-usoy it pangita para eang nga may anda nga mapakaon sa anda nga sarili ag bisan sa andang pamilya man.”*

Translation: The only issue is that sometimes, it's really difficult to ensure the students' complete attendance. Because of their living conditions, it's hard to say that they can come to school 100% of the time. Especially among the higher-grade learners, some of them choose to look for ways to earn money just so they can feed themselves or even help support their families.

As shared by Informant 2

*"About mat-a sa students, sangkiri malang sanda pero kung ihandle mo sanda hay syempre Ma'am, hahambae ko ngani kimo kaina nga mahina iya do internet connections kaya sa pag-abot sa assignments hay indi mo gid sanda mapwersa nga pa ubrahon do research nga ron dahil duyon nga uwa gid mana sanda it gadgets nga available nga magamit sa anda sa pagresearch.”*

Translation: When it comes to the students, there are a few who are struggling. But if you handle them properly, Ma'am - and as I mentioned earlier - the slow internet connection before made it hard for us to require them to do online research for assignments, because most of them didn't have gadgets at home.

Teachers observed that hunger, poor attendance, and lack of parental support affect students' focus and learning. Some older learners skip school to help earn income, while many lack internet and gadgets for assignments. These reflect deep socioeconomic barriers in rural communities. Aquino (2022) and Ucag et al. (2024) affirm that poverty, hunger, and limited access to technology hinder academic performance, placing extra pressure on teachers to bridge learning gaps.

Despite the challenges associated with student hunger, irregular attendance, and academic difficulties, the informants demonstrated resilience by adopting various strategies to address these realities and fulfill their responsibilities as teachers. These experiences lead to the next major theme on the coping strategies employed by the teachers of Bagong Barrio Integrated School.

## **Theme 2. Coping Strategies of the teachers of Bagong Barrio Integrated School**

This main theme presents the coping strategies of the teachers of Bagong Barrio Integrated School. It discusses the ways teachers manage and respond to the challenges they encounter in their professional duties, highlighting the strategies they use to maintain effectiveness, resilience, and well-being in their teaching practice.

### **Theme 2.1: Adaptive Pedagogy & One-on-One Remediation**

The informants consistently described adapting their teaching strategies to address the diverse learning needs of their students. Their narratives reveal the use of adaptive pedagogy and one-on-one remediation to support learners' academic progress despite existing challenges.

As observed by Informant 4:

*"Sa mga strategies man hay kung halimbawa hay do unang strategies nimo hay napansin nimo nga uwa naattain, hay ga-isip ka it another strategies pagid basta maattain nimo do imo nga objective sa imo nga lesson."*

Translation: When it comes to strategies, if I notice that my initial strategy isn't effective or the objective isn't being attained, I try to think of another strategy just to ensure that the lesson objective is achieved.

As explained by Informant 5:

*"Ag sambilog pa nga practices siguro namon nga naubra sa mga learners pagkatapos it klase hay kung pwede nga na one on one namon sanda especially sa akon nga subject nga Mathematics."*

Translation: Another strategy we apply, especially in teaching learners, is conducting one-on-one sessions after class whenever possible - particularly in my subject, Mathematics.



As noted by Informant 1:

*“Ag, syempre, do akon nga ginaubra especially sa mga gastruggle nakon nga mga learners hay, kung vacant time nakon, ginabuo ko gid-a sanda ron ag ginahueam sa anda nga teacher. Ginaremediate ko sanda sa pagbasa.”*

Translation: Another thing I do, especially for my struggling learners, is that during my vacant periods, I pull them out and coordinate with their teacher. I conduct remediation sessions to help them read.

Teachers adjust their strategies when initial approaches fail, showing flexibility to meet lesson objectives. They also provide one-on-one remediation, particularly in reading and math, using vacant time to support struggling learners. This reflects the findings of Cimene et al. (2024), who highlighted rural teachers’ adaptability and commitment to individualized instruction despite limited resources.

While the informants adapted their teaching strategies to address students’ individual learning needs, they also recognized that effective instruction depended on maintaining discipline, establishing routines, and managing classroom time efficiently.

## Theme 2.2: Discipline, Time Management & Routine

The informants consistently described the importance of maintaining discipline, effective time management, and structured routines in supporting students’ learning and behavior. Their narratives reveal how these practices contributed to creating a more organized and conducive learning environment.

As affirmed by Informant 2:

*“Do strategies ag practices nakon nga naubra adlaw-adlaw para makahabol sa biometrics hay pagbugtaw it agahon pat-a nga mayad, mga 3:50, ag mabugtaw eagi para makapahaom. Medyo nagaadjust man don sa time it pagprepare sa baeay para man makaattend kami on-time iya sa klase namon.”*

Translation: One of my daily strategies, especially to cope with the biometrics requirement, was to wake up as early as 3:50 in the morning just to get ready and leave early, I also had to adjust my time in preparing at home so I could arrive on-time for class.

As articulated by Informant 3:

*“Gabugtaw akot 5:00 or 4:30, ag syempre naubra ko do akon nga daily routines. Tapos 6:00 to 6:30 hay ga byahe eon dayon.”*

Translation: I usually wake up at 5:00 or 4:30 in the morning and go through my daily routines. Then, by around 6:00 to 6:30, I’m already on the road traveling to school.

As conveyed by Informant 4:

*"Ahh of course, do akon abi nga baeay hay igto patang gauli sa Tangalan, so para kakon hay medyo maeayo baea, ro challenges kakon hay kailangan ko gid magbugtaw it timprano, mag-eaha, magprepare, ag of course para makaabot man iya sa eskuylahan nga indi man ako ma late."*

Translation: Ahh, of course. Since I live in Tangalan, the school is quite far from my home. One of the main challenges for me is that I really need to wake up very early, take a bath, prepare myself, and of course, make sure I arrive at school on time and not **be late**.

Teachers maintain strict routines, waking as early as 3:50 A.M. to manage long commutes and meet biometric and class schedules. Their disciplined time management reflects strong personal commitment and resilience. This supports Lacaba et al (2020), who emphasized that in rural settings, individual discipline and motivation are crucial to sustaining teaching performance despite daily hardships.

While the informants relied on discipline, structured routines, and effective time management to manage their classroom responsibilities, they also emphasized that sustaining these efforts required emotional strength and support from their colleagues, families, and communities.

### **Theme 2.3: Emotional & Social Support Networks**

The informants consistently described the importance of emotional and social support in helping them cope with the challenges of teaching in a geographically isolated school. Their narratives reveal how support from colleagues, the community, family, and other stakeholders strengthened their resilience and well-being.

As conveyed by Informant 3:

*"Syempre kung may mga problems mana nga naeencounter, una gid do among Principal nga permi namon nga nadaeagnan. Tapos do amon man nga Kapitan, kung ano eon gid do problem, pero eversince uwa paman gid. Ag among mga ginikanan, syempre sanda gid do makabulig sa amon nga mga challenges nga ginaface sa among skuylahan. Bueoligan malang man don eh it Parents and Teachers and Stakeholders."*

Translation: Of course, whenever we encounter problems, the first person we turn to is our principal, who is always there for us. Then, we also approach our barangay captain, depending on the issue - although so far, we haven't really had any major problems. Our parents also play a big role, as they are truly the ones who can help us face the challenges we encounter in school. The support really comes from the combined efforts of the parents, teachers, and stakeholders.

As explained by Informant 1:

*"Syempre sa akon nga pamilya, naga-open-up ako kanda kung may problem. Tapos maliban karon sa akon man nga mga co-teachers, syempre akon man nga mga co-teachers hay nakakatao man sanda it advice sa mga problems nga akon nga ginakaharap."*

Translation: Of course, I turn to my family – I open up to them whenever I have problems. Aside from them, I also seek support from my co-teachers. They give me advice whenever I face challenges.

Teachers rely on strong support systems - school leaders, co-teachers, family, and community stakeholders - to cope with challenges. These emotional and social networks provide guidance, encouragement, and shared responsibility. This aligns with Downey (2021) and Gallo (2023), who emphasized that in remote contexts, supportive relationships are essential for managing stress and reducing feelings of isolation among educators.

Although the informants benefited from emotional and social support networks that helped them cope with the demands of teaching, they recognized that these sources of support alone were insufficient to address the broader challenges they encountered. Consequently, they identified several support mechanisms and interventions necessary to improve the teaching and learning experience in Bagong Barrio Integrated School.

Theme 3. Support and interventions needed to improve the teaching and learning experience in Bagong Barrio Integrated School

This main theme is composed of all the forms of assistance, intervention, and program that may be used in enhancing the teaching-learning process of Bagong Barrio Integrated School. These interventions will help in addressing current problems and improving on instruction to create an improved environment for both teachers and learners.

Theme 3.1: Road Development as Crucial Support

The informants consistently identified road development as a crucial support needed to improve their teaching experiences and access to Bagong Barrio Integrated School. Their narratives reveal the importance of safe and accessible roads in addressing the challenges of daily travel and school accessibility.

As emphasized by Informant 1

*"Do number one gid-a siguro Ma'am hay ro pag-ayos it karsada paagto iya sa eskuylahan, sa gobyerno gid-a ra kasi may mga part nga bukon pa gid-a it sementado ag risky baea sa mga nagaagi kapin pa kung mauean."*

Translation: I think the number one support we really need, Ma'am, is the improvement of the road going to the school. That's really something the government should address because there are still parts that are not cemented, and it becomes risky for those who travel - especially when it rains.

As pointed out by Informant 3:

*“Someday... ro daean gid-a ro pinakaproblem, nga sana masemento eon gid tanan para mas madali do byahe, duyon malang gid do among struggle iya, do among daean.”*

Translation: Someday... I really hope that the roads will finally be fully cemented, because that's our main problem. If that happens, travel would be much easier. That's really our main struggle here - the condition of the road.

The teachers emphasized the urgent need for road improvements, as unpaved and slippery routes make daily travel difficult and dangerous, especially during rain. These conditions affect their physical well-being, punctuality, and morale. While Some progress has been made, full road development remains essential. This aligns with Cimene, Aclan, and Gomez (2024), who found that better infrastructure boosts teacher retention and performance in rural schools and that safe, reliable transportation is key to ensuring equitable access to quality education in remote areas.

While the informants identified road development as a fundamental intervention to improve access to the school, they also emphasized that enhancing the teaching and learning experience requires adequate educational resources, including ICT equipment, learning facilities, and additional classrooms.

### **Theme 3.2: Need for ICT Equipment, Facilities, and Classrooms**

The informants consistently identified the need for adequate ICT equipment, improved school facilities, and additional classrooms to enhance the teaching and learning environment. Their narratives reveal how these resources are essential in supporting effective instruction and improving students' educational experiences.

As articulated by Informant 5:

*“Ag sambilog pa is lack kami it let say, uwa kami it ICT rooms. Do mga unga abi namon hay medyo bukon abi it masyado nga familiar sa mga gadgets like computer desktop. Although do ibang unga hay may gadget pero bukon gid-a baea it nagahands-on sanda sa mga ginatawag ngaron nga laptop. Indi sanda kaantiguhan magbukas sa ruyon nga gadget kasi ngani hay wa nanda napapractice. Ag sambilog pagid is kami nga mga teachers mana iya is kung pwede malang man kunta nga tig sambilog gid man tuod kami it laptop. Kasi ro amon nga personal nga laptop hay naga kasamad eota gid due siguro kung amat*

*kung hilipatan mo iya or naaywanan mo iya hay due sa fug hay nasasamad ro laptop.”*

Translation: Another concern is that we lack facilities like ICT rooms. Our students are not that familiar with gadgets like desktop computers. Some may have gadgets, but not many have hands-on experience with laptops. They don't really know how to use those devices because they don't get to practice. Another thing is, if possible, it would be helpful for us teachers if each of us could have our own laptop. Most of us use personal laptops, but they tend to get damaged easily - especially when we accidentally leave them behind or expose them to moisture during travel, which causes wear and tear.

As emphasized by Informant 4:

*“Para kakon, mas mnanami siguro kung do Government hay magatao it libre nga laptop para sa tanan nga Teachers. 'Maw man sa estudyante, mabahoe gida abi nga bulig kanda kapag may anda nga ginahands-on.”*

Translation: For me, it would be better if the government could provide free laptops for all teachers. The same goes for students - it would be a big help for them, especially when they have something to work on hands-on.

As stated by Informant 3:

*“Mas better pa nga magdugang pa it technology kunta iya or mga laptop. Another thing is sa room, classrooms, kasi hay kulang pa gid-a kami sa classrooms iya. Kasi do standard nga classroom iya hay ging hati sa daywa para eang may ma kwarto. Ag mga facilities ag iba pang mga facilities.”*

Translation: It would be better if more technological tools or laptops could be provided. Another concern is the classrooms - we still lack sufficient classrooms. Some standard classrooms are even divided into two just so there's enough space for everyone.

As conveyed by Informant 1:

*“Ag kinahang-eang man namon ro additional classrooms ag facilities it among eskuylahan agod mapanami pagid ro among pagtinueon-an.”*

Translation: We also need additional classrooms and school facilities so we can improve our teaching even more.

Teachers stressed the urgent need for ICT equipment, school-provided laptops, and additional classrooms and facilities. Students lack digital exposure, while teachers rely on personal, often damaged devices. Shared classrooms further hinder effective instruction. These challenges reflect digital and infrastructural gaps common in remote schools. Soekamto (2022) emphasized that limited access

to technology deepens digital literacy gaps. Doria and Ortega- Dela Cruz (2024) found that ICT-equipped teachers perform better, especially in STEM. Ke (2024) also noted that inadequate facilities lower teacher morale and impact learning outcomes.

While the informants emphasized the importance of providing adequate ICT equipment, learning facilities, and classrooms, they also recognized that these resources alone are insufficient to enhance educational outcomes. They stressed that positive student behavior is equally essential in fostering an effective and conducive teaching and learning environment.

### **Theme 3.3: Positive Student Behavior**

The informants consistently emphasized the importance of positive student behavior in fostering a productive teaching and learning environment. Their narratives reveal how learners' discipline, cooperation, and willingness to learn contribute to more meaningful educational experiences.

As highlighted by Informant 5:

*“Pag-abot nimo bisan man-o it bug-at imong bitbit nga bag, pag-abot it motor, anda ka gid nga sueang-sueangon tas mahambae sanda nga ”Ma'am kami lang ma bitbit karon, Ma'am.”*

Translation: When I arrive - even if I'm carrying a heavy bag - some students would immediately come and say, "Ma'am, we'll carry that for you."

Small acts of kindness from students, like offering to carry teachers' bags, reflect empathy and respect. These gestures, though simple, provide emotional uplift and motivation for teachers. This supports Borü (2018), who emphasized that a caring and respectful school climate enhances teacher morale and fosters a more positive teaching experience.

While the informants recognized that positive student behavior contributes to a conducive learning environment, they also emphasized that achieving quality education requires teachers to be equipped with the knowledge and skills needed to adapt to curriculum changes through continuous professional development.

### **Theme 3.4: Curriculum Instability & Professional Development**

The informants consistently described the need for curriculum stability and continuous professional development to enhance their teaching effectiveness. Their narratives reveal how consistent educational policies and learning opportunities can better support teachers in addressing the demands of their profession.

As pointed out by Informant 5:

*“Sambilog siguro hay ro consistency kunta it curriculum, pabag-o bag-o ta abi. Halimbawa, sa K-12 tapos majump eoman kami into Matatag, So mingko big adjustment, kung siin baea nga ro hatong ngato nga K-12 curriculum hay dali lang namon mamaster tapos maiump eoman kami into another nga ging implement nga curriculum, so another adjustment man imaw kamong ag at the same time, another adjustment man imaw sa mga estudyante.”*

Translation: One thing I would suggest is the consistency of the curriculum, because it keeps changing. For example, we were already adjusting to the K-12 curriculum, and now we're suddenly shifting to the Matatag curriculum. It requires a big adjustment. Just when we were starting to master the K-12 curriculum, we're now transitioning to another one, which means we teachers have to adjust again - and at the same time, the students also need to adjust.

Teachers expressed concern over frequent curriculum changes, such as the shift from K-12 to Matatag, which demand constant adjustments for both educators and students. These sudden transitions disrupt mastery and increase workload. This aligns with Ke (2024), who emphasized the importance of curriculum stability and continuous professional development, especially for teachers in rural areas facing limited training opportunities.

While the informants emphasized the importance of continuous professional development to help teachers respond to curriculum changes, they also recognized that improving educational outcomes requires addressing the socioeconomic challenges faced by students' families. In particular, they identified livelihood support for parents as a crucial intervention to reduce child labor and promote regular school attendance.

### Theme 3.5: Livelihood Support for Parents to Reduce Child Labor

The informants consistently identified livelihood support for parents as an important intervention to reduce child labor and improve students' participation in school. Their narratives reveal how strengthening families' economic capacity can contribute to better educational outcomes for learners.

As observed by Informant 1:

*“Since ngani Ma'am nga ro big factor gid-a ro child labor igto sa Bagong Barrio, duyon abi ro dahilan kung haman ga absent do mga estudyante ag uwa abi't permanenteng trabaho do ginikanan igto, siguro ro akong ma-isuggest hay livelihood para sa mga ginikanan agod sanda hay may sarili nga income, agod ro mga unga baea hay indi nanda pag-ubligahon nga mag trabaho agod makafocus sanda sa pagtuon.”*

Translation: Since child labor is really a big factor in Bagong Barrio - and that's one of the main reasons why students are often absent, especially because their parents don't have stable jobs - I would suggest providing livelihood programs for the parents. This way, they can have their own source of income, and they won't be forced to make their children work. That would allow the students to focus more on their studies.

Teachers identified child labor, driven by parental unemployment, as a major cause of student absenteeism. Providing livelihood programs for parents would ease financial burdens, allowing children to stay in school and focus on learning. This supports Ke (2024), who emphasized that economic support for families in poor communities helps reduce child labor and improves student attendance and engagement.

While the informants identified livelihood support for parents as an essential intervention to reduce child labor and improve school attendance, they also emphasized that students need adequate learning resources to maximize their educational opportunities. In particular, they highlighted the importance of providing access to reading materials to strengthen students' literacy skills.

### **Theme 3.6: Strengthening Literacy through Access to Reading Materials**

The informants consistently emphasized the need to strengthen students' literacy through greater access to reading materials. Their narratives reveal the importance of providing adequate learning resources to support reading development and improve academic performance.

As mentioned by Informant 2:

*“Sa makaron, pagbasa gid-a abi andang problema, Ma'am, sa reading gid-a do andang problema. Do kinahang-een gid-a namon nga support hay reading materials.”*

Translation: At present, Ma'am, reading is really the main problem among the students. So, the kind of support we really need is reading materials.

Teachers noted that poor reading skills among students stem from the lack of accessible reading materials. Strengthening literacy requires consistent access to age-appropriate books and resources. This aligns with Petiluna and Naparan (2022) who emphasized that improving access to reading materials in remote schools fosters early literacy and boosts overall academic performance.

### **Summary of Findings**

This study explored the lived experiences of teachers assigned in a remote school setting, with a particular focus on the challenges they encountered, the coping



mechanisms they employed, and the interventions they perceived as necessary to improve their teaching and overall learning environment. Specifically, the study sought to answer three central questions: (1) What are the struggles experienced by the teachers of Bagong Barrio Integrated School? (2) How do these teachers cope with the struggles they experience? and (3) What support and interventions can help improve the teaching and learning experience in Bagong Barrio Integrated School?

A qualitative research design was employed, using transcendental phenomenology as a central method for gathering and analyzing personal stories. Five purposefully selected participants, all regular DepEd teachers with a minimum of three years of teaching experience in Bagong Barrio Integrated School, were interviewed through semi-structured interviews. Thematic analysis was used to interpret the data, with ethical considerations such as informed consent, confidentiality, and member checking strictly observed. The study was guided by the Social-Ecological Model of Teacher Resilience, which provided a framework for understanding how individual, relational, and environmental factors influence teacher resilience.

The findings revealed that the teachers experienced multiple challenges in their professional lives. These included long and risky daily commutes on unpaved and slippery roads, particularly during the rainy season, resulting in physical strain and unpredictable travel conditions. Classroom-related difficulties such as student hunger, absenteeism, child labor, limited parental involvement, and lack of access to internet or learning devices further complicated their teaching roles. Despite these hardships, teachers employed several coping strategies such as adapting their teaching methods, conducting one-on-one remediation during vacant periods, maintaining discipline routines, and seeking support from family, colleagues, and community leaders.

To improve their work and the overall quality of education in their school, the participants recommended the cementing of roads, provision of laptops and ICT equipment, construction of additional classrooms, and access to more reading materials. They also suggested consistent curriculum implementation and the introduction of livelihood programs for parents to reduce child labor and encourage better student attendance. The teachers' stories revealed not only the severity of the challenges they face, but also their steadfast commitment to their profession, reinforcing the importance of meaningful, sustained support for educators in rural contexts.

## **Conclusions**

Based on the findings of the study, the teachers of Bagong Barrio Integrated School face several significant challenges in their day-to-day professional lives. These include long and difficult commutes due to unsafe and unpaved roads, physical strain, and the unpredictable nature of travel - especially during the rainy season. Additionally, they encounter classroom challenges such as student hunger, poor attendance, low academic performance, lack of parental involvement, and limited

access to technology and learning resources. These conditions reflect the broader struggles associated with teaching in remote and disadvantaged school settings.

Despite these difficulties, the teachers have demonstrated remarkable resilience and dedication. They employ adaptive teaching strategies and provide one-on-one remediation to support struggling learners. They practice disciplined routines and time management to arrive at school on time, often waking up before dawn. Furthermore, they rely on strong emotional and social support systems, including their families, co-teachers, school leaders, and local stakeholders, to sustain their motivation and well-being. These coping mechanisms help them continue performing their roles with compassion and commitment.

To improve the teaching and learning experience in Bagong Barrio Integrated School, the teachers highlighted several necessary support and intervention measures. These include the improvement and cementing of roads, provision of laptops and ICT facilities for both teachers and learners, access to adequate reading materials, and construction of more classrooms. They also expressed the need for stable curriculum implementation and livelihood assistance for parents to help reduce child labor and promote consistent student attendance. These suggested interventions are crucial to ensuring a safer, more equipped, and learner-friendly environment in rural schools.

In conclusion, the voices of the teachers in this study reveal the realities of teaching beyond the mountains. Their lived experiences highlight not only the struggles they face, but also their unwavering commitment to education. This underscores the importance of sustained institutional, infrastructural, and community support to empower educators and improve the quality of education in geographically remote areas.

## **Recommendations**

Based on the findings of the study, the following recommendations are proposed:

The Department of Education (DepEd) and education policymakers should prioritize the allocation of resources to geographically isolated schools such as Bagong Barrio Integrated School. These resources should include adequate ICT equipment, additional classrooms, improved school facilities, and sufficient instructional and reading materials to enhance the quality of teaching and learning. DepEd should also ensure that curriculum transitions are supported through comprehensive teacher orientations, continuous professional development, and implementation support to help teachers effectively adapt to curriculum changes while minimizing disruptions in instructional delivery.

School leaders and administrators, particularly the school head, should strengthen teacher support systems by providing responsive supervision, fostering teachers' emotional and professional well-being, and promoting a supportive school culture. The school should also institutionalize a sustainable Reading Intervention

Program through regular reading assessments, learner progress monitoring, teacher mentoring, and the provision of adequate reading materials to improve learners' literacy outcomes.

The Local Government Unit (LGU), in collaboration with the barangay officials and Bagong Barrio Integrated School, should prioritize the improvement and maintenance of access roads leading to the school to ensure safer and more accessible transportation for teachers and learners. Strengthening road infrastructure will help reduce travel-related risks, improve attendance, and support the continuous delivery of quality education. The LGU may also explore transportation assistance or mobility support during adverse weather conditions. Furthermore, livelihood programs and income-generating opportunities should be strengthened to improve parents' economic conditions, reduce child labor, and encourage learners' regular school attendance.

Teachers are encouraged to continue implementing adaptive teaching strategies, individualized remediation, and learner-centered instructional approaches that address the diverse learning needs of their students. They should also sustain positive classroom management practices, actively participate in professional development activities, and collaborate with colleagues and school leaders to continuously improve instructional practices and learner outcomes.

Parents and community members should strengthen their partnership with the school by actively monitoring learners' attendance, encouraging consistent school participation, supporting reading activities at home, and reinforcing positive values and discipline among children. Community stakeholders should likewise collaborate with teachers and school administrators in implementing school programs and initiatives that promote learners' academic achievement and overall well-being.

Finally, future researchers are encouraged to build upon the findings of this study by exploring teacher resilience, well-being, and support mechanisms in geographically isolated schools using broader populations or different qualitative and quantitative research designs. Future studies may also evaluate the effectiveness of interventions such as road infrastructure improvements, school-based Reading Intervention Programs, ICT integration, teacher support systems, facility enhancement, and community-based livelihood initiatives in improving teacher retention, learner achievement, school attendance, and overall educational outcomes.

Overall, these recommendations aim to guide teachers, school leaders, education policymakers, local government units, parents, community stakeholders, and future researchers in developing responsive and sustainable interventions that will improve the teaching and learning conditions in Bagong Barrio Integrated School and other geographically isolated schools with similar contexts.

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# **INSIGHTS FROM PSYCHOMETRICIANS ON ADMINISTRATIVE CHALLENGES AND SUPPORT SYSTEMS IN MENTAL HEALTH CARE IN THE PHILIPPINES: A BASIS FOR POLICY IMPROVEMENT**

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## **Abstract**

This study explores how registered psychometricians perceive and experience the integration of public administration in the implementation of the Mental Health Act (RA 11036). Using a qualitative phenomenological approach, the research examined the lived experiences of psychometricians working across various institutional settings in Luzon, focusing on their perceptions, challenges, and proposed strategies related to administrative roles in mental healthcare. Findings reveal that psychometricians recognize public administration as essential to organizing and sustaining mental health programs, yet they also encounter barriers such as unclear role expectations, limited resources, and administrative gaps that affect the delivery of psychological services. The implementation of RA 11036 has expanded their responsibilities, particularly in mental health assessments, but has also increased the demand for stronger institutional support. The study highlights the need for clearer administrative structures, improved coordination, enhanced capacity-building, and policy refinements to fully support psychometricians in their practice. Overall, the results underscore that effective mental health service delivery hinges not only on clinical expertise but also on a responsive and well-functioning public administration system.

**KEYWORDS:** Public Administration, Psychometricians, Mental Health Act

## **Introduction**

In recent years, the field of mental health has expanded significantly, becoming more intricate and multifaceted. However, this growth has not been matched by parallel advancements in administrative systems and support structures. As a result, researchers have increasingly turned their attention toward developing strategies to strengthen mental health and resilience through effective interventions. A key area of focus lies in understanding the experiences and challenges faced by mental health professionals—particularly psychometricians—and examining their roles within the context of public administration.

Psychology, as a discipline, plays an essential role in addressing mental health concerns and enhancing individual well-being (Gautam et al., 2024). Through

systematic collection, integration, and interpretation of information, psychological assessment provides valuable insights into individuals' characteristics, capabilities, and needs (Committee on Psychological Testing, Including Validity Testing for Social Security Administration Disability Determinations; Board on the Health of Select Populations; Institute of Medicine, 2015). These assessments form the foundation for diagnosing mental health conditions, designing appropriate interventions (Groth-Marnat & Wright, 2016), and monitoring treatment progress to ensure optimal outcomes (Kazdin, 2017).

Psychometricians, as mental health professionals, specialize in the measurement and prediction of psychological traits, aptitudes, and behaviors. Their expertise plays a crucial role not only in scientific psychology and educational measurement but also in the broader social and institutional frameworks that shape society (Borsboom & Wijsen, 2017). Beyond their technical functions, psychometricians also engage in public administration roles, particularly within healthcare systems. Public administration in healthcare involves managing and organizing services within governmental or public institutions, encompassing policy development, resource allocation, and the coordination of programs to ensure the effective delivery of healthcare services. In essence, it serves as the bridge connecting public health initiatives to accessible and equitable healthcare delivery.

Integral to their role in public administration, psychometricians must uphold principles of privacy and confidentiality—core values emphasized in Republic Act (RA) No. 11306 and reinforced by the Data Privacy Act of 2012. These laws require that all personal and sensitive data obtained during psychological assessments or sessions be securely protected. The increasing integration of technology into mental health practice, especially during the COVID-19 pandemic, has introduced both opportunities and challenges. Studies have highlighted issues such as technical failures, privacy risks, and ethical dilemmas as significant considerations in the adoption of information and communication technologies (ICT) in mental health services (Dores et al., 2020).

In the Philippines, the enactment of Republic Act No. 11036, also known as the Mental Health Act, marked a significant milestone in national mental health policy. The law aims to enhance the delivery of integrated mental health services and safeguard the rights of individuals seeking psychosocial care. Under Chapter IV, Section 14 of RA 11036, all public and private healthcare facilities are mandated to provide services that are evidence-based, culturally responsive, age-appropriate, and delivered by accountable mental health professionals. The Act also requires healthcare institutions to develop clear guidelines and protocols to ensure informed consent, uphold patient autonomy, and protect confidentiality throughout treatment processes.

Prior to the passage of this law, the Philippines lacked comprehensive mental health legislation, leaving clinicians without clear legal guidance and patients without explicit rights (Lally et al., 2019). The Mental Health Act now ensures that service users are protected from discrimination, coercion, and abuse while



guaranteeing their rights to informed consent, confidentiality, aftercare, and participation in treatment decisions. These provisions serve as vital guidelines for both public and private mental health practitioners, reinforcing the ethical and administrative responsibilities embedded in their professional roles.

Given that many psychometricians in the Philippines operate within private or for-profit settings—predominantly in major urban centers such as Metro Manila (Samaniego, 2017)—it is crucial to explore how they engage with the principles and practices of public administration in mental health care. This study, therefore, seeks to examine the lived experiences of psychometricians in navigating administrative, ethical, and professional challenges within the public mental health framework, focusing particularly on their personal meanings and perspectives in the context of Metro Manila.

## **Theoretical Framework**

### **Systems Theory - Ludwig von Bertalanffy (1950)**

The foundation of systems theory was first established by Ludwig von Bertalanffy in the early 1950s. His groundbreaking ideas laid the groundwork for what is now known as General Systems Theory, which shifted thinking away from classical management perspectives that viewed organizations as mechanistic structures. Instead, Bertalanffy's approach emphasized a holistic understanding of organizations as dynamic systems composed of interconnected people, processes, and functions. While Bertalanffy is often credited as the principal founder, systems theory emerged through the collective contributions of various scholars who sought to explain how organizations can function efficiently while also meeting the needs of individuals within them (Sridharan, 2022).

Within the context of mental health services, systems theory conceptualizes the field as a network of interrelated components, including government policies, healthcare institutions, mental health professionals, and the communities they serve. Each component interacts continuously with the others, influencing how services are designed, delivered, and evaluated. This theoretical lens enables researchers and practitioners to analyze how different elements within the public administration system interact to affect the accessibility, quality, and effectiveness of mental health care. By adopting a systems perspective, it becomes possible to identify areas of overlap, gaps, and potential synergies among the multiple actors and processes involved in mental health governance and service provision.

Applying systems theory to the role of psychometricians in public administration provides a structured way to examine the complex and interconnected nature of their professional environment. Rather than viewing challenges as isolated problems, systems theory encourages an understanding of how different factors—such as service delivery mechanisms, workforce management, policy frameworks, financing systems, and community engagement—interact dynamically to influence outcomes. This integrative perspective enables psychometricians to engage in

comprehensive planning, coordinate interventions more effectively, and design evaluation systems that reflect the realities of practice. It also supports a holistic approach to scaling up mental health care, emphasizing the relationships among individuals, institutions, and available resources.

According to Jordan (2024), applying systems theory to mental health contexts better captures the complex and evolving nature of health systems, providing opportunities to develop more robust evaluation and assessment strategies for expanding mental health services. For psychometricians involved in administrative functions, this approach allows for the examination of how systemic factors shape patient outcomes based on psychological assessments and program evaluations. Moreover, systems theory offers tools to trace the feedback loops that exist between policy implementation, professional practice, and patient experience, thus facilitating continuous improvement within the system.

Ultimately, systems theory serves as a valuable framework for understanding the interdependence of components within public administration and mental health care. It highlights how psychometricians, as both practitioners and administrators, can navigate and influence these interconnections to respond more effectively to the challenges of their professional environment. By emphasizing relationships, feedback mechanisms, and systemic coherence, systems theory provides a comprehensive foundation for analyzing and improving the administrative and service dimensions of mental health care.

### **Theory of Good Governance**

This study also draws upon the assumption that the experiences of psychometricians within the sphere of public administration are guided by existing mental health policies, circulars, and the application of best practices. These elements are essential in addressing the various challenges encountered in the delivery of mental health services. The effective implementation of mental health strategies—particularly in assessment and evaluation—reflects the principles of good governance, as it ensures that public institutions respond effectively to the mental health needs of individuals and communities. Such implementation contributes to the overall well-being of the workforce and aligns with the broader mental health objectives outlined in the Sustainable Development Goals (SDGs) for health.

The study is primarily anchored on the Theory of Good Governance as articulated by the World Bank (2015). According to this theory, good governance encompasses the processes and structures that guide political, economic, and administrative authority to manage a nation's affairs effectively. It emphasizes core principles such as transparency, accountability, participation, responsiveness, equity, efficiency, and adherence to the rule of law. These principles demand that policies and programs be clearly defined, accessible, responsive to public needs, and implemented fairly and efficiently for all citizens.

In the context of this study, the principles of good governance are directly applicable to mental health institutions where psychometricians carry out their professional duties. Compliance with legal mandates—such as the Mental Health Act and related administrative circulars—demonstrates the operationalization of these principles within the mental health system. Moreover, this framework provides a lens for understanding how institutional structures, administrative policies, and professional practices contribute to the effective governance of mental health services in both public and private sectors.

Ultimately, the Theory of Good Governance serves as a critical foundation for examining how psychometricians, as mental health professionals involved in public administration, uphold accountability, transparency, and responsiveness in their practice. It highlights how adherence to governance principles ensures that mental health programs are not only law-abiding but also equitable and effective in promoting the mental well-being of the population.

### **The Problem**

Mental health disorders remain one of the leading causes of disability worldwide, affecting approximately one-third of the global population. Despite the growing recognition of mental health as a public health priority, many countries, including the Philippines, continue to face significant challenges in ensuring access to quality mental health care services. According to Lally, Tully, and Samaniego (2019), the Philippine mental health system continues to struggle with persistent issues such as limited funding, underdeveloped community-based mental health programs, and a shortage of qualified mental health professionals.

In response to these challenges, the enactment of Republic Act No. 11036, otherwise known as the *Mental Health Act of 2018*, mandates healthcare providers and facilities to comply with national standards and policies to enhance the delivery of integrated mental health services. However, despite these policy frameworks, the implementation of mental health programs remains constrained by systemic and administrative barriers. Within this context, psychometricians—as mental health professionals engaged in assessment, evaluation, and intervention—encounter unique challenges in fulfilling their duties, particularly within the scope of public administration.

These challenges stem from bureaucratic processes, insufficient institutional support, and inconsistencies between policy directives and practical realities in mental health service delivery. As frontline practitioners, psychometricians working in both public and private healthcare settings are directly affected by administrative systems that influence their ability to provide timely, effective, and ethical care. Understanding their experiences provides valuable insights into how governance structures and administrative mechanisms shape the effectiveness of mental health programs in the country.

Therefore, this study seeks to explore the lived experiences of psychometricians in relation to their engagement with public administration's role in mental health care. It aims to uncover how they navigate systemic constraints, interpret administrative policies, and derive personal meaning from their professional responsibilities within the evolving landscape of mental health governance in the Philippines.

### **Statement of the Problem**

This study aims to explore the lived experiences of psychometricians—whether working in public institutions, private organizations, or independent practice—in relation to their engagement with the role of public administration in mental health care in the Philippines. It seeks to understand how these professionals perceive, interpret, and navigate the administrative structures, policies, and governance systems that influence the assessment, evaluation, and delivery of mental health services.

Furthermore, the study intends to contribute to the growing body of knowledge on the intersection between psychometric practice and public administration by identifying common challenges, opportunities, and best practices observed in various mental health service settings. By doing so, it aims to raise awareness among mental health professionals and policymakers about the realities of service delivery from the perspective of psychometricians. The findings of this study are expected to support the development of evidence-based programs, policies, and interventions that address the issues and concerns identified, ultimately enhancing the quality and efficiency of mental health services across different sectors in the country.

Specifically, the researcher sought to answer the following questions:

1. What is the perception of psychometrician on integrating the role of public administration in the field of mental healthcare?
2. What are the perceived challenges confronted by psychometrician in engaging public administration's role in mental health assessment and interventions?
3. How implementation of RA 11036 impacts the delivery of mental health services of psychometrician?
4. Based on the findings, what strategies and improvements can be proposed to enhance public administration systems of psychometrician implementing the Mental Health Act (RA 11036)?

### **Scope and Delimitation of the Study**

This study is limited to exploring the lived experiences of psychometricians in relation to their engagement with public administration's role in mental health care in the Philippines. It specifically focuses on the personal meanings, perspectives, and professional experiences of psychometricians working in public

institutions, private organizations, or individual practice settings. The primary objective is to gain a deeper understanding of how these professionals interpret and navigate administrative systems, policies, and governance processes that influence the delivery of mental health services.

Specifically, the study will focus on the following areas:

1. The perceptions of psychometricians regarding the integration of public administration principles in the field of mental health care;
2. The challenges encountered by psychometricians in engaging with public administration's role in the assessment and intervention processes of mental health services;
3. The impact of the implementation of Republic Act No. 11036 (Mental Health Act of 2018) on the delivery of mental health services, particularly in relation to psychometricians' professional responsibilities and their experiences of work-related stress or anxiety; and
4. The proposed strategies and recommendations of psychometricians to strengthen and improve administrative systems and practices in the effective implementation of the Mental Health Act.

The study will be conducted during the academic year 2025–2026, and the data collected will be utilized solely for academic and research purposes. The research will be geographically limited to Luzon, Philippines, and participants will include only those identified as Licensed Psychometricians registered under the Professional Regulation Commission (PRC). To ensure the relevance and depth of insight, respondents must have at least two years of professional experience in the field of mental health service delivery.

The study will not cover areas or topics outside the scope of psychometricians' lived experiences and their administrative engagement in mental health practice. It will exclude other mental health professionals such as psychologists, psychiatrists, and counselors. Furthermore, as noted by Marshall and Rossman (2016), research limitations may affect the generalizability of findings. One limitation of this study is that the data gathered may not fully represent the views and experiences of all psychometricians across the country. Additionally, participants' recollections of their interactions and compliance with public administration policies, including the implementation of Republic Act No. 11036 (The Mental Health Act of 2018), may be subject to recall bias or personal interpretation.

### **Significance of the Study**

The findings of this study are expected to provide valuable insights and practical benefits to multiple stakeholders, as they focus on the lived experiences of psychometricians in engaging with public administration within the mental health sector. The results can inform both mental health professionals and service users by highlighting challenges, best practices, and potential strategies for improving mental health service delivery.

## **Mental Health Professionals**

The study's findings will assist mental health professionals, particularly psychometricians, in navigating and governing public mental health services. By incorporating the provisions of RA 11036 (Mental Health Act of 2018), mental health professionals can better understand the importance of developing frameworks that support both practitioners and service users. Integrating principles of public administration can enhance the effectiveness of mental health assessments and interventions, improve client outcomes, and reduce pressures faced by professionals by providing structured support systems and necessary resources.

## **Policy Makers**

The study will provide policymakers with evidence to prioritize funding and resources for mental health services and administrative support systems. The findings can guide decision-making aimed at improving service quality, expanding access to mental health care, and ensuring fair compensation and professional development opportunities for mental health professionals, particularly in underserved areas. Moreover, insights from the study can help policymakers develop policies that foster supportive work environments for both service users and mental health professionals within public administration.

## **Academic Institutions**

Academic institutions can benefit from understanding the lived experiences of frontline mental health professionals within the context of public administration. This knowledge can be used to integrate the principles of public administration into educational programs, promote supportive and inclusive environments, and encourage open discussions on mental health. Implementing such initiatives can help reduce stigma, foster help-seeking behavior among students, faculty, and staff, and support policies that prioritize mental well-being and a healthy work-life balance.

## **Mental Health Organizations**

The study's findings can guide mental health organizations in developing and implementing comprehensive programs and support systems. This may include establishing dedicated mental health departments or teams, providing ongoing training for staff, offering confidential counseling services, and creating clear protocols for addressing mental health concerns. By integrating administrative principles and mental health support into organizational practices, these institutions can foster a culture of openness, resilience, and professional well-being for both employees and mental health practitioners.

## **Future Researchers**

This study can serve as a reference and guide for future researchers exploring similar topics in mental health, psychometrics, or public administration. It provides relevant insights, data, and frameworks that can inform subsequent studies and contribute to a deeper understanding of the challenges, strategies, and best practices in mental health service delivery.

## **Definition of Terms**

For clarity and a better understanding of this study, the following terms are defined conceptually and operationally:

### **Assessment**

Conceptually: Assessment refers to the systematic and continuous process of collecting, sorting, analyzing, and organizing data, as well as documenting and communicating information, particularly regarding a patient's physiological, psychological, sociological, and spiritual needs (Toney-Butler & Unison-Pace, 2025).

Operationally: In this study, assessment pertains to the tasks performed by psychometricians, integrated within their role in public administration in mental health care settings.

### **Frontline Mental Health Professionals**

Conceptually: Frontline mental health professionals are those who advocate for strategies that support personal resilience while fostering resilience within clinical teams and across healthcare organizations (Brown et al., 2021).

Operationally: In this study, frontline mental health professionals refer specifically to psychometricians performing administrative duties, including maintaining communication with service users and their families while adhering to ethical standards and the provisions of RA 11036.

### **Intervention**

Conceptually: Intervention refers to the application of scientific methods to evaluate policies and programs within or outside the health sector that have the potential to influence population-level health outcomes (Cambon et al., 2019).

Operationally: Intervention pertains to the professional duties of psychometricians in mental health facilities, integrated with their public administration responsibilities, while ensuring compliance with RA 11036.

## **Mental Health**

Conceptually: Mental health is defined as a state of well-being in which individuals can cope with normal stresses of life, realize their abilities, learn effectively, work productively, and contribute to their communities (WHO, 2022).

Operationally: In this study, mental health refers to the psychological condition of patients as assessed and intervened upon by psychometricians through the integration of public administration principles.

## **Psychometricians**

Conceptually: Psychometricians are professionals who develop and analyze tests to ensure they are reliable, valid, and fair, applying knowledge from engineering, data science, and machine learning to provide accurate information (Thompson, 2020).

Operationally: In this study, psychometricians are the participants—licensed professionals registered with the Professional Regulation Commission (PRC) in the Philippines, with a minimum of two years' experience in mental health service delivery.

## **Public Administration**

Conceptually: Public administration refers to the implementation of government policies and the study of this process, preparing civil servants to function effectively in public service while advancing governance and management goals (Max Weber, n.d.).

Operationally: In this study, public administration refers to the integrated administrative role of psychometricians in managing patient care, applying the provisions of the Mental Health Act, and navigating the governance systems within mental health facilities.

## **RA 11036 Mental Health Act**

Conceptually: RA 11036, or the Mental Health Act, establishes a national mental health policy to enhance the delivery of integrated mental health services and to promote and protect the rights of individuals accessing psychosocial health services (Senate of the Philippines, 2018).

Operationally: In this study, RA 11036 refers to the legal and policy framework that guides psychometricians in their public administration duties within mental health care, including compliance with its standards and provisions.



## **Method**

### **Research Design**

This study will employ a qualitative research methodology, specifically adopting the phenomenological approach. Qualitative research is particularly suited to exploring the “why” and “how” of human behavior, experiences, and perceptions, providing insights into the ways individuals organize, relate to, and interact with society (Groenewald, 2015). The researcher aims to identify commonalities among participants while setting aside preconceived notions and bracketing prior assumptions, generating inductive data that offers innovative descriptions and meaningful generalizations.

The study will focus on exploring the lived experiences of frontline mental health professionals, specifically psychometricians, who have at least two years of continuous work experience. By using the phenomenological method, the researcher will conduct in-depth interviews to uncover the unique perspectives and meanings these professionals attach to their roles within public administration. Moser and Korstjens (2017) define phenomenology as a qualitative approach that seeks to understand how individuals perceive and interpret the world, intentionally setting aside biases and assumptions to capture authentic experiences. This approach is particularly appropriate for the present study, as it enables an in-depth exploration of psychometricians’ experiences, facilitating a nuanced understanding of their professional roles and challenges.

To analyze the data, the researcher will employ Thematic Analysis, a widely used method for identifying, analyzing, and interpreting patterns or themes within qualitative data. Thematic analysis involves a reflective process in which the researcher’s insights contribute to the interpretation of data (Braun & Clarke, 2016). Although the discipline is broadly applied across fields and theoretical frameworks, Braun and Clarke (2016) outlined a six-step iterative process: familiarization with the data, generation of codes, identification of initial themes, review and refinement of themes, defining and naming themes, and selecting representative examples. Thematic analysis will allow the researcher to organize interview data into clear, coherent themes and categories, facilitating a meaningful interpretation of participants’ experiences.

Additionally, the study will employ a Triangulation Approach to enhance the validity and reliability of the findings. Investigative triangulation involves multiple stages of verification: first, the researcher will transcribe and analyze interview data, identifying initial codes and themes. Second, experts—such as the thesis adviser and an additional validator—will review the data and themes to ensure alignment with participants’ responses. Finally, participants will be consulted to confirm that the interpretations accurately reflect their experiences, without omissions or alterations. By incorporating multiple validators and perspectives, triangulation strengthens the credibility and trustworthiness of the study’s findings, ensuring that conclusions are grounded in authentic participant data.

## **Research Setting**

Luzon, the largest and most populous island in the Philippines, is located at the northern end of the archipelago. Luzon is also home to Manila, the national capital and the country's economic and administrative center. This vibrant and diverse environment provides an appropriate setting for a qualitative study examining the experiences of frontline mental health professionals.

Participants for this study will be drawn from various cities across Luzon. The island hosts a wide range of healthcare facilities, including government-run institutions, private hospitals, schools and universities, and non-governmental organizations that deliver mental health services. By focusing on this context, the study aims to explore and illuminate the experiences of mental health professionals, particularly regarding their engagement with public administration and its influence on their roles and practices.

## **Respondents of the Study**

The study will focus specifically on Licensed Psychometricians registered with the Professional Regulation Commission (PRC) in the Philippines, working within defined areas of psychological practice. A total of ten (10) licensed psychometricians will be recruited as participants. These professionals are regularly involved in patient assessments, research, program evaluation, development and administration of psychological tests, data analysis, and contributing to evidence-based decision-making (American Psychological Association, 2022).

For phenomenological studies, sample size recommendations vary among scholars. Creswell (1998) suggests conducting 5 to 25 interviews, while Morse (1994) recommends a minimum of six participants to adequately explore the depth and richness of lived experiences. This group of dedicated professionals not only provides essential care and support to patients on their journey toward mental health but also generates rich, meaningful data that will shed light on the challenges and experiences faced by psychometricians in their professional roles.

## **Data Gathering Tool**

This study will utilize an interview guide as the primary research instrument. An interview guide consists of a structured set of questions that directs the flow of the interview, indicating which questions to ask and in what sequence. Employing an interview guide helps ensure consistency across interviews and minimizes interviewer bias (Verlinden, 2020).

## **Data Gathering Procedures**

In the general procedures, participants will be recruited from Metro Manila using social media platforms by posting materials that outline the research overview,

including the researcher's contact information. These posts will target groups and pages with audiences primarily involved in psychiatric and mental health settings. In addition, purposive and snowball sampling techniques will be employed to identify and recruit additional participants for the study.

Specifically, the study will include eight to ten (5-10) participants, all of whom are licensed psychometricians working in mental health settings. Participants are required to have a minimum of two (2) years of professional experience in mental health service delivery. For phenomenological studies, John W. Creswell (1998) suggested 5–25 interviews; Janice M. Morse (1994) suggested at least six.

Interviews will be conducted via Google Meet or Zoom to accommodate participants' schedules. Using the interview guide, the researcher will gather detailed information about the experiences of frontline mental health professionals with their roles in public administration. With participants' consent, all sessions will be audio-recorded to ensure accuracy. To encourage open and comfortable responses, interview questions will be delivered in both English and Filipino, depending on the participant's preference.

### **Data Analysis**

To analyze the collected data, the study will employ Colaizzi's Method, as described by Morrow et al. (2015) and Wirihana et al. (2018). This method systematically organizes and interprets qualitative data, enabling the researcher to articulate the experiences of frontline mental health professionals in public administration.

The process involves several steps: familiarization with the data, identifying significant statements, formulating meanings, clustering themes, developing an exhaustive description, and validating the findings. Colaizzi's Method allows the researcher to extract, organize, and interpret the transcribed interview data, uncovering the underlying personal meanings and perspectives of participants. This structured approach is particularly useful for phenomenological studies, as it ensures a thorough and rigorous analysis of rich, complex narratives while maintaining fidelity to the participants' lived experiences.

### **Results and Discussion**

#### **Psychometricians' Perception of Integrating Public Administration in Mental Healthcare**

Findings show that the psychometricians strongly recognize the necessity of public administration in advancing mental health services, especially under the implementation of RA 11036. Their perception revolves around role integration, policy alignment, and the institutional positioning of psychometricians within government systems.

One participant emphasized the need to “strengthen collaboration between psychometricians and public administrators through regular training and policy dialogues,” highlighting that integration must begin with communication and structured coordination. Others underscored the functional significance of integrating psychometricians into the administrative system, stating that public administration should “recognize and integrate the role of psychometricians in policy-making and program implementation.”

A number of respondents also viewed psychometricians as crucial contributors to data governance—particularly in mental health screening, early detection, and risk assessment. One described their role as “front-line data providers for standardized screening and risk assessment,” reflecting a perception that their work directly supports evidence-based policymaking.

Overall, psychometricians perceive the integration of public administration not only as a necessary policy requirement but also as an opportunity for mental health programs to become more systematic, efficient, and aligned with national health priorities. This perception shows a readiness to participate in governance processes, provided their roles are clearly defined and supported institutionally.

## **2. Perceived Challenges in Engaging Public Administration’s Role in Mental Health Assessment and Interventions**

Despite their willingness to contribute, psychometricians identified several challenges when interacting with public administration structures.

### **2.1 Ambiguous Role Delineation**

A recurring concern was the unclear boundary between the responsibilities of psychometricians and psychologists. Many shared that “psychometricians often take on broader tasks, such as conducting debriefings or assisting in interventions, even though these are not clearly defined in the law.” This ambiguity raises ethical concerns and contributes to inconsistent service delivery across institutions.

### **2.2 Lack of Supervision and Capacity-Building**

Respondents reported chronic shortages of licensed psychologists, especially in agencies like DSWD and certain LGUs. As noted in the findings, this leads to an expanded workload: “administering assessments, initial interviews, debriefings, and even intervention support.” Without structured supervision, many feel vulnerable to burnout, improper task delegation, and ethical risks.

### **2.3 Inadequate Institutional Support and Resources**

Multiple participants expressed frustration over limited access to updated testing materials, irregular training, and insufficient wellness programs. One said that public institutions lack “updated test materials, supervision, and regular wellness

programs for staff.” Others highlighted issues with workload, emotional fatigue, and high caseloads.

## **2.4 Weak Information and Data Management Systems**

Respondents stressed the need for “a unified, mandatory digital platform for mental health record-keeping,” citing risks in confidentiality and inefficient documentation processes. Without standardized data systems, monitoring and reporting under RA 11036 remain inconsistent.

## **2.5 Public Awareness and Stigma**

Some respondents pointed out that the general population remains unaware of RA 11036. One remarked, “There are very few people who know about this law and it should be talked about more.” This affects service utilization, community participation, and support for mental health policies.

These challenges reflect both systemic concerns and the administrative limitations that hinder the optimal engagement of psychometricians in public mental health services.

# **3. How RA 11036 Impacts Psychometricians’ Delivery of Mental Health Services**

The implementation of RA 11036 has significantly influenced how psychometricians conduct assessments, including those related to anxiety screening among private hospital nurses. Many respondents acknowledged that the law has increased demand for mental health services, thereby expanding their workload and responsibilities.

## **3.1 Increased Demand for Assessment Services**

Psychometricians reported being tasked more frequently with standardized screening, early detection, and mental health profiling. This includes conducting psychological assessments for frontline workers such as nurses. With anxiety becoming a major concern in high-stress environments like hospitals, RA 11036 reinforces the need for systematic assessment.

## **3.2 Greater Responsibility but Limited Support**

Although the law legitimizes their participation, participants noted that implementation is uneven across institutions. The requirement for mental health programs often leads to heightened expectations without corresponding staffing, resources, or supervision. This results in psychometricians handling sensitive assessments—such as anxiety evaluations—under conditions that may compromise service quality.

### **3.3 Contribution to Data for Policy and Program Development**

Through their involvement in screening nurses' anxiety levels, psychometricians generate essential data that informs organizational decisions, wellness initiatives, and mental health interventions. Their role aligns with the Act's objective of strengthening evidence-based mental healthcare.

### **3.4 Ethical Considerations and Confidentiality**

Psychometricians highlighted concerns about data handling, stating that psychological reports "often pass through several offices," prompting the need for stronger confidentiality safeguards. This challenge becomes particularly relevant when handling sensitive data from private hospital staff.

In summary, RA 11036 has increased the visibility and relevance of psychometricians in mental healthcare delivery, but the impact is constrained by institutional gaps and inconsistent administrative support.

## **4. Proposed Strategies and Improvements to Enhance Public Administration Systems for Psychometricians Under RA 11036**

Across responses, participants identified several key strategies aimed at strengthening the public administration system to better support psychometricians.

### **4.1 Workforce Augmentation and Plantilla Creation**

Many emphasized the necessity of creating permanent, funded plantilla positions. Respondents argued that psychometricians should no longer be treated as temporary contractual workers but as essential components of the mental health workforce.

### **4.2 Standardized, Digitized, and Interoperable Information Systems**

Participants strongly proposed a centralized digital registry, standardized assessment templates, and secure data-sharing mechanisms. These systems would help ensure consistency, confidentiality, and efficient monitoring.

### **4.3 Clearer Role Definitions and Legal Scope of Practice**

Psychometricians recommended clearer guidelines on their professional scope, particularly in assessment and intervention activities. These must be supported by mandated supervision from licensed psychologists.

#### **4.4 Mandatory and Continuous Capacity-Building**

Participants advocated for regular training, mentorship, and CPD opportunities to maintain competence. Public administration support for CPD funding and attending seminars was emphasized.

#### **4.5 Strengthened Interagency Collaboration**

Participants recommended structured coordination among LGUs, DOH, DepEd, DSWD, and other agencies. Improved communication and shared protocols would enhance the mental health service delivery chain.

#### **4.6 Public Awareness and Stigma Reduction Efforts**

Some respondents suggested community-level information campaigns, social media messaging, and influencer-backed mental health awareness programs.

Overall, the strategies point toward making the public administration system more structured, sustainable, and capable of supporting the expanded demands of RA 11036.

### **Conclusions**

The findings show that psychometricians play a critical role in fulfilling the objectives of the Mental Health Act, but their contributions are often underrecognized due to unclear role definitions, limited institutional support, and inconsistent administrative structures. Psychometricians view their integration into public administration systems as essential for promoting organized and accessible mental health services. However, several challenges—such as role ambiguity, inadequate supervision, insufficient resources, and poor data systems—significantly affect their ability to execute mental health assessments and interventions effectively.

RA 11036 has expanded the scope of psychometricians' responsibilities, especially in conducting assessments such as determining the anxiety levels of nurses in private hospitals. While this reflects the growing demand for mental health services, it also intensifies the need for formal support mechanisms, standardized guidelines, and clearer administrative policies.

The participants' proposed strategies reveal a strong demand for systemic reforms within public administration, including plantilla creation, digital integration, enhanced coordination, and competency-building programs. These improvements are essential to strengthen mental healthcare delivery and fully realize the intent of RA 11036.

## **Recommendations**

Based on the findings of the study, several recommendations are proposed to strengthen the integration of psychometricians into the public administration system under RA 11036 and to improve the overall delivery of mental health services in both government and private institutions. First, there is a need for clearer and more robust policy reforms, including the creation of permanent plantilla positions for psychometricians and the clarification of their legal scope of practice. This will ensure that their roles are no longer treated as temporary or auxiliary, but as essential components of the national mental health workforce. Strengthening these policies also involves establishing mandated supervision mechanisms led by licensed psychologists to protect ethical standards and prevent role overlap.

In addition, administrative systems must be enhanced to support the evolving responsibilities of psychometricians. A centralized and secure digital mental health information system is recommended to standardize assessment reports, improve documentation accuracy, facilitate referrals, and ensure confidentiality—an issue highlighted by many respondents who expressed concern over the circulation of sensitive data across offices. This improved system should be accessible, interoperable across agencies, and streamlined to reduce administrative burdens.

The study also underscores the importance of capacity-building and continuous professional development. Psychometricians must be provided with regular training, updated testing materials, mentorship programs, and funded opportunities to attend seminars or workshops. These initiatives will ensure that they remain competent in administering assessments, interpreting results, and supporting mental health interventions, especially in high-demand settings such as private hospitals where issues like anxiety among nurses are becoming more prevalent.

Moreover, the recommendations stress the need for stronger interagency collaboration among LGUs, DOH, DSWD, DepEd, and private hospitals. Creating unified protocols, communication channels, and coordinated referral systems will reduce fragmentation and promote more consistent implementation of RA 11036 across institutions. Collaboration also ensures that psychometricians are not working in isolation but are supported by a larger network of professionals and administrators.

Finally, to support both professionals and the communities they serve, public awareness initiatives must be intensified. Many respondents noted that RA 11036 remains unfamiliar to the public, leading to stigma and low utilization of services. Public administration can address this by launching community-based campaigns, leveraging social media, and partnering with trusted local figures to normalize conversations about mental health. At the same time, institutions must strengthen internal wellness programs to prevent burnout among psychometricians and other mental health workers, ensuring a sustainable and supportive work environment.



Overall, these recommendations highlight the need for systemic reforms—spanning policy, administration, workforce development, communication, and public education—to fully realize the goals of the Mental Health Act and to empower psychometricians in their vital role within the mental healthcare system.

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# TEACHERS SELF-PERCEIVED COMPETENCY IN THE TECHNOLOGY INTEGRATION IN TEACHING MUSIC, ARTS, PHYSICAL EDUCATION AND HEALTH (MAPEH)

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## Abstract

This mixed-methods study investigated the digital competency of MAPEH teachers and its relationship with the extent of technology integration in MAPEH instruction. Specifically, it examined teachers' technological knowledge, pedagogical knowledge, and technological–pedagogical integration, as well as their use of technology in instructional planning, classroom implementation, and assessment practices. Data were collected through surveys and interviews, and analyzed using descriptive statistics, correlation analysis, and thematic interpretation. Findings revealed that MAPEH teachers demonstrate high digital competency (overall mean = 3.56) and consistently integrate technology in teaching and assessment (overall mean = 3.45), with the greatest utilization observed in classroom implementation and instructional planning. A very strong positive relationship ( $r = 0.82$ ,  $p < 0.001$ ) was found between teachers' digital competency and the extent of technology integration, indicating that higher digital skills significantly enhance technology use in MAPEH instruction. Challenges identified include technical issues, unstable internet, limited student access to devices, and low student digital literacy. The study concludes that effective digital pedagogy requires continuous professional development, adequate resources, and student digital skills development to optimize learning outcomes.

**Keywords:** MAPEH, digital competency, technology integration, digital pedagogy, teacher professional development, mixed-methods research

## Introduction

In pursuit of producing competent and holistic learners, the pedagogy employed by teachers must be given utmost priority, as it lays the foundation for the quality of instruction delivered to students. The engagement and academic performance of learners are rooted in the strategies, approaches, materials, and activities that teachers thoughtfully select and implement to help students master the required competencies. Exploring and understanding teachers' pedagogical practices is therefore crucial in ensuring the delivery of quality education that addresses learners' diverse needs.



In the 21st century, teaching and learning are deeply influenced by technological advancements. The positive use of technology in the classroom has become a hallmark of effective instruction, particularly as today's students are digital natives who respond well to interactive and technology-driven learning environments. According to Joynes (2019), 21st-century skills encompass five key areas: communication, collaboration, independent learning, autonomy, and digital literacy. These domains underscore the importance of preparing learners not only with academic knowledge but also with technological competence and adaptability, skills essential for success in a rapidly changing world.

Aligned with this, the Department of Education (2016), through *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*, highlights 21<sup>st</sup> Century skills and ICT integration in instruction and assessment as central to the K to 12 Curriculum. Teachers are therefore expected to enrich their lessons with developmentally appropriate ICT strategies that promote collaboration, engagement, and innovation in the classroom. This demonstrates that technology integration is no longer optional. It is a fundamental expectation in the delivery of modern instruction.

Empirical evidence suggests that technology has a positive impact on students' learning experiences. Katyara et al. (2023) found that the integration of technology significantly enhances students' engagement, both behavioral and cognitive resulting in improved learning outcomes. This suggests that technology not only deepens cognitive understanding but also fosters motivation and active participation, making the learning process more meaningful and enjoyable. Similarly, Carstens et al. (2021) emphasized that while technology enhances comfort and learning opportunities, it can also present challenges, such as overreliance or management issues, if not effectively integrated. Hence, continuous professional development for teachers is crucial to ensure that technology serves as an aid, not a hindrance, to meaningful instruction.

In this context, digital pedagogy emerges as a vital educational approach. According to the Library Guides on *Teaching with Digital Assignments* (2017), digital pedagogy extends beyond mere technical skills; it focuses on the *intent*, *context*, and *critical engagement* with technology. It concerns not only *how* to use digital tools but also *when* and *why* they are most effective. As Alhaji Idi Babate et al. (2024) asserted, integrating digital resources into the curriculum allows educators to cater to diverse learning styles, foster critical thinking, and promote active participation. Likewise, Tom (2019) noted that technology supports personalized learning and prepares students for the digital future by accommodating varied learning preferences and paces. Through digital pedagogy, learning becomes more inclusive, relevant, and connected to real-world contexts.

Despite the growing emphasis on technology integration, many teachers remain hesitant or less equipped to adopt it in their teaching practices. Some educators struggle with technological competence, which limits their ability to engage students whose learning preferences are increasingly technology-oriented. This gap necessitates robust support from educational leaders through assessments,

capacity-building programs, and targeted professional development, enabling teachers to adapt to evolving pedagogical demands.

In particular, the use of technology in MAPEH (Music, Arts, Physical Education, and Health), a subject that emphasizes skills and performance remains limited. Unsong and Morbo (2023) revealed that many Generation X MAPEH teachers face fears and challenges in integrating ICT due to inadequate infrastructure, unstable internet connectivity, a lack of devices, and insufficient digital skills. Similarly, Castañeda (2024) found that MAPEH teachers encounter significant difficulties in applying technology, particularly in instruction and assessment. In contrast, Samonte and Guzman (2019) reported weak pedagogical and technical integration among teachers, despite the availability of some tools. These findings suggest that, even in the 21st century, the integration of technology in MAPEH is not yet fully realized due to various systemic and individual barriers.

Recognizing this gap, the *MATATAG* Education Agenda emphasizes the need to accelerate the delivery of quality instruction through technology-driven teaching and assessment. It challenges educational leaders and teachers alike to embrace innovation in their classrooms, ensuring that learners achieve mastery of competencies through engaging, relevant, and digitally enriched instruction.

Guided by these considerations, this study aims to explore the digital pedagogy of MAPEH teachers by examining their level of digital competency and the extent to which they integrate technology into their practices. It further aims to identify the challenges teachers encounter when utilizing technology and to develop an action plan that will help them promote effective and meaningful technology-enhanced teaching. Through this exploration, the study endeavors to contribute to the broader goal of equipping teachers with the necessary digital competencies to create dynamic, inclusive, and future-ready learning environments.

## **Theoretical Framework**

This study is grounded in the following theories, which serve as its foundations. These are the Technological Pedagogical Content Knowledge (TPACK) Framework, the SAMR Model (Substitution–Augmentation–Modification–Redefinition), the Diffusion of Innovations Theory, and the Constructivist Learning Theory.

### **Technological Pedagogical Content Knowledge (TPACK) Framework.**

This theory, proposed by Punya Mishra and Matthew J. Koehler in 2006, focuses on evaluating the competency of teachers in integrating technology into instruction delivery for students. This stressed that an effective teaching with technology requires the integration of three forms of knowledge, Technological (TK), Pedagogical (PK), and Content Knowledge (CK). The intersection of these creates TPACK, which defines teachers' ability to blend technology seamlessly into subject instruction.

According to Kurt (2018), the TPACK framework highlights how teachers can effectively use technology, such as hardware, software, digital applications, and information literacy practices, to help students gain a deeper and more meaningful



understanding of a subject. The framework integrates three key types of knowledge: (1) Technological Knowledge (TK), (2) Pedagogical Knowledge (PK), and (3) Content Knowledge (CK). These areas interact in dynamic ways to form a holistic understanding of teaching with technology.

Technological Pedagogical Knowledge (TPK) refers to how teachers utilize technology in conjunction with specific teaching methods and strategies. In contrast, Pedagogical Content Knowledge (PCK) focuses on how teaching approaches align with particular learning objectives. Meanwhile, Technological Content Knowledge (TCK) explores how technology supports or enhances the delivery of subject matter. Together, these interconnected domains form TPACK, which recognizes the complex and overlapping relationships among technology, pedagogy, and content in the teaching and learning process. Furthermore, Kurt (2018) elaborates on the three foundational knowledge areas. Content Knowledge (CK) refers to a teacher's mastery of their subject matter, encompassing an understanding of key concepts, theories, principles, and frameworks within a discipline, as well as best practices for presenting this knowledge to students. The depth and scope of CK vary across grade levels and subjects; for instance, a middle school science teacher's content knowledge differs from that required at the university level. Pedagogical Knowledge (PK) involves understanding the principles and strategies of teaching and learning. It encompasses lesson planning, assessment design, classroom management, and awareness of students' diverse learning styles. PK also encompasses teachers' understanding of educational goals, values, and philosophies that inform effective teaching and learning. Lastly, Technological Knowledge (TK) refers to teachers' familiarity with and ability to use various digital tools and resources. It includes knowing how to select, apply, and adapt technology to support learning objectives, recognizing when technology enhances or hinders instruction, and continuously updating skills in response to emerging technological innovations. In essence, the TPACK framework emphasizes that effective teaching in the digital age requires not just knowing content, pedagogy, or technology individually, but understanding how all three work together to create meaningful and engaging learning experiences.

According to Pappas (2023), the Technological Pedagogical Content Knowledge (TPACK) framework serves as a flexible guide that helps teachers effectively integrate educational technology into their classrooms. It emphasizes how teachers' combined knowledge of technology, pedagogy, and content influences students' learning outcomes and supports a more organized, tech-driven approach to lesson delivery and curriculum implementation. By thoughtfully applying the intersections of these three components, teachers can design meaningful and engaging learning experiences that promote students' mastery of competencies and make class discussions more enjoyable and impactful.

This theory reinforces the study's purpose by clarifying the essential competencies that teachers must possess to integrate technology into MAPEH instruction effectively. It also provides the theoretical foundation for assessing digital pedagogy and technology integration. Guided by the TPACK framework, the researcher identified the independent variable (teachers' level of digital

competency) and the dependent variable (extent of technology integration in MAPEH teaching), which form the basis of the quantitative phase of the study. The results derived from teachers' responses in this phase will inform the subsequent qualitative inquiry, which is designed to explain further and contextualize the numerical findings related to their competency in integrating technology within MAPEH instruction.

### **SAMR Model (Substitution–Augmentation–Modification Redefinition)**

It was developed by Dr. Ruben Puentedura (2010). It outlines four progressive levels of technology integration in teaching, ranging from the simple substitution of traditional tools to the complete redefinition of learning experiences. This model emphasizes that effectively integrating technology into instruction can transform pedagogy and lead to positive learning outcomes.

According to Blundell et al. (2022), the SAMR model is widely applied in educational research to describe and categorize the use of digital technologies in teaching and learning. Since today's students are digital natives who naturally engage with technology, incorporating these tools into classroom instruction can enhance their focus, understanding, and participation. When technology is meaningfully integrated, it enriches both teaching practices and student learning experiences.

The model's four levels demonstrate this progression: (1) Substitution Level: Technology acts as a direct replacement for traditional tools without altering the learning process, for example, using interactive whiteboards instead of chalkboards or digital documents instead of printed materials. Although this is the most basic level, it introduces the foundation for further technology integration; (2) Augmentation Level: Technology enhances learning by improving traditional tasks. Educational apps, gamified platforms, and multimedia tools allow interactive engagement, instant feedback, and creative demonstrations of learning, making lessons more dynamic and effective. (3) Modification Level: At this stage, technology allows significant redesign of learning activities. Teachers can transform how tasks are structured and executed, for instance, by using collaborative platforms like Google Workspace or Microsoft Teams, where students co-create presentations, share real-time feedback, and engage in project-based learning. This level promotes higher-order thinking, creativity, and collaboration beyond what traditional tools can offer; and (4) Redefinition Level: At the highest level, technology transforms learning by creating new, previously unimaginable experiences. With innovations such as AI-based personalization, virtual environments, and immersive simulations, students engage in collaborative, real-world problem-solving that fosters 21st-century skills and promotes deeper learning. Furthermore, Boateng and Kalonde (2024) found a significant positive relationship between technology integration, as measured by the SAMR model, and increased student motivation and engagement, particularly in stages where technology enables interactive, dynamic, and personalized learning. Their study highlights the model's value in guiding educators to design more engaging and inspiring learning environments while considering the challenges and best practices of technology integration.

This framework is closely related to the present study as it provides a lens for analyzing how MAPEH teachers integrate digital tools at different levels of the SAMR model. Since MAPEH is a performance-based subject, applying technology strategically can enhance students' engagement and motivation, key factors that contribute to improved academic performance and overall learning success.

**Diffusion of Innovations Theory.** Everett M. Rogers introduces this concept, explaining how new ideas, practices, or technologies are adopted over time through five key stages: knowledge, persuasion, decision, implementation, and confirmation. In the context of this study, the theory provides a foundation for understanding how digital pedagogy, particularly in MAPEH education is embraced and applied by teachers in their instructional practices.

According to García-Avilés, (2020), Rogers' model describes the process by which innovation is communicated through specific channels over time among members of a social system. The stages, often referred to as awareness, interest, persuasion, decision, adoption, and confirmation, illustrate the gradual process by which individuals or groups come to accept and implement new ideas. This model has been extensively applied in various fields, including communication, management, health, and education, for understanding how innovations are introduced and sustained within organizations.

In the educational setting, the DOI theory suggests that the integration of technology in classroom instruction represents an innovation that teachers must first recognize, evaluate, and eventually adopt. By incorporating modern digital tools and technology-driven strategies, teachers ensure that their instruction remains relevant, engaging, and aligned with the needs of 21st-century learning. The adoption process is influenced by teachers' perceptions of the usefulness and effectiveness of digital pedagogy, as well as the support provided by their institutions and peers. Furthermore, Singer (as cited in Soriano, 2024) explains that the DOI theory, rooted in communication studies, focuses on how an idea or product gains acceptance and spreads within a particular social system. As innovations are communicated and demonstrated, individuals begin to perceive them as beneficial and original, leading to gradual acceptance and integration into regular practice. Adoption, therefore, requires teachers to engage in new instructional behaviors, such as using digital platforms, multimedia resources, and online collaboration tools that they may not have previously employed.

This theory is highly relevant to the present study as it frames the teachers' readiness and willingness to adopt digital pedagogy in MAPEH instruction. It helps explain the factors influencing their technology integration behaviors, such as their awareness of digital tools, their motivation to innovate, and their confidence in applying these tools effectively. By aligning with Rogers' diffusion stages, the study can better analyze where MAPEH teachers stand in the process of adopting digital pedagogy, from initial exposure to complete integration, thereby providing insights into how educational innovations can be more effectively supported and sustained.

**Constructivist Learning Theory.** The Constructivist Learning Theory, as discussed by Kurt (2021), emphasizes that learners actively construct their own knowledge through meaningful experiences. Rather than passively receiving information, students engage in an active process of thinking, reflecting, and connecting new information with their prior knowledge. This interaction between experience and cognition enables them to develop schemas or mental frameworks that help them make sense of the world around them. In this sense, learning becomes a personal, evolving process built through engagement and reflection

Cloke (2024) further expands on this perspective, emphasizing four key ideas within the constructivist approach. First, active engagement means that learners take ownership of their learning journey, integrating new ideas with what they already know. Second, experience plays a crucial role, as learning occurs most effectively through exploration, experimentation, and hands-on activities. Third, social interaction enhances understanding, since collaboration, discussion, and peer feedback help learners refine their ideas. Finally, knowledge in flux suggests that learning is not static, students continuously reshape their understanding as they encounter new experiences and information. Together, these principles underscore that learning is a dynamic and social process grounded in authentic contexts. Building on these ideas, Wibowo et al. (2025) link constructivism with Vygotsky's theory of social constructivism, which highlights the interplay of social, cultural, and individual factors in learning. Vygotsky's concepts of the Zone of Proximal Development (ZPD) and scaffolding illustrate how learners progress when they receive appropriate guidance and support. Through social interaction and collaboration, learners can extend their abilities beyond what they can accomplish independently. This perspective aligns with differentiated learning, where instruction is tailored to students' diverse skills, interests, and readiness levels, ensuring that all learners can reach their full potential.

Relating these theoretical insights to the current study, the Constructivist Learning Theory provides a strong pedagogical foundation for understanding how digital pedagogy enhances learning in MAPEH instruction. MAPEH, being a performance-based and skill-oriented subject, naturally lends itself to constructivist approaches that value active engagement, collaboration, and real-world application. Through the use of digital tools, such as interactive simulations, creative apps, virtual performances, and collaborative platforms students can construct knowledge in authentic, experiential, and socially interactive ways. Technology, therefore, serves as both a medium and a catalyst for constructivist learning. It allows learners to explore, create, and reflect within digital environments that simulate real-world contexts.

In summary, the Constructivist Learning Theory justifies the pedagogical use of digital technology in MAPEH by reinforcing the idea that learning is most effective when students actively participate, collaborate, and apply their skills in authentic contexts. This theory strengthens the study's foundation by explaining how digital pedagogy supports learner-centered instruction, fosters creativity and engagement, and enhances students' performance-based competencies in MAPEH.

From these studied theories, the researcher developed a conceptual model for this study, which is grounded in the Input–Process–Output (IPO) framework.

| <b>Input</b>                                                                                     | <b>Process</b>                                                                                           | <b>Output</b>                                                                                                                        |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| -Pivotal role of technology in delivering quality instruction in MAPEH                           | 1. Distribution of the survey questionnaire on teachers' competency and technology integration practices | Action Plan fostering Digital Pedagogy in MAPEH, enhancing teachers' competency, and effective technology integration in instruction |
| -Intensifying active engagement and motivation of students through technology-driven activities. | 2. Analysis of quantitative data gathered from the survey results.                                       |                                                                                                                                      |
| -Limited studies on digital pedagogy in MAPEH.                                                   | 3. Follow-through conduct of interviews with selected MAPEH teachers                                     |                                                                                                                                      |
|                                                                                                  | 4. Analysis of qualitative data using thematic analysis.                                                 |                                                                                                                                      |

This framework illustrates the logical flow of the research, from its foundational concepts to its outcome. It serves as a guide in understanding how the study on digital pedagogy in MAPEH unfolds from recognizing existing conditions to producing a meaningful and practical output that contributes to educational improvement. The Input phase highlights the essential elements that inspired and shaped the conduct of this investigation. It recognizes the pivotal role of technology in ensuring the delivery of quality instruction in MAPEH, especially in the 21st-century learning environment where digital competence is a core requirement. Technology not only supports instruction but also transforms it into a more interactive, engaging, and student-centered experience. The study also acknowledges the need to intensify active engagement and motivation among students through technology-driven activities that make learning MAPEH more relevant and enjoyable. Moreover, it addresses the limited studies on digital pedagogy in MAPEH, which underscores the research gap that this study aims to fill. The scarcity of empirical data provides a strong justification for exploring teachers' digital competencies and technology integration practices in this subject area.

The Process phase outlines the systematic procedures undertaken to achieve the study's objectives. It begins with the distribution of a survey questionnaire designed to assess teachers' competency levels and their current practices in integrating technology into MAPEH instruction. The collected quantitative data are then subjected to statistical analysis to determine trends, relationships, and significant findings. To enrich and deepen the results, a follow-through qualitative phase is conducted through interviews with selected 13 MAPEH teachers. Their insights and lived experiences are analyzed using thematic analysis, allowing the

researcher to capture the human dimension of teaching with technology, how teachers perceive, adapt, and innovate within their classroom realities. This mixed-methods approach ensures that both numerical evidence and personal narratives complement each other, resulting in a comprehensive understanding of the phenomenon under study.

Finally, the Output of the study is the development of an Action Plan fostering Digital Pedagogy in MAPEH. This plan serves as a practical and responsive framework that school leaders and teachers may use to strengthen digital teaching competencies and promote meaningful technology integration in instruction. It aspires to cultivate an educational environment where technology is not merely a tool but a transformative medium for learning. The action plan aims to support teachers in designing technology-enriched lessons, implementing innovative instructional strategies, and continuously enhancing their professional growth in the digital era.

### **The Problem**

As MAPEH is a skill-based subject that emphasizes performance tasks to demonstrate students' abilities in music, arts, physical education, and health, effective instruction requires engaging, interactive, and experiential learning approaches. However, while technology has become an essential tool in enhancing teaching and learning across disciplines, studies reveal that its integration in MAPEH remains limited. There is also a notable gap in research focusing on digital pedagogy specific to MAPEH instruction. This lack of empirical evidence on how MAPEH teachers develop and apply digital competencies in their classrooms underscores the need for deeper exploration.

In response to this, the present study seeks to examine the level of digital competency and the technology integration practices of MAPEH teachers. Understanding these dimensions is essential, as they directly influence how teachers design, deliver, and assess performance-based learning in a digital environment. The findings of this study will serve as vital inputs for developing an action plan that promotes a more technology-driven approach in MAPEH classes.

### **Statement of the Problem**

1. What is the level of digital competency of MAPEH teachers in terms of:
  - 1.1. technological knowledge,
  - 1.2. pedagogical knowledge, and
  - 1.3. technological-pedagogical integration?
2. What is the extent of technology integration in MAPEH instruction as perceived by teachers in terms of:
  - 2.1. instructional planning,
  - 2.2. classroom implementation, and
  - 2.3. assessment practices?

3. Is there a significant relationship between teachers' level of digital competency and their extent of technology integration in MAPEH teaching?
4. What challenges do MAPEH teachers encounter in implementing digital pedagogy?
5. Based on the integration of the quantitative and qualitative findings, what action plan may be proposed to enhance teachers' digital pedagogy and technology integration in MAPEH?

### **Hypothesis**

There is no significant relationship between teachers' level of digital competency and their extent of technology integration in MAPEH teaching.

### **Scope and Delimitation of the Study**

This study focused on investigating the digital competency and technology integration practices of MAPEH teachers in delivering instruction. Specifically, it examined how teachers utilize digital tools and platforms in teaching performance-based and skill-oriented lessons in Music, Arts, Physical Education, and Health.

The study was conducted among selected Junior High Schools in the Santa Maria East District, Schools Division of Bulacan, and included MAPEH teachers handling Grades 7 to 10. Data were gathered through a survey questionnaire that measured teachers' level of digital competency and extent of technology integration, and through interviews with 13 selected MAPEH teachers to gain deeper insights into the challenges they encountered in integrating technology into their classes.

The qualitative data were analyzed following the steps outlined by Braun and Clarke's thematic analysis framework, ensuring a systematic and meaningful interpretation of participants' experiences and perspectives. As the output of the study, an action plan was developed to strengthen technology-driven instruction in MAPEH. However, the evaluation of this proposed plan was limited to content validation by selected specialists, and its implementation or impact on actual classroom practices was beyond the scope of this research.

Furthermore, the findings of this study are limited to the context of Junior High School MAPEH teachers within the identified district; thus, results may not be generalized to other subject areas, neighborhoods, or educational levels. Despite these limitations, the study provides valuable insights that can guide future initiatives aimed at enhancing digital pedagogy and technology integration in MAPEH education.

### **Significance of the Study**

This study on digital pedagogy in MAPEH is significant as it addresses the growing need for teachers to integrate technology into performance-based subjects effectively. In an era where digital learning has become essential, understanding teachers' levels of digital competency and their technology integration practices provides valuable insights that can help improve both teaching and learning in MAPEH.

**Supervisors of MAPEH.** The findings can serve as a foundation for designing training programs, workshops, and initiatives that strengthen teachers' digital skills. By identifying areas of strength and improvement, supervisors can lead evidence-based professional development plans that ensure teachers are well-equipped to use technology in creative and pedagogically sound ways.

**School Principals.** This study offers practical guidance in supporting and promoting technology integration across MAPEH classes. The results may help them make informed decisions on resource allocation, digital infrastructure, and capacity-building programs to create a school culture that embraces innovation and 21st-century teaching practices.

**MAPEH Head Teachers.** The study provides relevant data that can be used to mentor colleagues and lead departmental initiatives aimed at improving instructional delivery through technology. Understanding how digital pedagogy enhances engagement and performance can help head teachers guide their team toward more interactive, student-centered approaches.

**MAPEH Teachers.** The study encourages self-assessment and reflection on their digital competencies. It aims to inspire teachers to explore new tools, methods, and strategies that make lessons more engaging, inclusive, and responsive to the diverse learning needs of students.

### **Definition of Terms**

To assist the readers, the researcher comprehensively defined vital terms from the study:

**Digital Pedagogy.** According to Tan et al. (2024), digital pedagogy refers to the pedagogical applications of digital technologies. This study focuses on the central aspect of the investigation, highlighting how MAPEH teachers effectively and purposefully utilize digital tools and platforms in implementing the curriculum and delivering instruction. It operationally refers to the teachers' ability to apply technology-enhanced teaching strategies that promote mastery of competencies and support meaningful learning experiences.

**Teacher's Competency.** Xue et al. (as cited in Yan & Chang, 2023) describe teacher competency as the foundation of teachers' educational work, serving as the basis for school recruitment, performance assessment, and the enhancement of academic quality. In this study, it operationally refers to the level of proficiency of MAPEH teachers in applying technological skills in the teaching and learning process. This includes their competence in selecting, utilizing, and integrating technology tools to deliver effective and engaging instruction.

**Technology Integration.** Wheeler et al. (as cited in Kaya & Adiguzel, 2021) define technology integration as the process of making technology an available, accessible, and essential component of instruction to enhance teaching and learning. In this study, it operationally refers to the extent to which MAPEH teachers select, use, and incorporate technological resources and applications into their lessons to foster active student engagement and improve learning outcomes.



## **Method**

### **Research Design**

This study employed a mixed-methods research design to provide a comprehensive understanding of MAPEH teachers' digital competency, technology integration practices, and the factors influencing their implementation of digital pedagogy. According to George (2021), mixed methods research combines elements of quantitative research and qualitative research to answer a research question. Mixed methods can help you gain a more complete picture than a standalone quantitative or qualitative study, as it integrates the benefits of both methods.

Specifically, a sequential explanatory design was employed, in which quantitative data were collected first, followed by qualitative data to explain further and enrich the findings. According to Ivankova et al, as cited in Draucker et al. (2020), the explanatory sequential design has two distinct strands that are implemented consecutively: a quantitative strand, in which numeric data are collected and analyzed, followed by a qualitative strand, in which textual data are collected and analyzed. This design was selected because it allows the researcher to measure the level of digital competency and extent of technology integration statistically, while also gaining in-depth insights into the experiences, challenges, and enabling factors faced by 13 MAPEH teachers in real classroom settings.

The quantitative phase addressed the first three research questions. To answer SOP 1 on the level of digital competency of MAPEH teachers in terms of technological knowledge, pedagogical knowledge, and technological-pedagogical integration, a structured survey questionnaire based on the TPACK framework was administered. For SOP 2, regarding the extent of technology integration in instructional planning, classroom implementation, and assessment practices, a separate survey was adapted from the Digital Pedagogical Competency Framework for Teachers (DPCFT). Responses from both surveys were analyzed using descriptive statistics, including frequency counts, percentages, weighted means, and standard deviations, to determine the overall level of competency and extent of integration. To examine SOP 3, which investigated the relationship between teachers' digital competency and technology integration, Pearson's correlation coefficient was employed to determine the strength and significance of the association between the two variables.

The qualitative phase was designed to complement and deepen the quantitative findings. To address SOP 4, which explored the problems, the researcher conducted face-to-face interviews using a set of two open-ended questions. Each interview lasted approximately 45–60 minutes, allowing teachers to elaborate on their personal experiences, perceptions, and strategies. The qualitative data were analyzed using thematic analysis, following the Braun and Clarke framework, to identify subthemes and major themes that illustrate recurring patterns, challenges, and opportunities in digital pedagogy.

Finally, SOP 5 integrated the findings from both quantitative and qualitative phases to inform the development of an action plan aimed at enhancing teachers'

digital pedagogy and technology integration in MAPEH instruction. The sequential explanatory design allowed the researcher to triangulate data, ensuring that the proposed action plan was grounded in both empirical evidence and teachers' lived experiences. This design provided a robust and practical framework for understanding how digital competency and technology integration interact in real-world educational contexts, as well as for proposing meaningful interventions to improve teaching and learning outcomes.

### Research Setting

This study was conducted in nine national high schools located in Marilao City and Santa Maria, under the jurisdiction of the Schools Division of Bulacan. The selected schools were . Parada National High School, 2. Sta. Maria National High School, 3. Fortunato F. Halili Agricultural School, 4. Catmon National High School, 5. Pulong Buhangin National High School, 6. Sta Cruz High School, 7. Caypombo High School, 8. Prenza National High School, and 9. Assemblywoman Felicita G. Bernardino Memorial Trade School. These schools were chosen as research sites because they represent a diverse population of learners and teachers, providing a comprehensive view of the implementation of MAPEH instruction and digital pedagogy within the division.

These schools offer a full complement of MAPEH subjects, and their teachers have varying levels of experience and exposure to digital tools and pedagogical practices. The study setting allowed the researcher to examine the level of digital competency of MAPEH teachers, as well as the extent of technology integration in instructional planning, classroom implementation, and assessment practices, within a real-world educational context. The diversity of the schools also provided rich qualitative data regarding the challenges and enabling factors in implementing digital pedagogy, ensuring that the findings are both reliable and reflective of actual teaching and learning conditions in the municipality.

### Respondents of the Study

The respondents of this study were the MAPEH teachers from the selected schools in Marilao City and Santa Maria, under the Schools Division of Bulacan. Only teachers who have served as public school teachers for at least two years were included to ensure that participants had sufficient teaching experience and familiarity with the curriculum. Additionally, all respondents were required to have conducted teaching demonstrations and at least two classroom observations, which allowed the researcher to gather reliable data on instructional practices, digital pedagogy, and classroom implementation.

**Table 1.** *Schools and Teacher-Participants*

| <b>School</b>                              | <b>Number of Participants</b> |
|--------------------------------------------|-------------------------------|
| 1. Parada National High School             | 17                            |
| 2. Sta. Maria National High School         | 8                             |
| 3. Fortunato F. Halili Agricultural School | 15                            |
| 4. Catmon National High School             | 9                             |
| 5. Pulong Buhangin National High School    | 21                            |

|                                                               |     |
|---------------------------------------------------------------|-----|
| 6. Sta Cruz High School                                       | 5   |
| 7. Caypombo High School                                       | 6   |
| 8. Prenza National High School                                | 8   |
| 9. Assemblywoman Felicita G. Bernardino Memorial Trade School | 11  |
| TOTAL                                                         | 100 |

The study targeted teachers across the nine selected national high schools, 1. Parada National High School, 2. Sta. Maria National High School, 3. Fortunato F. Halili Agricultural School, 4. Catmon National High School, 5. Pulong Buhangin National High School, 6. Sta Cruz High School, 7. Caypombo High School, 8. Prenza National High School, and 9. Assemblywoman Felicita G. Bernardino Memorial Trade School to capture a representative sample of MAPEH teaching practices. By focusing on 100 experienced MAPEH teachers who actively engage in classroom instruction, the study aimed to obtain rich and valid data regarding both their digital competency and the extent of technology integration in MAPEH instruction. Then, only 10 teachers participated in the second phase of the study, which is the interview to further explain the gathered data.

### **Data-Gathering Tool**

To gather data, the researcher employed both quantitative and qualitative instruments. For the quantitative phase, a structured survey questionnaire was used to measure the level of digital competency of MAPEH teachers based on the TPACK framework (Technological Pedagogical Content Knowledge). This survey assessed three dimensions: technological knowledge, pedagogical knowledge, and technological-pedagogical integration, each comprising ten items. Participants indicated their responses using a four-point Likert scale: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1). Additionally, a survey form was used to assess the extent of technology integration in MAPEH instruction as perceived by teachers. This instrument was adapted from the Digital Pedagogical Competency Framework for Teachers (DPCFT) for 21st Century Teachers (Joshi, Upadhayaya, Chapai, & Singh, 2025) and measured three dimensions: instructional planning, classroom implementation, and assessment practices, each with ten items rated using the same four-point Likert scale. The survey was carefully adapted and modified by the researcher to ensure contextual relevance to MAPEH instruction. The survey form was pilot tested to determine the level of reliability. The Cronbach's alpha result is 0.978 indicates an exceptionally high level of internal consistency and reliability for a survey form.

For the qualitative component, the researcher crafted two open-ended questions to explore the challenges that MAPEH teachers encounter in implementing digital pedagogy. These questions provided in-depth insights into the teachers' experiences, perceptions, and recommendations. Specialists in curriculum and research validated both the survey questionnaires and open-ended questions to ensure that the instruments were appropriate, reliable, and suitable for the participants' context.

## Data Gathering Procedures

The researcher began the data-gathering process by seeking permission from the Superintendent of the Schools Division of Bulacan to conduct the study. Upon approval, a formal Permit to Conduct Research was issued, allowing coordination with the principals of the selected national high schools, Parada National High School, Prenza National High School, Pulong Buhangin National High School, and Assemblywoman Felicita G. Bernardino Memorial Trade School.

After securing the permit, the researcher personally visited each school to request the participation of MAPEH teachers formally. During the visit, the purpose of the study was explained, with an emphasis on voluntary participation, confidentiality, and ethical considerations. Clear instructions on how to participate in the survey were provided to all respondents.

The quantitative data were collected first, allowing participants sufficient time to complete the survey instruments. Following this, the researcher conducted face-to-face interviews with selected 13 MAPEH teachers to gather qualitative data. Each interview lasted approximately 45 to 60 minutes, providing an opportunity for teachers to elaborate on their experiences and challenges in implementing digital pedagogy.

After the data collection, all instruments and interview notes were carefully checked for completeness and organized for coding and analysis. Throughout the process, ethical practices, including informed consent, anonymity, and secure handling of data, were strictly observed to ensure the integrity and credibility of the study.

## Statistical Treatment of Data

The data collected in this study were analyzed using both quantitative and qualitative statistical methods to answer the research questions effectively.

To assess the level of digital competency of MAPEH teachers in terms of technological knowledge, pedagogical knowledge, and technological-pedagogical integration, the researcher used a four-point Likert scale where respondents rated their agreement with each statement as follows:

| Scale | Description       | Interpretation                         |
|-------|-------------------|----------------------------------------|
| 4     | Strongly Agree    | The statement always applies to me.    |
| 3     | Agree             | The statement often applies to me.     |
| 2     | Disagree          | The statement sometimes applies to me. |
| 1     | Strongly Disagree | The statement rarely applies to me.    |

The responses were subjected to descriptive statistical analysis, including frequency counts, percentages, weighted means, and standard deviations, to determine the overall level of digital competency and the ratings for each

dimension. The interpretation of the weighted mean followed standard qualitative descriptors to categorize the competency level as low, moderate, or high.

Similarly, to determine the extent of technology integration in MAPEH instruction as perceived by teachers in terms of instructional planning, classroom implementation, and assessment practices, the responses were also measured using the same four-point Likert scale. The researcher applied descriptive statistics (frequency, percentage, weighted mean, and standard deviation) to summarize the data and identify which areas of technology integration were most and least evident in MAPEH instruction

For the qualitative component, the researcher employed thematic analysis as outlined by Braun and Clarke (2006) to analyze the open-ended responses regarding the challenges and enabling factors encountered by teachers in implementing digital pedagogy. The process involved familiarization with the data, generating initial codes, searching for patterns, reviewing themes, defining and naming subthemes, and formulating major themes. This approach allowed the researcher to systematically identify recurring ideas and insights, which complemented the quantitative findings and provided a more comprehensive understanding of teachers' experiences and perceptions.

## **Results and Discussion**

After analyzing and interpreting the data, the key findings of the study are:

1. The findings show that MAPEH teachers are highly competent in technological knowledge, pedagogical knowledge, and technological–pedagogical integration, with an overall mean of 3.56. This indicates that teachers possess strong digital skills and effectively combine technology with pedagogy in their teaching.
2. The findings show that MAPEH teachers consistently integrate technology across instructional planning, classroom implementation, and assessment practices, with an overall mean of 3.45 interpreted as Always. Technology use is most evident during classroom implementation and instructional planning, while assessment practices, although still consistently applied, show slightly lower utilization.
3. It indicates a very strong positive relationship ( $r = 0.82$ ,  $p < 0.001$ ) between MAPEH teachers' digital competency levels and the extent of technology integration. Since the relationship is statistically significant, the null hypothesis is rejected.
4. MAPEH teachers face challenges in implementing digital pedagogy, including technical issues, unstable internet, limited student access to devices, and low student digital literacy, which affect lesson delivery and engagement. Addressing these challenges requires a holistic approach involving teacher training, provision

of devices, reliable internet, and student digital skills development to ensure effective technology integration in MAPEH.

## **Conclusions**

**From the findings of the study, the following conclusions were drawn:**

1. MAPEH teachers are highly competent in technological knowledge, pedagogical knowledge, and technological–pedagogical integration, indicating that they possess the necessary digital skills to support effective teaching.
2. Teachers consistently use technology across instructional planning, classroom implementation, and assessment practices, with the highest utilization in classroom teaching and planning, showing their ability to apply digital tools in various teaching processes.
3. There is a very strong positive relationship between teachers' digital competency and their technology integration, confirming that higher digital skills significantly increase the likelihood of integrating technology in MAPEH instruction, leading to the rejection of the null hypothesis.
4. It can be concluded that the effective implementation of digital pedagogy in MAPEH is influenced by both teacher and student factors, including technological competence, access to devices, internet connectivity, and digital literacy. Therefore, addressing these interconnected challenges through comprehensive teacher training, improved infrastructure, and student digital skills development is essential to maximize the benefits of technology in teaching and learning.

## **Recommendations**

The study recommends the following:

1. MAPEH teachers should continue updating digital skills through online courses, webinars, and collaborative workshops to maintain high technological and pedagogical competency centered on digital quizzes, interactive rubrics, and online feedback tools, to match the high use observed in classroom teaching and planning. Also, they should share best practices with colleagues by demonstrating effective technology integration strategies in lesson planning, classroom activities, and assessment during Department Learning Action Cell.
2. Master Teachers, as instructional leaders should lead professional development sessions that model effective technological–pedagogical integration and mentor other teachers in using digital tools, especially in assessment practices where utilization is slightly lower. They should also monitor and evaluate technology integration initiatives to ensure that teaching practices align with modern digital competencies.
3. School Heads should provide support and resources such as hardware, software, and internet access to facilitate continuous and consistent technology integration in all MAPEH classrooms in the Annual Improvement Plan. Also, support the implementation of MAPEHUSAY Action Plan in the Department Learning Action Cell.

4. Education Program Supervisors of MAPEH should organize training programs and workshops to strengthen digital competency, ensuring all teachers are equipped with the necessary skills for technology integration. They should also conduct regular monitoring and assessment of technology use in MAPEH instruction to identify gaps and provide targeted support.

5. Future researchers are encouraged to examine the specific types of digital tools and platforms that most effectively enhance student engagement and learning outcomes in MAPEH. Additionally, qualitative studies exploring teachers' experiences in implementing the MAPEHUSAY Action Plan may provide valuable insights for refining and optimizing the plan for greater effectiveness.

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# **PAMPANGA LANGUAGE CHOICE AT HOME: A QUALITATIVE DESCRIPTIVE STUDY OF RURAL KAPAMPANGAN PARENTS' USE OF FILIPINO AND ENGLISH**

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## **Abstract**

This qualitative descriptive study explored Kapampangan parents' lived experiences of home language use and the perceived decline of the Kapampangan language in rural Pampanga. Using Reflexive Thematic Analysis, eight parents (P1–P8) were interviewed to examine their reasons for using Filipino and English, factors shaping language choice, perceptions of children's Kapampangan use, and attitudes toward the language. Findings show that English and Filipino dominate home interactions due to schooling demands, digital media exposure, and their perceived academic and social advantages. Although Kapampangan is valued as an identity marker, its daily use is inconsistent, resulting in children developing mostly receptive understanding. Parents identified barriers such as limited exposure, pronunciation difficulties, and correction-related shyness, yet noted openings through Kapampangan homework, family interactions, and intentional routines. These results highlight the influence of institutional prestige and media ecologies on language shift and underscore the need for supportive home–school practices to strengthen Kapampangan transmission.

**Keywords:** Kapampangan language, Home Language Use, Language Shift, Rural Communities

## **Introduction**

Language choice in the family domain is a critical driver of children's early linguistic socialization, identity formation, and intergenerational transmission of linguistic and cultural knowledge. In multilingual societies, parents often recalibrate household language practices toward dominant or high prestige languages that promise access to schooling, mobility, and media, thereby incrementally reassigning local or minority languages to narrower domains of use—a process widely theorized as language shift (Fishman, 1991; Curdt Christiansen, 2013). As the household remains the pivot of intergenerational continuity, “family language policy” (FLP) scholarship links parents' ideologies, management, and practices to broader sociopolitical structures and educational regimes, making the home a decisive site of language maintenance or attrition (Spolsky, 2012; Curdt Christiansen, 2018).

The Philippines exemplifies these dynamics. A linguistically diverse archipelago, it is home to roughly 175 living indigenous languages (alongside non indigenous languages), with Filipino and English as co official languages (Ethnologue; see also overview in Wikipedia for national classification context). In the 20th century, English achieved exceptional prestige through the public school system and nation building projects, while Filipino (Tagalog based) consolidated as a national lingua franca. Subsequent policies institutionalized bilingual education (1974) and later Mother Tongue Based Multilingual Education (MTB MLE) (2009/2012), reshaping the status of local languages in basic education (Tupas & Lorente, 2014; Department of Education [DepEd], 2012). While these shifts aimed to balance national cohesion, global competitiveness, and local inclusion, English continues to function as a mobility language in higher education and the labor market, potentially reinforcing parents' preference for English (and Filipino) in the home (Madrurnio et al., 2016; Manalastas, 2022).

Within Central Luzon, Kapampangan (also called Pampangan) is historically and culturally salient. Yet empirical and community-based accounts indicate shrinking domains and disrupted intergenerational transmission in some settings, especially among younger cohorts. For instance, Cruz (2020) reports tenuous sustainability (EGIDS 5) with threats in acquisition (A4), signaling family level transmission issues; Oda and Vizconde (2021) find Grade 5 pupils in Pampanga use both Kapampangan and Filipino but favor Filipino, hinting at an incipient shift; and recent local vitality assessments (e.g., Mabatang Kapampangan in Bataan) show limited functions and reduced child acquisition, despite positive attitudes (Pelagio & dela Rosa, 2023). Complementary ethnographic and sociolinguistic work points to lexical replacement and borrowing from Tagalog that may erode core vocabulary, reinforcing perceptions of Kapampangan's weakening everyday use (Pangilinan, 2009).

At the local scale of rural Pampanga communities, the household ecology—kin ties, ritual life, school expectations, media exposure, and livelihood demand—filters macro ideologies into everyday language practices. Parents weigh near term educational payoffs and wider communicative reach (Filipino/English) against long term cultural belonging (Kapampangan). MTB MLE policy frameworks formally elevate mother tongues in K–3, but implementation heterogeneity and English's enduring prestige can complicate family choices (DepEd, 2012, 2013; Madrunio et al., 2016). Understanding how parents in rural Kapampangan households rationalize language choice—what they value, what constrains them, and how they perceive the younger generation's use of Kapampangan—offers crucial, practice proximal insight for language maintenance, parent engagement, and school–community collaboration.

This study aims to describe how rural Kapampangan parents experience and respond to the gradual decline of Kapampangan in their homes. By exploring their daily language use, beliefs, and influencing factors, this research seeks to provide grounded insights that can guide efforts to support mother-tongue preservation and strengthen Kapampangan use among future generations.

## Theoretical Framework

This study is anchored on Family Language Policy (FLP) and Ethnolinguistic Vitality Theory, which together explain how families make language decisions within wider social, educational, and cultural environments. FLP highlights the interaction of language ideologies, language management, and language practices in the home, showing that parental beliefs, daily routines, schooling demands, and media exposure shape children's language experiences and patterns of transmission.

Ethnolinguistic vitality perspectives further explain why Kapampangan, despite its cultural importance, experiences reduced transmission when dominant languages—Filipino and English—carry higher institutional prestige, stronger media presence, and clearer academic advantages.

### Conceptual Paradigm (Input–Process–Output):

This study is guided by an Input–Process–Output (IPO) model that illustrates how parental beliefs, home routines, school demands, and media exposure shape daily language practices within Kapampangan families. These inputs influence the process of everyday language choices, interactions, and negotiation between parents and children, resulting in outcomes such as perceived gains or losses, identity meanings, and hopes or fears for the future use of Kapampangan.

**Figure 1.** presents the conceptual framework that guided this study.

| Input            | Process                | Output            |
|------------------|------------------------|-------------------|
| Parental beliefs | Daily language choices | Experienced       |
| Home routines    | Interactions           | gains/losses      |
| School demands   | Negotiation            | Identity meanings |
| Media exposure   |                        | Hopes/fears       |

**Figure 1.** *Input–Process–Output (IPO) Model of the Study.*

### The Problem

This study seeks to describe and interpret parents lived experiences of the perceived decline of the Kapampangan language in rural Pampanga, focusing on daily home language use, meanings attached to Kapampangan, influencing factors, consequences of shifting, and aspirations regarding the language's future.

### Statement of the Problem

Main Problem: What are the lived experiences of parents regarding the decline of the Kapampangan language in rural Pampanga?

Sub-questions:

1. What reasons do Kapampangan parents have for using Filipino and English with their children?
2. What factors influence their choice of language at home?
3. How do parents perceive the use of Kapampangan among the younger generation?
4. What are parents' attitudes toward using Kapampangan as a home language?

### **Scope and Delimitation of the Study**

This study examines how rural Kapampangan parents describe their home language use and the perceived decline of Kapampangan. It was conducted in selected rural barangays in Pampanga and involved parents or primary caregivers of children aged 3–18 through semi-structured interviews. The study focuses only on parental experiences, beliefs, and factors influencing language choice and does not measure children's actual language proficiency or compare different provinces or urban settings. Findings are context-specific, offering depth rather than generalizability to all Kapampangan communities.

### **Significance of Study**

This study is significant to several groups.

**Parents** will benefit from insights that help them reflect on their home language practices and understand how daily choices influence their children's use of Kapampangan.

**Teachers and schools** may use the findings to strengthen mother-tongue support, improve classroom strategies, and align home–school language expectations.

**Local communities and cultural organizations** can draw from the results to design programs that encourage Kapampangan use among younger generations.

**Policy makers**, particularly those involved in MTB-MLE, may use the evidence to address gaps between policy and actual home language practices. Finally,

**future researchers** may use this study as a reference for exploring language shift, family language policy, and mother-tongue revitalization in similar contexts.

## **Definition of Terms (Operational)**

**Kapampangan** - Refers to the regional mother tongue traditionally spoken in Pampanga. In this study, it specifically denotes the language parents report using—or not using—in their everyday communication at home.

**Filipino (Tagalog)**- The national lingua franca used in schools, media, and daily interaction. In this study, it refers to the language commonly chosen by parents for ease of communication and school alignment.

**English**- A high-prestige academic and mobility language in the Philippines, often acquired early through school, media, and digital exposure. In this study, it refers to the language parents use to support children's academic readiness. <sup>1</sup>

**Home Language**- Any language spoken by parents and children in the household for daily routines, interactions, discipline, homework, play, and communication.

**Language Choice**- Parents' decision-making process regarding when and why they use Kapampangan, Filipino, or English at home, shaped by beliefs, convenience, school expectations, and children's comprehension.

**Lived Experience**- Parents' first-hand stories about how they navigate language use at home, the challenges they encounter, and the meanings they attach to Kapampangan, Filipino, and English.

**Language Shift**- The gradual reduction of Kapampangan use in daily life, replaced by Filipino and English due to schooling demands, media exposure, and social pressures.

**Daily Language Practices**- The repeated, routine ways parents and children use languages at home, including mixing, switching, or prioritizing certain languages over others.

**Reflexive Thematic Analysis (TA)**- The qualitative method used in this study to identify themes across interview data through six recursive phases: familiarization, coding, theme generation, review, definition, and reporting.

## **Ethical Overview**

The study will obtain Research Ethics Committee approval consistent with PHREB (2022). Participants will provide informed consent; confidentiality and minimal risk procedures will be followed. Data privacy will comply with RA 10173 (2012).

his study adheres to established ethical standards for qualitative research, with particular emphasis on respect for persons, beneficence, and justice. Given that the research involves parents discussing household practices, cultural identity, and language choices, careful attention was given to ensuring voluntary participation, safeguarding confidentiality, and minimizing potential risks.

**Voluntary and Informed Participation.** All participants were fully informed about the study's purpose, procedures, expected time commitments, and their

rights as participants. Prior to data collection, each participant received a clear explanation of the study through an information sheet and was asked to provide written or verbal informed consent. Participants were reminded that their involvement was entirely voluntary and that they could withdraw at any time without penalty.

**Confidentiality and Anonymity.** To protect participant identity, no personally identifiable information was recorded in the interview transcripts or research reports. Pseudonyms were assigned, and all data were stored securely in encrypted, password-protected files accessible only to the researcher. Any potentially identifiable details—such as specific barangay names or references to local institutions—were generalized or removed when presenting findings.

**Minimization of Risk.** The study involved minimal risk, as participants were asked only to reflect on their language practices and attitudes. However, because language use can be tied to cultural pride, identity, and perceived social pressures, the researcher remained sensitive to discomfort or hesitation. Participants were assured that there were no right or wrong answers and that their perspectives would not be judged or evaluated.

**Cultural Sensitivity.** Recognizing Kapampangan identity as a meaningful cultural resource, the researcher approached all interviews with respect for local norms and linguistic preferences. Participants were allowed to choose the language(s) in which the interview was conducted—Kapampangan, Filipino, or English—to ensure comfort and authenticity in responses.

**Data Integrity and Responsible Reporting.** Data were transcribed and analyzed with fidelity to participants' meanings. Findings will be reported accurately, without selective representation or misinterpretation, and will be contextualized in ways that avoid reinforcing language hierarchies or stigmatizing linguistic practices.

**Ethical Clearance.** Prior to data collection, the study was submitted for review and received approval from the appropriate institutional ethics committee. All procedures complied with institutional and disciplinary guidelines for research involving human participants.

## **Methods**

### **Research Design**

This study used a qualitative descriptive research design to provide a straightforward and experience-near account of how rural Kapampangan parents describe their home language choices and the perceived decline of Kapampangan. This design is appropriate for studies aiming to capture participants' natural language and everyday interpretations with minimal abstraction (Sandelowski, 2000, 2010).



Data were analyzed using Reflexive Thematic Analysis following Braun and Clarke's (2006) six phases: familiarization, coding, theme generation, review, definition, and reporting. Interviews were conducted with parents or primary caregivers of children aged 3–18 from selected rural barangays in Pampanga. This approach allowed the researcher to explore patterns in parents' beliefs, routines, and influences affecting language choice in an inductive and reflective manner.

### **Research Setting**

This study was conducted in selected rural barangays in Pampanga, a province where Kapampangan remains widely used but is increasingly influenced by Filipino and English through schooling and media. Because participants lived in different barangays and had varying schedules, data were collected through a combination of phone interviews and face-to-face interviews. Phone interviews were conducted to ensure convenience, privacy, and accessibility for parents who preferred remote participation. Face-to-face interviews were held in participants' homes or in quiet barangay spaces, allowing for a more natural setting where parents could comfortably describe their everyday language practices. These combined modes of data collection provided flexible yet meaningful access to parents' lived experiences regarding their home language choices.

### **Respondents of the Study**

The respondents of this study were Kapampangan parents or primary caregivers residing in selected rural barangays in Pampanga. To be included, participants had to be at least 18 years old, identify as Kapampangan or having Kapampangan heritage, and have at least one child aged 3 to 18 years old. This age range was chosen because it captures early childhood to late adolescence, a period when home language exposure, school demands, and media influence strongly shape language preferences and use. The study employed purposive sampling to select information-rich participants whose experiences aligned with the research objectives. A total of eight (8) parents participated through face-to-face or phone interviews, providing flexible access to diverse household contexts. This sampling approach ensured adequate depth, consistent with qualitative research recommendations that prioritize information power over large sample.

### **Role of the Researcher and Reflexivity**

In this qualitative descriptive study, the researcher served as the primary instrument for data collection and analysis. This role required awareness of personal beliefs, assumptions, and prior experiences related to language, schooling, and Kapampangan culture. To minimize bias, the researcher maintained a reflexive stance throughout the study by keeping analytic memos, documenting decision points, and acknowledging how personal interpretations could influence coding and theme development. Consistent with reflexive thematic analysis, the researcher recognized that meaning-making is co-constructed and shaped by the researcher's positionality (Braun & Clarke, 2006). Interviews—conducted through face-to-face and phone conversations with parents—were approached with cultural sensitivity, neutrality, and openness. Reflexive journaling and ongoing

self-evaluation supported transparency and trustworthiness, ensuring that the parents lived experiences remained central to the interpretation of findings.

### **Data Gathering Tool**

The primary data-gathering tool for this study was a semi-structured interview guide developed specifically to explore parents' home language practices, beliefs, and perceptions of Kapampangan use. The guide included open-ended questions that prompted parents to describe their daily language routines, reasons for using Filipino and English, and observations of their children's use of Kapampangan. To ensure clarity and relevance, the interview questions were reviewed in relation to the study's research problems and were informed by concepts from Family Language Policy and language-shift literature. The guide was prepared in Kapampangan, Filipino, and English following standard translation and back-translation procedures to maintain meaning across languages (Brislin, 1970; Sousa & Rojjanasrirat, 2011). During data collection, the semi-structured format allowed flexibility for follow-up questions while ensuring that all essential topics were consistently explored across participants.

### **Data Gathering Procedures**

Data collection followed a systematic and ethical process to ensure the credibility and trustworthiness of the study. After securing approval from the Research Ethics Committee (REC), recruitment began through coordination with rural barangay officials and community contacts in Pampanga. Eligible participants—Kapampangan parents or primary caregivers who met the inclusion criteria—were invited and provided with clear information about the study's purpose and procedures. Informed consent was obtained prior to participation.

Interviews were conducted using a semi-structured interview guide, delivered through face-to-face or phone interviews, depending on the participant's preference and availability. Each interview took approximately 20–40 minutes and was audio-recorded with permission. Field notes were also taken to capture contextual details relevant to the interpretation of responses.

All interviews were transcribed verbatim. Personal identifiers were removed, and each participant was assigned a code (e.g., P1–P8) to ensure confidentiality. Audio files, transcripts, and related documents were stored in password-protected folders accessible only to the researcher.

### **Data Management and Security**

All data collected in this study were managed with strict attention to confidentiality, accuracy, and ethical standards. Audio recordings from both face-to-face and phone interviews were securely stored in password-protected digital folders accessible only to the researcher. After each interview, recordings were transcribed verbatim, and all identifying information—such as names, specific locations, and personal details—was removed or replaced with participant codes (e.g., P1–P8) to ensure anonymity.

Electronic files, including transcripts, demographic forms, and field notes, were kept in encrypted storage throughout the research process. Printed materials, if any, were stored in a locked container within the researcher's private workspace. In accordance with institutional and ethical guidelines, all raw data will be retained for the required period before being permanently deleted or securely destroyed.

These procedures ensured that participants' information remained confidential and protected at all times, consistent with the Data Privacy Act (RA 10173) and research ethics requirements.

### **Data Analysis**

Data were analyzed using Reflexive Thematic Analysis (RTA) following the six recursive phases outlined by Braun and Clarke (2006). First, the researcher engaged in familiarization by listening to audio recordings, reading transcripts repeatedly, and noting initial impressions. Second, initial codes were generated across the dataset, marking meaningful features related to parents' language decisions and perceptions. Third, coded segments were organized into candidate themes by identifying patterned meanings relevant to the research questions. Fourth, themes were reviewed and refined to ensure coherence, internal consistency, and distinctiveness. Fifth, themes were defined and named, clarifying each theme's central meaning and analytic boundaries. Finally, the sixth phase involved writing the analytic narrative, integrating data extracts and interpretation into the findings chapter.

Throughout this process, the researcher maintained a reflexive stance, recognizing that theme development is an interpretive act shaped by the researcher's insights and positionality, consistent with the principles of reflexive thematic analysis.

### **Statistical Treatment of Data**

As a qualitative study using reflexive Thematic Analysis, no inferential statistics are applied. Data are processed through rigorous qualitative coding and theme development; descriptive counts may be used sparingly to summarize data characteristics where appropriate.

### **Trustworthiness and Quality**

To ensure rigor in this qualitative descriptive study, trustworthiness was established through the criteria of credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Credibility was supported by careful transcription, prolonged engagement with the data, and the use of reflexive thematic analysis to capture meaningful patterns grounded in participants' accounts. Transferability was addressed by providing clear descriptions of the research setting, sampling criteria, and participant characteristics, enabling readers to judge the relevance of the findings to similar contexts. Dependability was ensured through consistent documentation of procedures, including interview protocols, coding decisions, and analytic memos. Confirmability was strengthened by maintaining reflexive notes and securely storing all data to ensure that interpretations were grounded in the participants' voices rather than researcher

bias. Together, these strategies helped produce trustworthy and ethically sound qualitative findings.

### **Ethical Considerations**

This study adhered to standard ethical guidelines to ensure the safety, dignity, and rights of all participants. Prior to data collection, the researcher obtained Research Ethics Committee (REC) approval and complied with all institutional requirements for conducting research with human participants. All respondents were informed about the purpose of the study, the voluntary nature of their participation, the approximate duration of the interview, and their right to withdraw at any time. Informed consent was obtained before conducting any face-to-face or phone interviews.

To maintain confidentiality, participants' names and identifying information were removed from transcripts and replaced with alphanumeric codes (e.g., P1–P8). Data privacy was strictly observed in accordance with the Data Privacy Act of 2012 (RA 10173); digital files were stored in password-protected devices, while any printed materials were secured in locked storage accessible only to the researcher. All audio recordings, transcripts, and documents will be stored for the required retention period and disposed of securely thereafter.

### **Limitations and Delimitations**

This study is delimited to Kapampangan parents or primary caregivers who have lived in Pampanga for more than ten years and have at least one child aged 3 to 18 years old. It focuses specifically on home language practices, parental beliefs, and perceptions of Kapampangan use, rather than measuring children's actual language proficiency or comparing urban and rural communities. The study is further bounded by its use of semi-structured interviews, which rely on self-reported experiences and may not capture all household language behaviors.

The limitations include the small purposive sample size, which prioritizes depth over breadth typical of qualitative research, and the reliance on translated interview materials, which may introduce subtle shifts in meaning despite careful handling. The use of both phone and face-to-face interviews also created differences in communication dynamics. As with all qualitative studies, findings are context-specific and are not intended to be generalized beyond similar rural Kapampangan settings.

### **Proposed Timeline**

The conduct of this study followed a sequenced timeline to ensure orderly completion of all research phases.

**Weeks 1–2:** Preparation of interview instruments; validation by two to three experts (e.g., FLP expert, language teacher, qualitative methods expert).

**Weeks 3–4:** Revision of the interview guide based on validators' feedback; polishing of consent form and recruitment script.

**Weeks 5–7:** Recruitment of participants and scheduling of interviews.

**Weeks 8–9:** Data collection through face-to-face and phone interviews.

**Weeks 10–11:** Transcription, de-identification, and initial coding.

**Weeks 12–14:** Reflexive Thematic Analysis (reviewing, defining, naming themes).

**Week 15:** Writing, revising, proofreading, and preparing the manuscript for submission.

*Expected Outputs:*

This study is expected to produce several key outputs that reflect the rigor of the qualitative descriptive design and the Reflexive Thematic Analysis process. First, a thematic map will be generated to visually represent the relationships among codes, subthemes, and overarching themes identified in the interviews. Second, a set of defined and clearly articulated themes will be presented, each supported by participant quotations and analytic explanations. Third, an analytic narrative integrating these themes will form the core of the Results and Discussion chapter, offering a coherent account of parents' language choices and perceptions. Finally, an audit trail will be maintained, documenting coding decisions, reflexive memos, data management steps, and analytic transitions to ensure transparency, dependability, and trustworthiness in the research process.

## **Results And Discussion**

This chapter presents the results of a reflexive Thematic Analysis (Braun & Clarke, 2006) of eight parent/caregiver interviews (P1–P8). The analysis addresses the study's questions on: (a) reasons for using Filipino/English with children; (b) factors influencing home language choice; (c) parents' perceptions of children's Kapampangan use; and (d) parental attitudes toward Kapampangan as a home language. Across the dataset, Tagalog and English emerged as practical default choices oriented toward schooling and communicative reach, while Kapampangan was valued for identity yet less consistently used in daily routines.

### **Overview of the Data set**

The dataset for this study consists of interview transcripts gathered from eight (8) Kapampangan parents or primary caregivers residing in rural barangays in Pampanga. All participants had lived in the province for more than ten years and had children aged 3 to 18 years old, allowing for a broad understanding of language use across different stages of childhood and adolescence. The dataset was generated through semi-structured interviews, conducted either face-to-face or via phone call, depending on participant availability and convenience. Each interview lasted approximately 20–40 minutes and explored parents' daily home language practices, beliefs about Filipino, English, and Kapampangan, and their observations of children's language behavior. The recorded interviews were transcribed verbatim, de-identified, and assigned participant codes (P1–P8). These transcripts served as the primary data source for coding and theme development in the Reflexive Thematic Analysis process, informing the thematic structure presented in this chapter.

## Thematic Map

| Theme 1                                                  | Theme 2                   | Theme 3                   | Theme 4                             |
|----------------------------------------------------------|---------------------------|---------------------------|-------------------------------------|
| School and screen decide                                 | Kapampangan matters, but. | Family language policy in | Barriers and opening of kapampangan |
| Central core<br>parent's home<br>language<br>experiences |                           |                           |                                     |

**Figure 2. Thematic Map of Parents' Home Language Experiences**

The thematic map illustrates how the four major themes in the study emerge directly from the central core of parents' home language experiences, with outward-pointing arrows showing that each theme is derived from what parents reported in the interviews. Theme 1, "School and Screen Decide," reflects parents' experiences with school language expectations and children's heavy exposure to Filipino- and English-dominant media, which strongly shape their daily language choices. Theme 2, "Kapampangan Matters, But...", emerges from parents' lived tension between valuing Kapampangan as an identity marker and deprioritizing it in practice due to the perceived advantages of Filipino and English. Theme 3, "Family Language Policy in Practice," arises from parents' descriptions of their actual routines, code-switching habits, and everyday interactions, revealing that home language use often defaults to Tagalog or English despite intentions to teach Kapampangan. Finally, Theme 4, "Barriers and Openings for Kapampangan," reflects parents' experiences of pronunciation difficulties, limited exposure, and children's shyness, as well as opportunities such as homework tasks and interaction with Kapampangan-speaking relatives. Together, the outward arrows in the map emphasize that these four themes branch out from and are fundamentally rooted in parents lived realities and decision-making about language use at home.

## Codebook Summary

To enhance analytic transparency, Table 4 summarizes the codes, analytic vignettes, and theme groupings generated from Participants P1–P8.

| Participants   | Codes / Vignettes (Analytic Summary)                                                                                                                                                                                           | Themes                                                                  |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| P1, P2, P8     | Parents prioritize Filipino and English due to school alignment, media exposure, and perceived advantages. English often develops earlier through YouTube; Tagalog is reinforced by community interactions and school mediums. | School and Screens Decide: Tagalog/English as Practical Choices         |
| P1, P7, P8     | Kapampangan is described as meaningful, tied to culture, belonging, and identity; however, it is not consistently used at home because other languages feel more practical.                                                    | “Kapampangan Matters, But...”: Identity Pride with Low Immediate Payoff |
| P1, P4, P8     | Home routines default to Tagalog; English dominates through media. Parents switch back to Filipino/English when children struggle, limiting productive Kapampangan use.                                                        | Family Language Policy in Practice: Habits and Mixed Inputs             |
| P2, P4, P7, P8 | Pronunciation correction from elders causes shyness; limited exposure results in insecure usage. Homework tasks and time with Kapampangan-speaking relatives provide natural learning opportunities.                           | Barriers and Openings for Kapampangan                                   |

**Table 1.** *Code–Vignette–Theme Matrix D.* Themes with Illustrative Extracts and Literature Links

### **Theme 1.** *School and Screens Decide: Tagalog/English as Practical, High-Utility Choices*

Parents consistently linked English to academic advantage and Tagalog to wider social reach. Early screen exposure front-loaded English vocabulary and discourse patterns, often outrunning parent intentions to begin with Tagalog/Kapampangan.

P1: "Right now, English, because he uses it in school. It's an advantage."

P2: "At home we speak Tagalog... even in Jollibee and on TV, the language is Tagalog."

P1: "He learned English from YouTube—nursery rhymes, educational content."

P8: "I usually speak to my children in Tagalog and sometimes English because that is what they hear most in school and on television."

This pattern reflects Family Language Policy evidence that parents orient home choices toward languages rewarded by schools and society; in the Philippine context, English's symbolic and economic power in the Philippines, documented by Madrunio et al. (2016), directly influences parental strategies that emphasize English at home to secure future advantages for their children. In addition, parents' descriptions of early English learning from nursery rhymes and videos reflect global and Philippine evidence showing that digital media serves as an "input amplifier" for majority languages. Pelagio & dela Rosa (2023) similarly found children shifted toward majority languages because Kapampangan exposure is not reinforced by digital media. In addition, Oda & Vizconde (2021) documented that school-aged kids in Pampanga use Filipino and English more than Kapampangan partly due to media reinforcement, reflecting your participants' claims that cartoons and YouTube dominate children's input.

## **Theme 2. "Kapampangan Matters, But...": Identity Pride with Low Immediate Payoff**

Participants affirmed Kapampangan's salience for belonging and place yet did not prioritize it in daily routines where Tagalog/English felt safer for school and public communication. Some anticipated gradual, later learning.

P1: "If you're in Pampanga, you should know Kapampangan."

P7: "Kapampangan is a beautiful language... I'm happy he's learning little by little when we go to the province."

P8: "Kapampangan is important for my child's identity... Even if they mainly use Filipino and English, learning Kapampangan can help them feel proud of their roots."

This ambivalence is consistent with research showing strong symbolic attachment to heritage languages alongside pragmatic shifts toward majority languages when these are perceived to deliver clearer academic and economic returns. As Pelagio & dela Rosa (2023) found communities express strong pride in Kapampangan identity, yet children still show low productive skills. The tendency of parents to postpone teaching the heritage language is common in language shift situations and is tied to beliefs that minority languages are "extra" or "supplementary" after school languages are mastered.

## **Theme 3. Family language policy in practice: habits, inconsistency, and mixed inputs**

Households typically defaulted to Tagalog; parents often code-switched back to Tagalog/English for clarity. Children commonly showed receptive knowledge of



Kapampangan but used it less productively. YouTube-accelerated English sometimes reversed parents' original plans.

P4: "At home... Tagalog... [child] understands Kapampangan but can't speak it fluently."

P1: "We planned Tagalog first, but it ended up reversed—he learned English first because of YouTube."

FLP theory shows that even when ideology is pro-Kapampangan, management (planning) and practice (daily habits) may not align. Parents default to Tagalog due to ease, habit, and communicative efficiency.

#### **Theme 4. Barriers and Openings for Kapampangan**

Barriers included pronunciation/intonation anxieties, limited daily exposure, and parental linguistic insecurity, often resulting in switching back to Tagalog/English. Openings included homework-based practice, time with Kapampangan-speaking kin, and staged routines (deferred teaching).

P2: "Some older Kapampangans correct them... sometimes they feel shy, so they prefer Tagalog."

P8: "They are not very familiar with Kapampangan... more exposed to Filipino and English... I often switch back to Filipino or English so communication is easier."

P1: "If he has assignments in Kapampangan, I make him read it and teach pronunciation and meaning."

P7: "He learns when we spend time in the province where Kapampangan is widely used."

P8: "I would like them to learn Kapampangan in the future when they are older and can understand it better."

#### **Cross-Question Alignment of Findings**

RQ1 (reasons): Schooling and media (Theme 1) drive Tagalog/English at home.

RQ2 (factors): Institutional (school medium), sociocultural (community norms/intermarriage), and digital (YouTube/TV) influences converge (Themes 1 & 3).

RQ3 (perceptions): Children show receptive but limited productive Kapampangan; pronunciation/intonation issues and shyness are common (Theme 4).

RQ4 (attitudes): Identity pride with low instrumental payoff leads to ambivalence (Theme 2).

#### **Theory-Supported Evidence**

Findings cohere with Family Language Policy scholarship that parents align home practices with institutional prestige and assessment regimes; in the Philippine setting, English remains a mobility language and Tagalog the national lingua franca. Mother Tongue–Based Multilingual Education (MTB-MLE) emphasizes home reinforcement, and vitality studies highlight intergenerational, naturalistic exposure as protective for transmission.

## **Trustworthiness and Reflexivity**

Consistent with reflexive TA, themes are researcher-generated analytic interpretations grounded in iterative familiarization and coding. Credibility was supported by varied extracts; transferability by thick contextual description; dependability/confirmability by documenting theme boundaries and analytic decisions.

## **Limitations**

The purposive sample (eight participants) is context-bound; translated materials may soften nuance in code-switching. One participant (P8) provided structured, shorter responses; nevertheless, P8 triangulated patterns evident across longer interviews.

## **Implications and Recommendations**

For families: adopt 10-minute Kapampangan-only routines (mealtime/storytime), use homework as pronunciation practice, and curate Kapampangan songs/stories alongside English/Tagalog. For schools: normalize visible Kapampangan use in routines and provide take-home pronunciation supports. For communities: host intergenerational story circles that encourage low-pressure production without public correction.

## **Conclusion**

Parents prioritize Tagalog/English for schooling and reach while valuing Kapampangan for identity. Media and school ecologies set practical defaults; yet targeted, low-pressure routines at home and in school can reopen acquisition pathways and strengthen intergenerational continuity for Kapampangan.

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# **DEVELOPMENT OF A TAILORED COMPETENCY FRAMEWORK AS A KEY MECHANISM IN INTENSIFYING THE LEARNING ACTION CELL IN ELEMENTARY SCHOOLS**

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## **Abstract**

This study aimed to develop a tailored competency framework as a key mechanism for Master Teachers serving as Learning Action Cell (LAC) facilitators to ensure the quality implementation of LACs in elementary schools. Specifically, it assessed the implementation of LAC, identified the stumbling blocks encountered by Master Teachers, developed a localized competency framework, and determined its perceived acceptability. The study employed a mixed-method research design and qualitative-thematic approach supported by descriptive analysis to examine the experiences, strategies, and insights of teachers and Master Teachers in LAC implementation. Findings revealed that the implementation of LAC across its major phases was highly evident, with planning and preparation ( $M = 3.64$ ), facilitation and implementation ( $M = 3.68$ ), and application, monitoring, and evaluation ( $M = 3.60$ ), all interpreted as Strongly Agree/Highly Evident. Despite this strong implementation, eight significant themes emerged as major challenges and adaptive strategies namely time management and workload pressures, attitudinal and motivational resistance, resource and logistical constraints, reduced collaborative effectiveness, compromised session quality and relevance, strategic and advance planning, resourcefulness and adaptability, and interpersonal and facilitation skills. These findings indicated that while Master Teachers face persistent barriers in facilitating LAC sessions, they employ strategic and adaptive mechanisms to sustain its implementation. Grounded on these findings, the study developed the EMPOWER localized competency framework, which stands for Establishing the Training Needs, Making the Objectives, Outputs, and Outcomes, Plotting the Matrix of the Training, Operationalizing the LAC Plan, Wrapping Up the Training Essence, Employing Knowledge and Skills Gained, Revisiting Training's Implications, and Recognizing Teachers' Efforts. The framework provides a structured, needs-based, and context-responsive guide for planning, facilitating, implementing, monitoring, and evaluating LAC sessions. Moreover, the perceived acceptability of the developed framework yielded an overall weighted mean of 3.72, interpreted as Highly Acceptable, indicating strong agreement among Master Teachers regarding its relevance, clarity, and applicability in LAC facilitation. The study concluded that the EMPOWER framework is a practical and responsive model that can strengthen teacher collaboration, professional growth, and the quality of LAC implementation. It is recommended that schools adopt and institutionalize the framework to support sustainable and effective teacher professional development.

**Keywords:** learning action cell implementation, EMPOWERR localized competency framework, master teacher facilitation competencies, teacher professional development, collaborative professional learning

## **Introduction**

The quality of education is fundamentally anchored on the quality of teaching, making teacher professional development an essential component in improving learner outcomes. The Department of Education (DepEd) strongly recognizes that the effectiveness of teaching significantly influences the quality of learning; hence, it continuously promotes programs that support the professional and personal growth of teachers. Empirical studies have consistently shown that participation in professional development activities positively influences teachers' beliefs, instructional practices, students' learning, and the successful implementation of educational reforms. In response to this, DepEd institutionalized the Learning Action Cell (LAC) as a school-based continuing professional development strategy under the K to 12 Basic Education Program, grounded on the principle of lifelong learning and the commitment to maximizing teachers' professional potential (DepEd Order No. 35, s. 2016).

A Learning Action Cell (LAC) is defined as a group of teachers who engage in collaborative learning sessions to address common challenges encountered in the school, facilitated by the school head or a designated LAC leader (DepEd Order No. 35, s. 2016). As emphasized by Luistro (2016), LAC fosters collaborative planning, problem-solving, and action implementation among teachers, establishing a community of practice that enhances teaching effectiveness and promotes holistic student development. In elementary schools, LAC serves as a practical mechanism in operationalizing the Philippine Professional Standards for Teachers (PPST), particularly in strengthening competencies in content knowledge and pedagogy, curriculum planning, assessment, and professional growth.

Despite its institutionalization and intended benefits, the implementation of LAC in public elementary schools continues to face several challenges. Studies by Sales (2024) revealed that while teachers demonstrate high engagement in LAC activities such as group discussions and collaborative action planning, they encounter difficulties related to schedule conflicts, limited ICT competence, resource constraints, and topic prioritization. Similarly, Grape (2024) found that although teachers recognize LAC as a collaborative and necessary professional development strategy, many perceive it as an additional burden due to overwhelming workloads, limited time, and inadequate instructional resources. These findings suggest that the quality and consistency of LAC implementation remain affected by contextual and operational barriers.

In the local district/school context, the implementation of LAC likewise manifests inconsistencies due to the absence of a clear and contextualized competency framework for facilitators, particularly Master Teachers who often assume the role

of LAC leaders. Variations in school resources, teacher expertise, and monitoring practices have resulted in uneven implementation quality and, in some cases, compliance-driven sessions rather than meaningful professional engagement. Monitoring observations further revealed insufficient alignment of LAC sessions with actual teacher competency needs, as existing professional development initiatives tend to be generalized and less responsive to identified instructional gaps.

While previous studies have extensively explored the effectiveness, challenges, and impact of LAC implementation, there remains limited literature on the development of a localized competency framework specifically designed for Master Teachers serving as LAC facilitators. Moreover, there is a notable scarcity of contextualized frameworks that comprehensively integrate planning, facilitation, monitoring, and evaluation processes within elementary school settings. This gap underscores the necessity of establishing a structured and responsive framework that will strengthen the quality and sustainability of LAC implementation.

In view of these circumstances, this study is conceptualized to develop a tailored competency framework as a key mechanism for Master Teachers serving as Learning Action Cell facilitators in elementary schools. Specifically, the study introduces the EMPOWER Framework—Establishing training needs, Making objectives, Plotting the training matrix, Operationalizing the LAC plan, Wrapping up training essence, Employing learning, Revisiting training implications, and Recognizing teachers' efforts—as a localized model for year-round monitoring and evaluation of LAC implementation. Through this framework, the study aims to intensify LAC practices, ensure contextualized professional development, and promote sustained improvement in teaching and learning outcomes.

### **Statement of the Problem**

How can a tailored competency framework be developed as a key mechanism for Master Teachers, acting as LAC facilitators, to ensure the quality implementation of Learning Action Cells (LACs) in elementary schools?

Specifically, this study seeks to answer the following questions:

1. How can the implementation of Learning Action Cells by Master Teachers be assessed?
2. What are the stumbling blocks faced by Master Teachers in conducting Learning Action Cells?
3. How can a tailored competency framework be developed to guide Master Teachers in facilitating LACs?
4. What is the perceived acceptability of the developed Tailored Competency framework among Master Teachers?

## **Objectives of the Study**

This study aimed to develop a tailored competency framework as a key mechanism for Master Teachers serving as Learning Action Cell (LAC) facilitators to ensure the quality implementation of LACs in elementary schools. The participant of the study is the purposively identified 10 Master Teachers and 25 Teacher respondents among the identified schools where presence of Master Teachers is available by Plantilla. Purposive sampling was used in the study.

Specifically, it sought to:

1. Assess the implementation of Learning Action Cells (LACs) by Master Teachers in terms of planning, facilitation, and post-session practices;
2. Identify the stumbling blocks encountered by Master Teachers in conducting Learning Action Cells;
3. Develop a tailored competency framework to guide Master Teachers in facilitating effective and quality LAC sessions; and
4. Determine the perceived acceptability of the developed tailored competency framework among Master Teachers.

## **Research Instrument**

This study utilized two sets of survey questionnaires as the primary instruments for data collection. These instruments were anchored on the policy guidelines of the Philippine Professional Standards for Teachers (PPST) and the implementation of Learning Action Cells (LACs).

The first set of survey questionnaire focused on the assessment of LAC implementation and consisted of three parts: Part I contained the demographic profile of the respondents; Part II included a checklist assessing the implementation of LAC across three phases: (A) Before the LAC Session (Planning and Preparation), (B) During the LAC Session (Facilitation and Implementation), and (C) After the LAC Session (Application, Monitoring, and Evaluation); and Part III comprised open-ended interview guide questions designed to identify the stumbling blocks encountered by Master Teachers in conducting LAC sessions.

The second set of survey questionnaire focused on the development and validation of the tailored competency framework. It consisted of Part I, which gathered the profile of Master Teachers, and Part II, which contained the Perceived Acceptability Checklist with the attached rationale of the generalized LAC framework and the developed EMPOWERR Tailored Competency Framework.

To establish reliability, the researcher conducted a pilot test among selected teachers who were not included in the actual respondents. The instrument obtained a Cronbach's alpha coefficient of 0.79, indicating acceptable reliability and good internal consistency, confirming its suitability for the study. Furthermore, the instruments were subjected to content validation by the Division Research Coordinator, School Head, and an alternate District/School Research



Coordinator to ensure their validity, clarity, and appropriateness for the research purpose.

### **Data Gathering Procedure**

Prior to the conduct of the study, the researcher secured a letter of permission from the Schools Division Superintendent of the Schools Division of Aklan, for the information and consent also of the Public Schools District Supervisor, Head of Schools and Teachers of Ibajay West District.

Upon approval, the researcher administered two sets of survey questionnaires to the identified participants using purposive sampling. The first set of survey questionnaire, intended to address Statement of the Problem (SOP) 1, 2, and 3, was distributed to five (5) Master Teachers and twenty-five (25) Teachers from selected elementary schools to assess the implementation of Learning Action Cells (LACs) and identify the challenges encountered in conducting LAC sessions. This set also included open-ended interview guide questions to gather qualitative data regarding the stumbling blocks experienced by Master Teachers. In addition, interviews were conducted with the five (5) Master Teacher participants and three (3) teacher participants to enrich the data gathered.

The second set of survey questionnaire, which focused on the perceived acceptability of the developed tailored competency framework, was administered to the remaining five (5) Master Teachers.

The researcher personally distributed the survey questionnaires to ensure that participants were properly oriented regarding the purpose of the study and the instructions for answering each part of the instrument. Participants were given two to three weeks to complete the questionnaires for sufficient and accurate responses.

After retrieval, the data were organized, tallied, and analyzed using descriptive statistics for quantitative data and thematic analysis for qualitative responses to generate relevant codes and themes. All collected data were treated with strict confidentiality, respect, and ethical consideration throughout the study.

### **Data Analysis**

This study utilized descriptive statistics, specifically weighted mean, mean average, and standard deviation, to analyze the quantitative data gathered from the survey questionnaires. These statistical tools were used to assess the implementation of Learning Action Cells (LACs) and determine the perceived acceptability of the developed tailored competency framework.

For the qualitative data obtained through open-ended questions and interview responses, thematic analysis was employed to identify, code, and generate emerging themes from the participants' experiences and insights.

To interpret the results, a four-point Likert scale was used, where 4 indicates *Strongly Agree/Highly Evident/Highly Acceptable*, 3 indicates *Agree/Evident/Acceptable*, 2 indicates *Disagree/Slightly Evident/Unacceptable*, and 1 indicates *Strongly Disagree/Not Evident/Highly Unacceptable*. This scale served as the basis for describing the level of implementation and acceptability of the competency framework.

### **Ethical Considerations**

This study strictly observed ethical standards in the conduct of the research. Prior to data collection, formal permission was secured from the Schools Division Superintendent, for the information also of the Public Schools District Supervisor, Head of Schools and Teachers of Ibajay West District. Participants were informed of the purpose of the study, and their voluntary participation was sought through informed consent. They were assured that their responses would be treated with strict confidentiality and anonymity, and that all information gathered would be used solely for academic and research purposes. Participants were also given the freedom to withdraw from the study at any point without any consequences. Throughout the research process, the principles of respect, integrity, privacy, and fairness were upheld to ensure the ethical protection of all participants.

### **Significance of the Study**

**Master Teachers.** This study provides Master Teachers with a structured framework to strengthen their skills in planning, facilitating, monitoring, and evaluating LAC sessions.

**Teachers.** This study helps teachers improve their participation in LAC sessions and enhance their professional knowledge, skills, and collaboration.

**Learners.** Improved teaching practices from effective LAC implementation may lead to better learner engagement, academic performance, and holistic development.

**School Administration.** The study offers school heads a guide for improving, monitoring, and sustaining school-based professional development through quality LAC implementation.

**Department of Education (DepEd).** The findings may help DepEd identify gaps in the current LAC framework and support the development of localized and contextualized policies.

**Future Researchers.** This study may serve as a reference for future research on competency frameworks, professional development, and localized LAC implementation.

## **Scope and Delimitations**

This study focused on the development of a localized competency framework for Master Teachers serving as Learning Action Cell (LAC) facilitators in the District of Ibajay West, Schools Division of Aklan, during the School Year 2025–2026, specifically in the third and fourth quarters. The study involved 10 regular-permanent public elementary Master Teachers and 25 proficient Teachers from selected schools in the district.

Although the district is composed of 16 public elementary schools, the study was delimited to six purposively selected schools with existing Master Teacher I and II Plantilla positions, namely: Aquino Elementary School, Ibajay Central School, Maloco Elementary School, Ondoy Elementary School, Sta. Cruz Elementary School, and Tagbaya Elementary School, all located in Ibajay.

The study was limited to assessing the existing practices, challenges, and competency needs of Master Teachers as LAC facilitators as basis for developing the EMPOWER Framework. It did not cover secondary schools, non-teaching personnel, or schools without Master Teacher positions. Likewise, the study was confined to the district context; hence, the findings may not be generalized to other districts or divisions with different educational settings.

## **Method**

### **Research Design**

This study employed a mixed methods research design to comprehensively investigate the development of a tailored competency framework as a key mechanism in intensifying the implementation of the Learning Action Cell (LAC) in elementary schools. Mixed methods research combines both quantitative and qualitative approaches to provide a deeper and more comprehensive understanding of a research problem. According to Ahmed et al. (2024), this design enables researchers to triangulate data, validate findings, and explore complex phenomena from multiple perspectives.

The quantitative component of the study was used to gather measurable data on the profile of Teachers and Master Teachers, as well as their perceived acceptability of the developed competency framework. This provided numerical evidence to support the analysis of participants' responses.

On the other hand, the qualitative component was utilized to assess the current implementation of LAC, identify challenges encountered, and explore the competency needs of Master Teachers as LAC facilitators through interviews and open-ended responses. This approach provided in-depth insights into participants' experiences, practices, and perceptions.

By integrating both quantitative and qualitative data, the study ensured a more systematic, contextualized, and evidence-based development of the EMPOWERR Framework.

### Participants/Respondents of the Study

The study involved 35 public elementary school teachers from the District of Ibajay West, Schools Division of Aklan, during School Year 2025–2026. These included 10 highly proficient Master Teachers and 25 proficient Teachers from six selected elementary schools where Master Teachers are assigned. The participants were directly involved in the planning, facilitation, and implementation of Learning Action Cell (LAC) sessions, making them relevant to the study.

Master Teachers served as the primary respondents due to their role as LAC facilitators and their direct experience in identifying teacher needs, leading sessions, and monitoring implementation. Teachers served as secondary respondents, providing insights on the challenges, implementation, and acceptability of the proposed competency framework. Purposive sampling was used to ensure that only participants with actual LAC involvement and relevant experience were included in the study

### Results And Discussions

Assessment on the Implementation of Learning Action Cells Before LAC Session

**Table 1.** *Assessment on the Implementation of Learning Action Cells (A) Before the LAC Session (Planning and Preparation)*

| No. | Indicators                                                                                         | Weighted Mean | Standard Deviation | Verbal Interpretation             |
|-----|----------------------------------------------------------------------------------------------------|---------------|--------------------|-----------------------------------|
| 1   | Professional development needs of teachers are properly identified before conducting LAC sessions. | 3.79          | 0.41               | Strongly Agree/<br>Highly Evident |
| 2   | Classroom observation results are utilized in identifying LAC topics.                              | 3.26          | 0.96               | Strongly Agree/<br>Highly Evident |
| 3   | Teachers' self-assessment results are considered in planning LAC activities.                       | 3.71          | 0.46               | Strongly Agree/<br>Highly Evident |
| 4   | Learner assessment results are used as basis for identifying instructional concerns.               | 3.79          | 0.41               | Strongly Agree/<br>Highly Evident |
| 5   | Priority topics for LAC sessions are collaboratively determined by members.                        | 3.70          | 0.46               | Strongly Agree/<br>Highly Evident |

|              |                                                                                                    |      |      |                                   |
|--------------|----------------------------------------------------------------------------------------------------|------|------|-----------------------------------|
| 6            | LAC groups are organized according to teachers' professional needs and specialization.             | 3.63 | 0.58 | Strongly Agree/<br>Highly Evident |
| 7            | Appropriate interventions and learning resources are identified before the conduct of the session. | 3.58 | 0.58 | Strongly Agree/<br>Highly Evident |
| 8            | The schedule and frequency of LAC sessions are properly communicated to members.                   | 3.71 | 0.46 | Strongly Agree/<br>Highly Evident |
| 9            | A written LAC Plan is prepared and documented before implementation.                               | 3.71 | 0.46 | Strongly Agree/<br>Highly Evident |
| 10           | Monitoring and evaluation procedures are clearly indicated in the LAC Plan.                        | 3.63 | 0.49 | Strongly Agree/<br>Highly Evident |
| MEAN AVERAGE |                                                                                                    | 3.64 | 0.52 | Strongly Agree/<br>Highly Evident |

*Legend Scale: 4=Strongly Agree, 3=Agree, 2=Disagree, 1=Strongly Disagree*

Table on the implementation of LAC assessment before the session has 10 important indicators. All indicators indicated Strongly Agree/Highly Evident implementation. The highest weighted mean identified was M=3.79 with Strongly Agree/Highly Evident implementation on indicator 1 or the Professional development needs of teachers are properly identified and indicator 4 or Learner assessment results are used as basis for identifying instructional concerns, While the lowest mean identified with weighted M= 3.26 or Strongly Agree/ Highly Evident was indicator 2 that tells about classroom observation results are utilized in identifying LAC topics.

This simply implies that most of the teachers highlight the importance of identifying professional development training needs as well as used learner assessment results as basis of LAC planning and preparation. However, although classroom observation results were highly utilized by the teachers, the need to strengthen its utilization by making its objectives, outputs and outcomes clearer, well-guided, attainable and result-oriented.

These findings are supported by the study of Linda Darling-Hammond et al. (2017), which emphasized that effective professional development begins with identifying teachers' learning needs and aligning activities with instructional demands. This suggests that systematic preparation and collaborative planning are crucial foundations for successful LAC implementation and sustained teacher development.

## Assessment on the Implementation of Learning Action Cells During LAC Session

**Table 2.** *Assessment on the Implementation of Learning Action Cells (B) During the LAC Session (Facilitation and Implementation)*

| No.          | Indicators                                                                                                           | Weighted Mean | Standard Deviation | Verbal Interpretation             |
|--------------|----------------------------------------------------------------------------------------------------------------------|---------------|--------------------|-----------------------------------|
| 1            | The objectives of the LAC session are clearly explained by the facilitator.                                          | 3.75          | 0.44               | Strongly Agree/<br>Highly Evident |
| 2            | Learning activities conducted during the session are relevant to teachers' needs.                                    | 3.75          | 0.44               | Strongly Agree/<br>Highly Evident |
| 3            | Master Teachers effectively facilitate collaborative discussions among participants.                                 | 3.67          | 0.48               | Strongly Agree/<br>Highly Evident |
| 4            | Teachers actively participate during LAC activities and discussions.                                                 | 3.71          | 0.46               | Strongly Agree/<br>Highly Evident |
| 5            | Different professional learning activities such as coaching, workshops, demonstrations are utilized during sessions. | 3.63          | 0.49               | Strongly Agree/<br>Highly Evident |
| 6            | Instructional materials and resources are appropriately used during the session.                                     | 3.63          | 0.49               | Strongly Agree/<br>Highly Evident |
| 7            | The facilitator encourages sharing of best practices and classroom experiences.                                      | 3.71          | 0.49               | Strongly Agree/<br>Highly Evident |
| 8            | The session provides opportunities for collaborative problem-solving and reflection.                                 | 3.71          | 0.49               | Strongly Agree/<br>Highly Evident |
| 9            | Individual and group action plans are developed at the end of the session.                                           | 3.58          | 0.50               | Strongly Agree/<br>Highly Evident |
| 10           | Monitoring of participation and implementation of activities is conducted during the session.                        | 3.71          | 0.46               | Strongly Agree/<br>Highly Evident |
| MEAN AVERAGE |                                                                                                                      | 3.68          | 0.47               | Strongly Agree/<br>Highly Evident |

*Legend Scale: 4=Strongly Agree, 3=Agree, 2=Disagree, 1=Strongly Disagree*

Table on the assessment of LAC implementation before the LAC Session showed Mean Average 3.68 or Strongly Agree/Highly Evident interpretation on facilitation and implementation at 0.47 Standard Deviation. The highest weighted mean indicated M=3.75 or Strongly Agree/ Highly Evident implementation particularly on indicators 1, with clearly explained objectives by the LAC facilitator as well as the learning activities conducted are relevant to teacher's needs. Indicator 9 or individual and group action plans are developed at the end of the session was indicated to be the lowest mean that has still a favorable Strongly Agree/Highly Evident implementation results experienced by most of the respondents. This implies that the need to strengthen its development by providing well guided sample individual and group actions plans and intensive coaching and mentoring, proper follow-up on its implementation and monitoring and evaluation is highly necessary to ensure a more improved quality result.

Relating to other indicators pertaining to teachers actively participation, sharing of best practices and classroom experiences, session provided opportunities for collaborative problem-solving and reflection, and monitoring of participation and implementation of LAC activities were also evident during this phase indicating a weighted mean of M=3.71 with Strongly Agree/Highly Evident implementation also.

Gutierrez (2017) found that collaborative professional development through lesson study significantly strengthened teachers' professional culture by promoting collaboration, reflective practice, and continuous learning. The similarity of findings confirms that structured collaborative sessions and reflective learning activities are effective mechanisms for strengthening teacher competencies and sustaining professional development.

Assessment on the Implementation of Learning Action Cells After the LAC Session

**Table 3.** *Assessment on the Implementation of Learning Action (C) After the LAC Session (Application, Monitoring and Evaluation)*

| No. | Indicators                                                                      | Weighted Mean | Standard Deviation | Verbal Interpretation          |
|-----|---------------------------------------------------------------------------------|---------------|--------------------|--------------------------------|
| 1   | Teachers apply the strategies learned from the LAC session in their classrooms. | 3.71          | 0.46               | Strongly Agree/ Highly Evident |
| 2   | Teachers evaluate the effectiveness of the implemented strategies.              | 3.58          | 0.50               | Strongly Agree/ Highly Evident |
| 3   | Teachers share feedback and experiences after implementing LAC activities.      | 3.67          | 0.48               | Strongly Agree/ Highly Evident |

|              |                                                                                            |      |      |                                   |
|--------------|--------------------------------------------------------------------------------------------|------|------|-----------------------------------|
| 4            | Follow-up discussions are conducted to assess the success of interventions.                | 3.50 | 0.51 | Strongly Agree/<br>Highly Evident |
| 5            | LAC facilitators monitor the implementation of agreed classroom practices.                 | 3.50 | 0.51 | Strongly Agree/<br>Highly Evident |
| 6            | School heads provide support through classroom observations and feedback.                  | 3.63 | 0.49 | Strongly Agree/<br>Highly Evident |
| 7            | Teachers demonstrate improvement in instructional practices after LAC participation.       | 3.58 | 0.50 | Strongly Agree/<br>Highly Evident |
| 8            | The LAC contributes to improve learner performance and engagement.                         | 3.71 | 0.46 | Strongly Agree/<br>Highly Evident |
| 9            | Documentation and evaluation reports of LAC activities are regularly prepared.             | 3.58 | 0.50 | Strongly Agree/<br>Highly Evident |
| 10           | The results of monitoring and evaluation are used for future LAC planning and improvement. | 3.67 | 0.48 | Strongly Agree/<br>Highly Evident |
| MEAN AVERAGE |                                                                                            | 3.60 | 0.49 | Strongly Agree/<br>Highly Evident |

*Legend Scale: 4=Strongly Agree, 3=Agree, 2=Disagree, 1=Strongly Disagree*

Table on assessment of the implementation of LAC after the activity session showed an overall Mean Average of M=3.60 or Strongly Agree/Highly Evident implementation on the application, monitoring and evaluation of LAC processes. The highest weighted mean indicator with M=3.71 or Strongly Agree/ Highly Evident revealed the teacher's application of the strategies learned from the LAC session in their classroom that contributes to the improvement of learner's performance and engagement. It is noted also that many of the teachers agreed the same that they also evaluated the effectiveness of the implemented strategies, demonstrated improvement in instructional practices and conduct regular documentation and evaluation reports of LAC activities. On the other hand, the lowest weighted mean identified fall on indicator 4 were follow-up discussions to assess the success of intervention was also conducted and that LAC facilitators monitored the implementation of agreed classroom practices indicated M=3.50 of Strongly Agree/Highly Evident monitoring and evaluation practices.

This also implies that although there is a favorable result of the LAC application, monitoring and evaluation after the session, the need to assess the training impact



is also necessary by revisiting trainings implications. Likewise, appreciation of everyone's efforts and successes is usually lacking and taken for granted. So, it is also necessary to start recognizing every teachers' efforts as a motivation through an exit program.

A related study by Jan D. Vermunt et al. (2019) supports the present findings on the post-implementation phase of the Learning Action Cell (LAC). Their study on Lesson Study found that teachers who applied learned strategies, reflected on their effectiveness, and engaged in follow-up collaborative discussions showed significant improvement in instructional practices and professional learning. The study emphasized that monitoring, evaluation, and reflective feedback are essential in sustaining teacher growth and improving learner outcomes. This aligns with the present findings where respondents strongly agreed that teachers apply LAC strategies, evaluate their effectiveness, share feedback, and use monitoring results for future planning.

## **Qualitative Results**

### **Stumbling Blocks Faced by Master Teachers/Teachers in Conducting Learning Action Cells**

#### **Theme 1. Time Management and Workload Pressures**

Time management and workload pressures are one of the most common difficulties encountered by both teachers and Master Teachers in conducting LAC.

To Note:

*“ Limited time preparation, lack of interest of some co-teachers, limited resources and lack of support system by the school head in school.” (R1) “ The most common hurdles are severe time constraints due to heavy teacher workloads, widespread teacher fatigue, and a compliance-driven mindset where participants view the session as a mandatory chore rather than an opportunity for growth. Additionally, balancing the wide gap in digital literacy and pedagogical skills among a multi-generational teaching staff makes finding a one-size fits all topic difficult.” (R4) “Scheduling conflicts due to teachers heavy workloads and numerous school activities, limited time for meaningful discussions and balancing different learning needs and interest of participants.” (R5) “Difficulties commonly encounter when conducting LAC are resources, time management and resistance to new ideas.” (R6) “ Managing time, conflicting schedules, experiencing low participation among teachers due to hesitant, varied learning needs making it difficult to design sessions that are relevant to all. As well as limited resources and materials and some teachers resist adopting new teaching strategies instead continue to use the traditional method.” (R7)*

These only shows the systemic time-binds educators experienced, including heavy daily workloads, teacher fatigue, numerous school activities, and limited preparation time in conducting LAC sessions.

Hammond et al. (2017) supports this finding, emphasizing that time, sustained engagement, and organizational support are critical elements for effective teacher professional development. Their study found that excessive workload, limited time, and lack of institutional support often hinder teachers' active participation in professional learning activities. These findings suggest that without proper time allocation, administrative support, and manageable workloads, the effectiveness of LAC as a collaborative professional development mechanism may be compromised.

Researcher believes that with the help of the localized framework on LAC, through establishing training needs, making clear objectives, operationalizing the LAC plan, and revisiting the year round monitoring and evaluation on LAC utilizing the contextualized framework, will helps address time constraints, workload pressures, and participation issues.

## **Theme 2.** Attitudinal and Motivational Resistance

We cannot deny the fact that some teachers in school experiencing attitudinal and motivational resistance during LAC implementation.

To Note:

*“Negativity in embracing changes in the program, not interested in listening especially those retireable.” (2) Some teachers view it also as an additional burden rather than development opportunity. Resistance to new methodologies among veterans teachers.” (R3).*

The findings show that attitudinal and motivational resistance is a significant barrier in the implementation of Learning Action Cell (LAC), particularly among some veteran teachers who perceive it as an added burden rather than an opportunity for professional growth.

Similar to the study of Lomba et al. (2022), which found that teacher resistance to educational change is influenced by workload, low motivation, and prolonged teaching experience, affecting their openness to innovation.

With all this, the researcher strongly believed the importance of utilizing the EMPOWERER contextualized framework to strengthen LAC implementation. Through this structured well-guided framework approach, teachers' resistance can be reduced, fostering greater acceptance, active participation, and continuous professional growth.

### **Theme 3. Resource and Logistical Constraints**

Other difficulties commonly encounter by teachers in conducting LAC sessions are the limited resource and logistical constraints.

To Note:

*“ Limited time preparation, lack of interest of some co-teachers, limited resources and lack of support system by the school head in school.” (R1) “Scheduling conflicts dur to teachers heavy workloads and numerous school activities, limited time for meaningful discussions and balancing different learning needs and interest of participants.” (R5) “Difficulties commonly encounter when conducting LAC are resources, time management and resistance to new ideas.” (R6)*

The findings reveal that resource and logistical constraints remain significant barriers in the effective implementation of Learning Action Cell (LAC). The physical limitations that prevent teachers from implementing new ideas, including lack of materials, limited internet access, scheduling conflicts, and insufficient Learning Action Cell (LAC) resources are some other difficulties commonly encounter by teachers when conducting LAC that need to be address and not taken for granted to ensure quality results.

This finding is supported by the study of König et al. (2020), which found that inadequate resources, technological limitations, and organizational challenges significantly affect teachers’ professional development and instructional effectiveness.

As a result, this highlights the importance of utilizing the EMPOWER local framework, particularly in Establishing training needs to identify resource gaps, Plotting the matrix of training for better scheduling and logistics, Operationalizing the LAC plan to ensure accessibility and feasibility, and Revisiting training implications to improve future implementation, thereby strengthening the sustainability and quality of LAC sessions.

### **Theme 4. Reduced Collaborative Effectiveness**

One of the challenges that affect the planning, facilitation and overall effectiveness of LAC in school is it reduced collaborative effectiveness.

To note:

*“These difficulties heavily compromise every stage of the LAC loop like planning becomes rush and generic instead of being data-driven and tailored to actual classroom needs. Facilitation devolves into a dry, one-way lecture because energy levels are low and teachers are hesitant to interact. Participation becomes purely passive, with exhausted teachers attending only for the signature while doing multi-tasking “ (R4) :” Interest and motivation is very much affected, and session activity is very minimal which in turned really*

*affect the overall effectiveness of the program implementation.” (R2)*  
*“When teachers cannot access the materials necessary to execute the strategies, overlapping of schedules that results to rushed discussions and disengaged of participants that results to stagnation.”(R6) “In terms of planning, time constraints and varying teacher needs make it difficult to design organized and relevant sessions that cater to all the participants. Limited training and difficulties in managing group dynamics lead to less engaging and less focused discussions. Participation is also affected as some teachers may be hesitant to actively contribute while others may dominate. Moreover, resistance to change and lack of resources can reduce teachers’ motivation to fully engage in the process. As a result, overall LAC effectiveness is compromised.”*

These shows that teachers find it difficult to share experiences and best practices freely when discussions are disengaged and rushed. Likewise, when sessions become lack of focus and engagement, the overall effectiveness of the LAC which is intended to improve teacher competence and address shared classroom challenges is significantly degraded or affected.

This finding is supported by the study of Admiraal et. al (2021), which emphasized that effective teacher professional learning communities rely heavily on active participation, shared collaboration, and focused engagement to improve teaching practices and professional growth.

Consequently, this highlights the importance of utilizing the EMPOWER framework to create structured and engaging sessions, Employing learning to translate collaboration into practice, and Recognizing teachers’ effort to sustain motivation and active participation. Through this framework, collaborative effectiveness can be strengthened, making LAC more responsive, interactive, and impactful.

## **Theme 5. Compromised Session Quality and Relevance**

Compromised session quality and relevance truly affect the planning, facilitation and overall effectiveness of LAC.

To Note:

*“Affect LAC session quality and participation.” (R1) : “Experiencing last minute planning resulted to session quality. Limited time for material development leads to less engaging content and participation. Limited focus when teachers are mentally divided with mixed responsibility. As well as experiencing limited follow through on action plans due to workload constraints.”. (R3) : “These challenges can affect the quality of LAC implementation. During planning, scheduling conflicts may limit opportunities for thorough preparation and coordination. Participation may also be affected*

*when some teachers are unable to attend or actively engage due to workload and other responsibilities.” (R5).*

The findings reveal that compromised session quality and relevance significantly affect the planning, facilitation, and overall effectiveness of Learning Action Cell (LAC), as last-minute preparations, limited time for material development, scheduling conflicts, and teachers’ divided responsibilities often result in less focused, less engaging, and less meaningful sessions. These challenges weaken teacher participation and reduce the ability of LAC to address actual classroom needs effectively.

Trust & Whalen (2020), found out that the quality and relevance of professional learning are directly influenced by adequate preparation, contextualized content, and sustained teacher engagement, emphasizing that rushed and poorly planned sessions lessen learning impact and instructional improvement.

This underscores the importance of utilizing the EMPOWERR localized framework, particularly in Establishing training needs to ensure relevance, Making objectives, outputs, and outcomes to provide clear direction, Plotting the matrix of training for proper scheduling and preparation, Wrapping up the training essence to reinforce key learnings, and Revisiting training implications to assess effectiveness and improve future sessions.

## **Theme 6. Strategic and Advance Planning**

One of the strategies use by teachers to address challenges encountered in conducting LAC sessions.

To Note:

*”I used effective planning, schedule sessions during existing free periods, select relevant topics based on teachers' needs, simplify documentations, encourage active participation, create a supportive environment, utilize available resources and technology and provide follow-up coaching and feedback.”  
(R1) :”I value time management to conform with the duty expected of me. I try to explain to them that the need to conduct this LAC session is very important to address existing problems particularly on dealing with the updated curriculum and various assessments to support teaching and learning.” (R4) :”Being patient enough and keep on balancing time management and encouraging teacher participants to cooperate for the benefit of all.”*

The findings reveal that strategic and advance planning is an effective approach in addressing challenges encountered during LAC implementation, as teachers who practice early preparation, effective time management, careful scheduling, and needs-based topic selection are better able to balance workloads, maximize session time, and improve participation and engagement.

Likewise, study of Hammond et.al (2020), emphasized that well-planned professional development that is relevant, structured, and sustained contributes significantly to teacher learning and instructional improvement.

This further point out the importance of the EMPOWERERR localized framework, particularly in Establishing training needs, Making objectives, outputs, and outcomes, and Plotting the matrix of training, as these components ensure organized, responsive, and purposeful LAC sessions that address teacher needs and strengthen professional growth.

### **Theme 7. Resourcefulness and Adaptability**

Resourcefulness and adaptability are one of the strategies most teachers show when dealing with challenges in teaching particularly in handling LAC sessions.

To Note:

*” Being resourceful and learned to adjust pacing for mixed-ability teacher participants.” (R3) “Being patient and resourceful as well as value time management and encourage co- teachers to be participative.”” (R6) :” Encourage everyone to plan out early and be resourceful, helpful and participative in the LAC session. “ (R8)*

As a result, truly highlights the necessity of being "resourceful," especially when dealing with unforeseen circumstances or limited resources during sessions. Moreover, the findings demonstrate that resourcefulness and adaptability are essential strategies in addressing the challenges of Learning Action Cell (LAC) implementation, as teachers who adjust to varying participant needs, manage limited resources, and remain flexible in unforeseen circumstances are better able to sustain meaningful participation and maintain the continuity of collaborative learning.

Study of Kim et al.(2020) pointed out that teacher adaptability and resilience play a crucial role in responding to changing educational demands and overcoming instructional challenges, particularly in resource-limited settings.

This highlights the importance of the EMPOWERERR localized framework, particularly in Operationalizing the LAC plan to ensure flexibility, Employing learning to apply practical solutions, Revisiting training implications to improve strategies based on experience, and Recognizing teachers’ effort to encourage continuous adaptability and commitment. Through this framework, teachers’ resourcefulness can be strengthened, making LAC implementation more responsive, sustainable, and effective.

## **Theme 8: Interpersonal and Facilitation Skills**

Interpersonal and facilitation skills are also other strategies that can be used to address various challenges in conducting LAC sessions.

To Note:

*“Because of the convincing power and special skills in talking, my sense of humor help a lot in facilitating the session.” (R2) :”Being patient enough and keep on balancing time management and encouraging teacher participants to cooperate for the benefit of all.” (R5) ”Prioritize time management by setting clear goals. Use interactive and collaborative methods to give everyone chance to contribute their parts. Lead by example.” (R7)*

Truly that interpersonal skills and facilitation skills like "convincing power," patience, and "interactive and collaborative methods" are necessary to keep participants engaged and focused on shared learning goals. The findings highlight also that interpersonal and facilitation skills are essential strategies in addressing challenges during Learning Action Cell (LAC) implementation, as effective communication, patience, motivation, and the use of interactive and collaborative approaches help sustain teacher engagement, encourage active participation, and strengthen shared learning goals.

Vangrieken et al. (2021), underscores that strong interpersonal relationships and effective facilitation are key factors in sustaining teacher collaboration and improving professional learning outcomes.

As a whole, the emerging presented themes underscore the multifaceted challenges and adaptive strategies experienced by teachers in LAC implementation, thereby providing a strong empirical basis for the development of the localized competency framework -EMPOWERR as a structured and responsive model for strengthening teacher collaboration, professional growth, and LAC effectiveness.

## **Development of a Tailored Competency Framework to Guide Master Teachers in Facilitating LAC**

### **Rationale**

By taking a look at this framework, it is quite generalized one that leads to various way of understanding and implementation. That is why, by moving away from "one-size-fits-all" instruction, the researcher come up to the development of a localized tailored competency framework as a key mechanism in intensifying the LAC in Elementary schools led by Master Teachers in Ibajay West District.



|                                                                                               |                                                                                                          |                                           |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Community of practice with collaborative planning, problem-solving, and action-implementation | Improved teacher's content knowledge, pedagogical skills, assessment strategies, and professional ethics | Student learning and holistic development |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------|

As a result of the gathered responses to the concerned teachers and masters teachers at the respondents elementary schools in the District of Ibajay West, the researcher come up with the below Localized framework for a Year-Round Monitoring and Evaluation on Learning Action Cell (LAC) summarized as Establishing the training needs, Making the objectives, outputs and outcomes, Plotting the matrix of the training, Operationalizing the LAC plan, Wrapping Up the training essence, Employing learning, Revisiting trainings implications and Recognizing teachers' effort (EMPOWERR).

This localized framework for monitoring and evaluating the implementation of Learning Action Cells aims to provide Master Teachers and LAC Coordinators with a practical roadmap for initiating and concluding academic endeavors while ensuring the achievement of set objectives. Focused on enhancing teachers' skills, which significantly impact students learning processes, this framework offers guidance from start to finish.

**Figure 1.** Localized Framework for A Year-Round Monitoring and Evaluation on Learning Action Cell

|   |                                                 |
|---|-------------------------------------------------|
| E | <b>1. Establishing the Training Needs</b>       |
| M | 2. Making the Objectives, Outputs, and Outcomes |
| P | 3. Plotting the Matrix of the Training          |
| O | 4. Operationalizing the LAC Plan                |
| W | 5. Wrapping Up the Training Essence             |
| E | 6. Employing Learning                           |
| R | 7. revisiting Training's Implications           |
| R | 8. Recognizing Teachers Effort                  |



**Figure 2.** Establishing the Training Needs

| <b>ESTABLISHING THE TRAINING NEEDS</b>                                                                                                                                                                                                                      |                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| This phase aims to ascertain the needs of teachers through a thorough examination of various documents such as individual Performance Commitment and Review For (IPCRF), Development Plan, Self-Assessment Tool (SAT), or Teaching and Learning Assessment. |                                 |
| <b>Used Documents:</b>                                                                                                                                                                                                                                      | <b>Top Five Teacher's Needs</b> |
| IPCRF                                                                                                                                                                                                                                                       | 1.                              |
| Development Plan                                                                                                                                                                                                                                            | 2.                              |
| SAT                                                                                                                                                                                                                                                         | 3.                              |
| Teaching and Learning                                                                                                                                                                                                                                       | 4.                              |
|                                                                                                                                                                                                                                                             | 5.                              |
| Priority Need for School Year                                                                                                                                                                                                                               |                                 |
| REMARKS:                                                                                                                                                                                                                                                    |                                 |

To properly utilize this template EMPOWER (Establishing the Training Needs) localized framework, the following 6 steps are suggested to follow:

Steps in Establishing the Training Needs Template

- Step 1: Identify the Used Documents
- Step 2: Analyze the Documents
- Step 3: Fill in the Top Five Teachers' Needs
- Step 4: Determine the Priority Need for the School Year
- Step 5: Write Important Remarks
- Step 6: Use the Results for LAC Planning

**Figure 3.** Making the Objectives, Outputs, and Outcomes

|                                                                                                          |                 |
|----------------------------------------------------------------------------------------------------------|-----------------|
| <b>MAKING THE OBJECTIVES, OUTPUTS, AND OUTCOMES</b>                                                      |                 |
| This phase is designed to craft objectives, pinpoint desired outputs, and conceptualize target outcomes. |                 |
| <b>Objectives</b>                                                                                        |                 |
| 1.                                                                                                       |                 |
| 2.                                                                                                       |                 |
| 3.                                                                                                       |                 |
| <b>Output</b>                                                                                            | <b>Outcomes</b> |
|                                                                                                          |                 |
|                                                                                                          |                 |
| <b>REMARKS:</b>                                                                                          |                 |

This template is designed to transform the identified training needs into clear objectives, expected outputs, and desired outcomes to guide the implementation of Learning Action Cell (LAC) sessions.

Steps in Using the Planning Template on Making Objectives, Outputs, Outcomes Template

Step 1: Review the Identified Priority Training Need

Step 2: Write the Objectives

Step 3: Identify the Expected Outputs

Step 4: Determine the Desired Outcomes

Step 5: Write Important Remarks

Step 6: Validate and Finalize the Template

**Figure 4.** Plotting the Matrix of the Training

|                                            |                |                             |
|--------------------------------------------|----------------|-----------------------------|
| <b>PLOTTING THE MATRIX OF THE TRAINING</b> |                |                             |
| This phase is aimed at drafting the LAC    |                | <b>Matrix of Activities</b> |
| <b>Schedule of the LAC Sessions</b>        | <b>Quarter</b> | <b>Topic</b>                |
| Time:                                      | 1              |                             |
| Day:                                       | 2              |                             |
| Venue:                                     | 3              |                             |
|                                            | 4              |                             |
| <b>REMARKS:</b>                            |                |                             |

This phase is designed to organize and structure the implementation of the Learning Action Cell (LAC) by drafting the LAC plan and establishing the training schedule. It serves as the operational blueprint of the entire LAC process, ensuring that the identified training needs, objectives, outputs, and outcomes are translated into a clear timeline of activities.

#### Steps in Using the Plotting the Matrix of the Training Template

- Step 1: Review the Established Training Needs and Objectives
- Step 2: Set the Schedule of the LAC Session
- Step 3: Identify the Quarterly Topics
- Step 4: Sequence the Topics Logically
- Step 5: Validate the Matrix
- Step 6: Write Important Remarks
- Step 7: Finalize and Implement the Matrix

**Figure 5:** Operationalizing the LAC Plan

| <b>OPERATIONALIZING<br/>THE LAC PLAN</b>                                               |                                    |               |
|----------------------------------------------------------------------------------------|------------------------------------|---------------|
| This phase is designated for the execution of the LAC (Learning Action Cell) sessions. |                                    |               |
| <b>Quarter</b>                                                                         | <b>Implementation<br/>Activity</b> | <b>Output</b> |
| 1                                                                                      |                                    |               |
| 2                                                                                      |                                    |               |
| 3                                                                                      |                                    |               |
| 4                                                                                      |                                    |               |
| <b>REMARKS:</b>                                                                        |                                    |               |

This phase focuses on the actual execution and implementation of the planned Learning Action Cell (LAC) sessions. It is where the identified training needs, objectives, outputs, outcomes, and matrix of activities are translated into concrete actions. This competency ensures that all planned activities are carried out systematically, monitored regularly, and documented properly.

#### Steps to Follow in Using the Operationalizing the LAC Plan Template

- Step 1: Review the Approved LAC Matrix
- Step 2: Identify the Quarterly Activities
- Step 3: Assign the Quarter of Implementation
- Step 4: Determine the Expected Output
- Step 5: Conduct the LAC Sessions

Step 6: Monitor and Document the Progress

Step 7: Write Important Remarks

Step 8: Evaluate the Implementation

**Figure 6:** Wrapping Up the Training Essence

| <b>WRAPPING UP THE TRAINING ESSENCE</b>                                                                              |                                                       |                        |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|------------------------|
| This phase aims to complete the LAC reflection journal and develop strategies to integrate the learning effectively. |                                                       |                        |
| <b>Quarter</b>                                                                                                       | <b>Reflection Journal<br/># of Submitted Journals</b> | <b>Major Takeaways</b> |
| 1                                                                                                                    |                                                       |                        |
| 2                                                                                                                    |                                                       |                        |
| 3                                                                                                                    |                                                       |                        |
| 4                                                                                                                    |                                                       |                        |
| <b>REMARKS:</b>                                                                                                      |                                                       |                        |

This phase focuses on consolidating and documenting the key learnings gained from the Learning Action Cell (LAC) sessions through a Reflection Journal. It serves as the evaluation and synthesis stage where teachers capture their major takeaways, insights, and realizations after each quarter of implementation. This competency ensures that learning is not left unexamined but is instead reflected upon, internalized, and translated into practical teaching improvements.

Steps in Using the Wrapping Up the Training Essence Template

Step 1: Conduct the Post-LAC Reflection

Step 2: Collect the Reflection Journals

Step 3: Identify the Major Takeaways

Step 4: Record the Quarterly Reflection Data

Step 5: Write Important Remarks

Step 6: Use the Reflections for Improvement

**Figure 7:** Employing Knowledge and Skills Gained

| <b>EMPLOYING<br/>KNOWLEDGE AND<br/>SKILLS GAINED</b>                                                    |                       |                      |
|---------------------------------------------------------------------------------------------------------|-----------------------|----------------------|
| This phase is intended for applying the acquired knowledge and skills in the teaching learning process. |                       |                      |
| <b>Integration Form</b>                                                                                 |                       |                      |
| <b>Quarter</b>                                                                                          | <b>What to Apply?</b> | <b>How to Apply?</b> |
| 1                                                                                                       |                       |                      |
| 2                                                                                                       |                       |                      |
| 3                                                                                                       |                       |                      |
| 4                                                                                                       |                       |                      |
| <b>REMARKS:</b>                                                                                         |                       |                      |

This phase focuses on the actual application of the acquired learning, strategies, and competencies gained from the Learning Action Cell (LAC) sessions into the teaching-learning process. It ensures that the knowledge discussed during LAC does not remain theoretical but is translated into practical classroom actions. Steps in Using the Employing Knowledge and Skills Gained Template/Reflection Journal

Step 1: Revisit the major learnings

Step 2: Identify What to Apply

Step 3: Determine How to Apply It

Step 4: Align the Application per Quarter

Step 5: Implement in the Classroom

Step 6: Monitor the Effectiveness of Application

Step 7: Write Important Remarks

Step 8: Use the Results for Continuous Improvement

**Figure 8:** Revisiting Trainings’ Implications

|                                                            |                                   |                     |
|------------------------------------------------------------|-----------------------------------|---------------------|
| <b>REVISITING<br/>TRAINING’S<br/>IMPLICATIONS</b>          |                                   |                     |
| This phase aims to thoroughly asses the training’s impact. |                                   |                     |
|                                                            | <b>Training’s<br/>Implication</b> |                     |
| <b>Strong Points</b>                                       | <b>Needs to Improve</b>           | <b>Major Impact</b> |
|                                                            |                                   |                     |
|                                                            |                                   |                     |
|                                                            |                                   |                     |
|                                                            |                                   |                     |
| <b>REMARKS:</b>                                            |                                   |                     |

This phase focuses on evaluating and assessing the impact of the LAC sessions after the acquired knowledge and skills have been applied in actual teaching practice. It serves as the assessment and reflection stage where the effectiveness of the training is examined by identifying its strong points, areas for improvement, and major impact.

Steps in Using the Revisiting Training’s Implications Template

- Step 1: Gather Evidence of Training Implementation
- Step 2: Identify the Strong Points
- Step 3: Determine the Areas that Need Improvement
- Step 4: Assess the Major Impact
- Step 5: Write Important Remarks

**Figure 9:** Recognizing Teachers' Efforts

| <b>RECOGNIZING TEACHER'S EFFORTS</b>                                                                        |  |
|-------------------------------------------------------------------------------------------------------------|--|
| This phase is intended to conduct an exit program that acknowledges and highlights the efforts of teachers. |  |
| <b>Awards</b>                                                                                               |  |
| <b>Schedule of the Awarding</b>                                                                             |  |
| Time:                                                                                                       |  |
| Day:                                                                                                        |  |
| Venue:                                                                                                      |  |
|                                                                                                             |  |
|                                                                                                             |  |
| <b>REMARKS:</b>                                                                                             |  |

This phase focuses on acknowledging, appreciating, and celebrating the contributions and active participation of teachers throughout the Learning Action Cell (LAC) implementation. It serves as the culmination stage where teachers' commitment, outputs, and professional growth are formally recognized through an exit or awarding program.

#### Steps in Using the Recognizing Teachers' Efforts Template

- Step 1: Review Teachers' Participation and Accomplishments
- Step 2: Set the Schedule of the Awarding
- Step 3: Identify the Awards to be Given
- Step 4: Validate the Awarding Criteria
- Step 5: Conduct the Recognition Program
- Step 6: Write Important Remarks
- Step 7: Use Recognition as Motivation for Future LAC Cycles

Perceived Acceptability.

**Table 4.** *Perceived Acceptability of the Tailored Competency Framework for Master Teachers*

| No. | Indicators                                                                                       | Weighted mean | Standard Deviation | Verbal Interpretation |
|-----|--------------------------------------------------------------------------------------------------|---------------|--------------------|-----------------------|
| 1   | The competency framework is aligned with the objectives of Learning Action Cells.                | 3.6           | 0.55               | Highly Acceptable     |
| 2   | The framework clearly identifies the competencies needed by Master Teachers as LAC facilitators. | 3.8           | 0.45               | Highly Acceptable     |

|                     |                                                                                         |      |      |                   |
|---------------------|-----------------------------------------------------------------------------------------|------|------|-------------------|
| <b>3</b>            | The framework is relevant to the professional development needs of teachers.            | 3.6  | 0.55 | Highly Acceptable |
| <b>4</b>            | The competencies included in the framework are practical and applicable.                | 3.6  | 0.55 | Highly Acceptable |
| <b>5</b>            | The framework supports effective facilitation of collaborative learning among teachers. | 3.8  | 0.45 | Highly Acceptable |
| <b>6</b>            | The framework promotes continuous professional growth among Master Teachers.            | 3.6  | 0.55 | Highly Acceptable |
| <b>7</b>            | The framework can guide the monitoring and evaluation of LAC implementation.            | 3.8  | 0.45 | Highly Acceptable |
| <b>8</b>            | The competency indicators are clear and understandable.                                 | 3.6  | 0.55 | Highly Acceptable |
| <b>9</b>            | The framework is suitable for implementation in elementary schools.                     | 3.8  | 0.45 | Highly Acceptable |
| <b>10</b>           | The tailored competency framework is acceptable for use by Master Teachers.             | 4.0  | 0.0  | Highly Acceptable |
| <b>MEAN AVERAGE</b> |                                                                                         | 3.72 | 0.45 | Highly Acceptable |

*Legend Scale: 4=Strongly Agree, 3=Agree, 2=Disagree, 1=Strongly Disagree*

Table on the perceived acceptability of the tailored competency framework for Master Teachers indicated a Mean Average of 3.72 interpreted as Highly Acceptable with 0.45 Standard Deviation. All indicators presented a notable highly acceptability. Respondents believed that the presented localized framework for a Year-Round Monitoring and Evaluation on Learning Action Cell (LAC) summarized as Establishing the training needs, Making the objectives, outputs and outcomes, Plotting the matrix of the training, Operationalizing the LAC plan, Wrapping Up the training essence, Employing learning, Revisiting trainings implications and Recognizing teachers' effort (EMPOWERR) is highly acceptable and can provide Master Teachers and LAC Coordinators with a practical roadmap for initiating, conducting and concluding collegial academic endeavors which are well guided offering guidance from start to finish and result-based oriented in the local setting. It also focuses on enhancing teachers skills, which significantly impact students learning processes towards a more holistic learning outcomes.



This finding is supported by the study of Langkiwa et al. (2023), which found that Learning Action Cells significantly contribute to teachers' professional competence by enhancing collaboration, pedagogical skills, and instructional effectiveness. Their study emphasized that structured competency-based LAC frameworks improve teacher facilitation and strengthen professional development mechanisms, which supports the high acceptability of the EMPOWER framework in this study.

## **Conclusions**

This study affirms that the implementation of Learning Action Cell (LAC) in elementary schools remains a vital yet challenging mechanism for teacher professional development. The eight identified themes revealed that while teachers encounter significant barriers such as workload pressures, resistance to change, resource limitations, reduced collaboration, and compromised session quality, they also employ adaptive strategies including strategic planning, resourcefulness, and effective facilitation skills to address these challenges. These collective findings provided a strong empirical basis for the development of the EMPOWER localized competency framework, which offers a systematic, well-guided and context-responsive roadmap to improving LAC implementation. Furthermore, the framework's high acceptability among Master Teachers strengthens its potential as a practical guide in enhancing teacher collaboration, professional competence, and the overall effectiveness of LAC as a sustainable professional learning platform.

## **Recommendations**

1. Schools may adopt and integrate the EMPOWER localized competency framework as a structured guide or roadmap in planning, facilitating, monitoring, and evaluating Learning Action Cell (LAC) sessions to ensure relevance, consistency, and effectiveness.
2. School heads and Master Teachers should conduct regular training needs assessments using available teacher performance documents (e.g., IPCRF, SAT, Development Plans) to ensure that LAC topics are aligned with the actual professional development needs of teachers.
3. Schools may establish protected schedules, provide adequate materials, and improve access to instructional resources and technology to minimize workload conflicts and logistical constraints during LAC sessions.
4. Master Teachers or LAC Team should undergo continuous training on facilitation, collaboration management, and coaching strategies to strengthen their competence in handling diverse teacher needs and sustaining meaningful LAC engagement.
5. School leaders should implement recognition systems, peer support mechanisms, and motivational strategies to address attitudinal resistance and encourage active teacher participation.
6. Regular monitoring and reflective practices should be embedded in every LAC cycle to assess implementation effectiveness, identify areas for improvement, and refine future sessions.

7. Teachers should be encouraged to consistently apply the knowledge and skills gained from LAC sessions in their classroom practices and document their experiences for continuous improvement.
8. Future researchers may test and validate the EMPOWER framework in different school contexts and divisions to establish its broader applicability, effectiveness, and sustainability in teacher professional development.

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# INTEGRATION OF THE FAST DRAW APPROACH AS AN INSTRUCTIONAL STRATEGIES IN TEACHING MATHEMATICS

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## **Abstract**

This study examines the effectiveness of the Fast Draw Approach as a teaching strategy for mathematics among selected Grade 10 students at Francisco P. Felix Memorial National High School in Cainta, Rizal. The study seeks to explore a systematic, structured step-by-step way of utilizing visual strategies to improve student ability and learning experience in mathematics, given the continued issues with students' achievement in mathematics such as low retention, anxiety, and solving word problems. Specifically, the study intends to explore each of the following: examine the level of academic achievement of students before and after the intervention; a reasoned examination of the perceived effectiveness of Fast Draw addressing student engagement, enjoyment, understanding and retention; compare the performance of the students triad with those students whose science instruction favored traditional methods; and examine if there is a relationship between student's perception of the approach and their performance improvement. A quasi-experimental research design was employed using quantitative data from 60 purposively selected Grade 10 students assigned equally to experimental and control groups. The instruments used includes a researcher-made 40 item achievement test administered as a pretest and posttest, and a validated perceptions survey using a 4- point Likert scale. Descriptive measures were used in addition to paired and independent sample t-tests and Pearson r correlation to test for significant difference or relationship. The results showed that while both groups showed improvements after instruction, only the experimental group progressed from "Developing" to "Proficient" level, thereby providing evidence to support the efficacy of the Fast Draw Approach as an instructional strategy that promoted academic performance. Students also viewed the approach to be Very Effective for participation, enjoyment, understanding, and retention of content, while the students still struggled with elements such as maintaining motivation and decreasing math anxiety. A significant positive relationship was established between students' perceptions of the Fast Draw Approach and academic progress, indicating that students' understanding of the efficacy of strategy may contribute to increased achievement. In conclusion, the Fast Draw Approach is a viable learner-centered strategy that surpasses direct instruction and enhances academic performance and learning conditions.

**Keywords:** Fast Draw Approach, Mathematics Education, Visual Learning

## Introduction

Mathematics is generally considered the cornerstone of education because of the logical thinking, reasoning and analytical skills it teaches. However, it is still common for students to have negative views toward learning mathematics and to do poorly in mathematics courses, despite the phenomenal understanding of the importance of mathematics in the 21st century. In an effort to address this long-standing problem, an array of instructional methods has been implemented to enhance student engagement, interest, understanding, and memory of mathematics concepts. A typical example is the Fast Draw Approach, a well-defined approach for effectively solving mathematical problems that takes the learner through a series of steps to analyze and solve problems systematically.

Mathematics has been considered as a fundamental academic subject in school since it develops the arithmetic, logical, and critical reasoning of an individual. It involves several aspects of human life from complex to simple things such as budgeting (Rossi et al., 2023). It has a role in enhancing students' knowledge and skills so they can handle daily problems, pursue higher education, and become productive workers (Maamin et al., 2021). For this account, educational institutions seek to enhance the students, problem-solving and computational skills.

Problem in mathematics performance of the students gradually became a serious matter globally. The Organization for Economic Cooperation and Development (OECD) released the results of its 2022 Programme for International Student Assessment (PISA) showing that during the period from 2018 to 2022, the average performance of OECD countries decreased by a record 15 points (Harper, 2023). This showed an alarming threat of continuous downfall of mathematics performance globally in the future.

In the United States, the mathematics performance of the teenagers has declined significantly since 2018, which is considered to be lower than their performance 20 years ago (Mervosh, 2023). Meanwhile, Europe experienced its unprecedented drop in mathematics achievement. PISA 2022 results implied that European countries have lagged behind in terms of academic standards (Harper, 2023).

Meanwhile, although six of the Asian countries namely Singapore, Chinese Taipei, Macao, Hong Kong, Japan, and Korea performed well, it couldn't outshine the poor performance of other countries such as the Philippines.

The improvement of mathematical skills of Grade 10 students is still a pressing concern in Philippine education. This review focused on methodological studies at the national and regional levels that have been used to improve mathematics achievement, with an emphasis on innovations that can be used to support the implementation of fast draw strategy to achieve least mastered mathematical competencies.

The use of the Fast Draw Strategy for students with learning disabilities in mathematics word problem solving was first described by Mercer and Miller (1992). They are: Find what you are solving for, Ask yourself what information is given, Set up the problem, Tie down the operations, Discover the sign, Read the problem again, Answer the problem, and Write the answer. In this way, students can regiment questions into manageable parts which enhances their overall problem-solving strategies. Harris et al. (1995) also supported that Fast Draw strengthens students' ability to solve mathematical problems in a more confident and structured manner, thereby resulting in higher accuracy and fluency.

In recent years, Fast Draw has become a clear strategy, not only for children with learning disabilities, but for most students in a regular setting. Tok and Keskin (2012) emphasize that students taught using the Fast Draw Approach significantly outperform their counterparts who have been lectured through traditional means, and they also show more favorable attitudes towards mathematics. Their quasi-experimental study with third-graders adds to this line of research by providing empirical evidence of the effect of the strategy on both cognitive outcomes and affective engagement.

Although it is already proven effective in foreign countries, the infusion of the Fast Draw Approach to the Philippine secondary education especially at Grade 10 is inadequate. Philippine public schools like Francisco P. Felix Memorial National High School usually utilize traditional modes of instruction which may not cater well enough for the varying needs of learners. The literature lacks information on how formal problem-solving frameworks such as Fast Draw can be modified in the context to improve the mathematical achievement of the students. In addition, extant studies mainly concentrate on performance results and pay less attention to whether students' perception of strategy correlates with their academic improvement.

This study seeks to fill these gaps by investigating the academic performance of grade 10 students with and without the integration of the Fast Draw Approach as an instructional strategy in the teaching of Mathematics. Namely to determine to what extent a student's academic achievement is measured by the students pre-test and post-test results, and, if the Fast Draw is effective in terms of engagement, enjoyment, understanding, and retention as measured by Sony Cryout's (2016) (S. Cryout, personal communication, November 26 and 29, 2019) engagement formula, understanding, overall presentation scores and retention for those with a standard science instruction and those with the Fast Draw Approach. It also examines the correlation between students' views on the Fast Draw Approach and their improved academic performance. By using quasi-experimental methodology, this study adheres to common conventions for assessing educational interventions in real-world classrooms when random assignment is impractical (Miller et al., 2020).

Finally, this study aspires to add to the pool of knowledge about instructional strategies in mathematics by providing concrete evidence on the effectiveness of

Fast Draw in the Philippine setting. The results are expected to provide guidance to teachers and curriculum developers about the effectiveness of teaching students how to use structured problem-solving processes to improve students' math achievement and math interest.

## **Background and Rationale of the Study**

Mathematics is still a key school subject at the secondary level, but international studies keep showing how students are challenged by some types of problems – in particular non-routine and word problems. Based on the Programme for International Student Assessment (PISA, 2018) and Trends in International Mathematics and Science Study (TIMSS, 2019), most of secondary school students seem not able to be proficient in solving authentic-realistic applications with a decreasing trend in their performance in the last few years (Avvisati et al., 2019; Ministry of Education Malaysia, 2020 & Ong, 2023). This pattern implies that the global problem of providing support to students for the move from procedural work to contextualized, higher-level thinking problems faced by many learners.

The same challenges exist in the Philippines. Local studies show that several students in the 10th grade had low levels of fact recall and lack skills in both comprehending and strategic in solving sentence problems (Pascual & San Pedro, 2018). And they often have difficulty with reading comprehension and math language, which interferes with how they represent and solve problems. In the absence of strategies to scaffold their thinking, learners often resort to guess-and-check or procedural methods, which serves to superficialize their conceptual understandings and compromise long-term retention.

An encouraging answer to this void could be a way of explicit problem-solving heuristics in mathematics education. Design research in upper secondary school settings has demonstrated that explicit instruction of problem-solving strategies has a significant increase on both procedural fluency and conceptual understanding (Fülöp, 2015). Furthermore, theoretical constructs suggest that combined exposure to heuristics, metacognitive monitoring, and productive attitudes towards problem solving develop the students' continual mathematic reasoning (Lester and Cai, 2016). Yet, despite such evidence, most of the structured approaches have been tried in Western settings with little adaptation in Filipino classrooms.

The Fast-Drawing Approach is a type of heuristic method that organizes learners' problem-solving with incremental cognitive scaffolding. While the efficacy of this approach has been found in a range of populations (including primary-level students and students with disabilities), its use with older students in Southeast Asian contexts has not been much examined. So far, no empirical studies have been conducted on the effect of Fast Draw on Grade 10 performance, affective engagement, and retention in selected Philippine public high schools.

Another limitation is in linking students' perceptions to their academic achievement. Although many interventions demonstrate progress in performance, it is however rare that the relationship of the performance gains and how learners' engagement, enjoyment, comprehension and reported self-efficacy contribute to the effectiveness of instructional strategies are considered. This study endeavors to establish a more complete picture of the effects of Fast Draw by examining performance measures along-side student perceptions.

Hence, at Francisco P. Felix Memorial National High School, this study attempts to respond to two issues as associated with poor performance of learners in mathematics and the absence of structured problem-solving instruction (both from the prescriptive test and standards threading generators therein), First, lack on effects of mathematical problem solving instruction on the performance and perception of grades 10 in the Filipino setting, then lack of evidence of effect or no effect of Fast Draw on the performance and perception for secondary schools in the Philippine setting. This dual focus not only fills a gap in the educational literature but has practical implications for curriculum innovation and teacher education in mathematics education.

## **Theoretical Framework**

This research is founded on three educational theories and has established a strong base for understanding the way the Fast Draw Approach can improve the core educational performance of students in Mathematics; the three theories are Polya's Problem-Solving Theory, Constructivist Learning Theory and Cognitive Information Processing Theory. Taken together, these theories describe how the use of structured, purposeful and strategic learning experiences can improve students' problem-solving skills, engagement and retention.

The Polya's Problem-Solving Theory suggest a logical, systematic and systematic approach in solving mathematical problems in four stages including comprehension, planning, execution and verification of the solution. The theory underpinning this approach is the basis for structuring problem solving methods, such as, The Fast Draw Approach., a program that directs students through a defined series of steps when solving math word problems. This way, students can build on their logical reasoning, problem understanding, and the metacognitive ability to engage in like and similar problems.

Constructivist Learning Theory (Bruner, 1960, Vygotsky, 1978). According to the constructivist perspective, learners actively build their knowledge by interacting with the world in meaningful ways, rather than by passively receiving it. Bruner's Vygotsky's notion of scaffolding and Zone of Proximal Development (ZPD) all again stress the value of assisted learning, the need for learners to be met with strategic interventions until real independence and competence can be achieved.

The Fast Draw Approach is consistent with constructivist philosophy in that it promotes active participation, visualization, the formation of individual steps in



problem solving. Through practicing this structured method, students build a more solid concept of math and its components. Additionally, the approach functions as a support, helping students transition from teacher led teaching to independent problem solving.

The Cognitive Information Processing Theory describes how information is processed (attention, encoding, storing and retrieval) and also suggests that information must be organized in some way to store it in memory and allow it to be retrieved easily. Memory aids, like the Fast Draw Approach, are vital in order to minimize cognitive load, so that learners can process/comprehend complex problem-solving steps better. By means of repetition and organized cues, the Fast Draw Approach helps students move information from short-term to long-term memory. This has led to better understanding and retention of problem-solving techniques which is crucial in Mathematics where concepts and skills are cumulative.

Fast Draw and the Theoretical Perspectives of Polya, Bruner, Vygotsky, and Atkinson & Shiffrin the Fast Draw Approach shares a strong theoretical foundation, as an approach to instruction, with the theories of Polya, Bruner, Vygotsky and Atkinson & Shiffrin. Together, these frameworks support the role of organization, scaffolds, and efficient cognition in realizing greater problem-solving proficiency for learners as well as greater academic achievement. By immersing learners into such a strategy in Grade 10 Mathematics classrooms, the overarching goal of this study would be to not only increase their level of performance on such tests, but improve their interest in Mathematics, enjoyment of the subject, understanding, and retention, all critical elements to promoting the long-term success of learning Mathematics.

## Conceptual Framework

To clearly illustrate the flow of this study, the Input-Process-Output (IPO) Framework is presented below, outlining the key elements involved from the initial inputs to the expected outcomes of the research.

| <b>INPUT</b>                                                | <b>PROCESS</b>                                          | <b>OUTPUT</b>                                                                |
|-------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------|
| 1. Grade 10 students' academic performance (Pretest Scores) | 1. Administer Pretest (Experimental and Control groups) | 1. Difference between Pretest and Posttest Scores                            |
| 2. Instructional Strategies:                                | 2. Implement Fast Draw Approach (Experimental group)    | 2. Level of Academic Performance Improvement                                 |
| • Fast Draw Approach (Experimental Group)                   | 3. Implement Traditional Instruction (Control group)    | 3. Level of Engagement, Enjoyment, and Retention (Perception Survey Results) |
| • Traditional Method (Control Group)                        | 4. Administer Posttest to both groups                   |                                                                              |
|                                                             | 5. Administer Perception Survey                         |                                                                              |

|                                           |                                                      |                                                                                                              |
|-------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Group)                                    | Survey (Experimental group)                          | 4. Relationship between Perception of Fast Draw Approach and Academic Performance                            |
| 3. Validated Research Instruments:        | 6. Analyze data through:                             | 5. Empirical Evidence on the Effectiveness of Fast Draw Approach as an Instructional Strategy in Mathematics |
| • Researcher-made Pretest and Posttest    | • Mean and Standard Deviation (Pretest and Posttest) |                                                                                                              |
| • Perception Survey Questionnaire         | • Paired Sample T-test (Performance Difference)      |                                                                                                              |
| 4. Theoretical Foundations:               | • Pearson r Correlation (Perception and Performance) |                                                                                                              |
| • Polya's Problem Solving Theory          | • Weighted Mean (Perception Survey)                  |                                                                                                              |
| • Constructivist Learning Theory          |                                                      |                                                                                                              |
| • Cognitive Information Processing Theory |                                                      |                                                                                                              |

The Input-Process-Output (IPO) Framework of this study systematically outlines how the research was conducted to determine the effectiveness of the Fast Draw Approach in teaching mathematics to Grade 10 students. Inputs include the Grade 10 students' pretest academic performance, the instructional strategies employed (the Fast Draw Approach for the experimental group and traditional teaching methods for the control group), validated research instruments such as the pretest and posttest examinations, and the perception survey. Additionally, the study is anchored on well-established theoretical foundations including Polya's Problem-Solving Theory, Constructivist Learning Theory, and Cognitive Information Processing Theory. These inputs serve as the essential elements to guide the implementation and measurement of the study's objectives. The Process involves several key stages. Initially, pretests were administered to both the experimental and control groups to establish baseline data. The experimental group underwent instruction using the Fast Draw Approach, while the control group received conventional teaching methods. After the intervention period, both groups took the posttest to measure academic performance improvements. Furthermore, the experimental group answered a perception survey to assess their levels of engagement, enjoyment, understanding, and retention during the intervention. The data collected were analyzed using statistical tools such as mean, standard deviation, paired sample t-tests, Pearson r correlation, and weighted mean to interpret the effectiveness and relationships among variables. The Outputs of this study consist of the identified differences between the pretest and posttest scores, the determined level of improvement in academic performance, and the results of the perception survey reflecting students' engagement, enjoyment, understanding, and retention. Furthermore, the analysis reveals whether there is a significant relationship between students' perceptions of the Fast Draw Approach and their academic performance. Ultimately, this framework provides empirical evidence on the effectiveness of the Fast Draw Approach as an instructional strategy in improving mathematics performance among Grade 10 students.

## Statement of the Problem

The study aims to identify the level of academic performance of Grade 10 students before and after the integration of Fast Draw Approach as an instructional strategy in Mathematics in Francisco P. Felix Memorial National High School.

Specifically, the study seeks to answer the following questions;

1. What is the level of academic performance of controlled and experimental group of Grade 10 students in;
  - 1.1 pretest, and
  - 1.2 posttest?
2. What is the level of effectiveness of Fast Draw Approach as an instructional strategy in teaching Mathematics in terms of;
  - 2.1 engagement,
  - 2.2 enjoyment,
  - 2.3 understanding, and
  - 2.4 retention?
3. Is there a significant difference between the pretest and posttest scores of controlled and experimental group of Grade 10 students after the integration of Fast Draw Approach?
4. Is there a significant relationship between students' perception of the Fast Draw Approach and their academic performance improvement?

## Hypothesis

**Null Hypotheses (H<sub>0</sub>):** H<sub>01</sub>: There is no significant difference between the pretest and posttest scores of Grade 10 students after the integration of the Fast Draw Approach as an instructional strategy in Mathematics.

H<sub>02</sub>: There is no significant relationship between the students' perception of the Fast Draw Approach (in terms of engagement, enjoyment, understanding, and retention) and their improvement in academic performance.

**Alternative Hypotheses (H<sub>1</sub>):** H<sub>11</sub>: There is a significant difference between the pretest and posttest scores of Grade 10 students after the integration of the Fast Draw Approach as an instructional strategy in Mathematics.

H<sub>12</sub>: There is a significant relationship between the students' perception of the Fast Draw Approach (in terms of engagement, enjoyment, understanding, and retention) and their improvement in academic performance.

## Significance of the Study

This research aims to find out if the Fast Draw Approach is an effective strategy as an instructional material in improving the performance of the Grade 10 Mathematics of the students at Francisco P. Felix Memorial National High School. The findings of this study are anticipated to be useful for the stakeholders concerned with education.

**Students.** The direct recipients of this study are the Grade 10 students who will directly participate in the fusion of the Fast Draw Approach into their Mathematics lessons. This study seeks to improve their mathematics performance and attitudes by revealing the effective methods that makes learning more attractive, understandable and retentive. This, in turn, could be associated with greater confidence, better problem-solving and higher academic achievement.

**Mathematics Teachers.** This research work will provide the mathematics teachers with a workable material that will help them to proffer solution to some of the challenges students confront when learning mathematical concepts particularly when solving word problem. The results can contribute by providing empirical evidence of how the structured and systematic step-by-step problem-solving approach using a Fast Draw Approach can promote students in engaging in activity and developing understanding in learning environments.

**School Administrators.** School leaders and managers could utilize the information gathered from this study to aid their decision making in designing staff development programs, improving teaching styles and school-based intervention programs to enhance student's performance in Mathematics. This research can help school to maintain commitment to educate in a high-quality way and consistent practices.

**Curriculum Developers.** It is anticipated that the results of this study may contribute to the evidence for curriculum developers on the cost-effectiveness of the integration of a programmed instruction of structured problem-solving strategies in the mathematics curriculum. This could help to create more interactive student-centered learning materials and activities that are delivered in the K to 12 Curriculum.

**Future Researchers.** This research may serve as inspiration for future researchers that look to investigate instructional methods in a similar manner, or those looking to continue investigating the relationship between problem-solving approaches and academic achievement. It gives baseline information on the utilization of Fast Draw in the secondary schools of the Philippines particularly on the public setting.

**Department of Education (DepEd).** Finally, the results of this study may have implication for the Department of Education as it may add to the local literature of good teaching in practice. This may be an aid to DepEd to respond with the students' poor performance in Mathematics, as evidenced in the national test and in introducing evidence-based practices within the public schools.

### **Scope and Delimitation of the Study**

The study intends to find out the effectiveness of Fast Draw Approach as an intervention to the instructional performance in Mathematics of the Grade 10 students of Francisco P. Felix Memorial National High School, Cainta, Rizal SY

2025-2026. It assesses the difference between the pretest and posttest results in academic achievement of the students before and after the use of Fast Draw Approach. The study also examines the perceived efficacy of the approach in promoting engagement, enjoyment, understanding, and retention of mathematical content.

The research is limited to learners in Grade 10 who are officially enrolled in the regular Mathematics class at the selected public school. The study will involve 60 students in all and these will be randomly split into two equal groups that is experimental group, which will be taught using the Fast Draw Approach and the control group, which will receive instruction through the traditional methods generally used in the teaching of Mathematics. A purposive sample design method is employed where students who do not have histories of long-term absenteeism and are attending regular classes are specifically selected to participate. The time frame for research is duration of intervention, as ample to Mathematics curriculum, pretest and posttest can be given. The research uses researcher-constructed 40-item multiple choice achievement test anchored in the DepEd Grade 10 Mathematics Curriculum Guide and a validated perception survey that evaluates the students' level of engagement, enjoyment, understanding, and retention.

The research is limited to single schools at other grade levels. It is limited to other subjects, and it does not control for things other than the instructional strategy (e.g., teacher quality and students' socio-economic status or learning style) that also affect school performance. Otherwise, the study confines its assessment of academic performance to the developed/designed test on areas of knowledge covered during intervention period and there are no long components to monitor long-term retention after posttest.

### **Definition of Terms**

This subsection defines key terms in this study, both technically and operationally, to have a clear understanding of the concepts as being used within the context of the study.

**Fast Draw Approach.** The Fast Draw Approach of problem solving individually structured by mnemonic rule, for learner to complete the step-by-step procedure for mathematics word problem. Then use the word FAST DRAW which stands for Find what you are solving for, ask yourself what is given, set up the equation, tie down the sign, Discover the operation, Read the problem again, Answer the problem, Write the answer (Mercer & Miller, 1992). It's meant to strengthen the student's understanding of the problem, logic reasoning, and the accuracy of the solution. In the present study, Fast Draw Approach refers to the teaching approach adopted in the experimental groups on the explicit way of following the outlined Fast Draw step-by-step process of solving mathematics problems in the intervention stage.

**Academic Performance.** The extent to which a learner has accomplished defined educational goals; normally measured by standardized tests, grades, or curriculum-based assessments (Cambridge University Press, 2023). Academic performance in this research is operationalized as the scores of the learners in a 30-item researcher-made pretest and posttest in Mathematics which is congruent with the G10 Mathematics Curriculum of the Department of Education.

**Engagement.** In the school context, engagement represents the degree of attention, interest, curiosity, and active participation that students show in the learning process (Fredricks et al., 2016). It is one of a number of factors that predict academic success. In the present study, student engagement is referring to the students' self-reporting their perceived involvement when they were learning mathematics with the Fast Draw Approach, which was measured using a reliable questionnaire.

**Enjoyment.** Learning enjoyment is the positive affective response a learner has towards academic material that is associated with enhanced motivation and learning depth (Pekrun et al., 2017). In this study, enjoyment refers to the students' level of enjoyment and interest of the mathematics class that uses Fast Draw Approach, the results of which can be found in the surveys.

**Understanding.** Understanding of Mathematics, A common definition for understanding is a student's comprehension of concepts, procedures, and the application of those concepts and procedures in different problem-solving situations (National Research Council, 2015). In this research, understand references the participants' feeling about how much they understand the mathematical concept/step during the use of the Fast Draw Approach (Based on the questionnaire).

**Retention.** Retention in education describes the extent to which a learner can recall and apply knowledge or skills as time passes, which is evidence of a long-term memory of learned material (Mayer, 2017). In the present study, retention is the students' view on how well they think they will remember and use the Fast Draw Approach mathematical problem-solving steps, as indicated on the one month after intervention questionnaire.

## **Method**

### **Research Design**

This study will utilize Quasi-Experimental Research Design to identify the level of academic performance of Grade 10 students before and after the integration of Fast Draw Approach in teaching Mathematics. According to **Sreekumar (2024)**, this research design is used when participants cannot be randomly assigned to an experimental and control group, it evaluates effects of interventions and establish the causal relationship of the variables. In the case of this study, this design will

help the researcher identify whether or not Fast Draw Approach is effective as a strategy in teaching Mathematics. This will serve as a guide in measuring the academic performance of students based on their pretest and posttest scores and its effectiveness.

### **Research Locale**

The study will be conducted in Francisco P. Felix Memorial National High School in Cainta, Rizal. This is a public secondary school operating under the Department of Education (DepEd) in the Philippines. Focused on Grade 10 Junior High School students, these students must be currently enrolled in the school and taking up Mathematics subject. The choice of this setting is based on the school's willingness to participate in the study and its alignment with the researcher's goal to improve student academic performance through innovative instructional strategies. The familiar learning environment will help ensure the authenticity of the data collected and minimize external distractions that could affect the results.

### **Research Subject**

The participants of this study will be Grade 10 students of Francisco P. Felix Memorial National High School in the Academic Year 2025-2026. Sixty (60) students will be selected to participate in the study. Moreover, this total will be divided into two groups. The experimental group involves 30 students that will receive treatment of Fast Draw Approach as an instructional strategy and the control group with 30 students will receive traditional instructional strategy, both in learning mathematics.

The participants of the study will be selected using Purposive Sampling Technique. Turner (2020), this sampling technique is used when the study targets a specific individual as a respondent with characteristics. This study will involve 60 Grade 10 students from Francisco P. Felix Memorial National High School in the Academic Year 2025-2026. Specifically, the respondents will be selected based on the following criteria: the respondents must be (1) officially enrolled in a Grade 10 Mathematics class, (2) no record of prolonged absences and, (3) belonging to a regular scheduled Grade 10 Mathematics class.

### **Data Gathering Tool**

To obtain the data needed for this study, a researcher-made achievement test in mathematics will be utilized to measure the students' level of academic experience in pretest and posttest. This instrument will include 40-item multiple choice test that aligned with the DepEd Grade 10 Curriculum Guide in Mathematics. Moreover, a research-made questionnaire to measure students' perceived effectiveness will be administered to the experimental group post-intervention. To ensure the validity of the data gathering tools used, both achievement tests and survey questionnaire will undergo content validation where face and content

validity will be reviewed by experts and will undergo pilot-testing. Strong reliability will be indicated with a Cronbach's Alpha of 0.88.

### **Ethical Considerations**

Consent from the school principal, teachers, parents, and students were secured before the conduct of the study. All of the concerned individuals were properly oriented on the objectives and the procedures. Confidentiality of the information provided by the participants was also emphasized ensuring all data gathered are to be used solely for this research study. Furthermore, no conflict of interest aroused in the conduct of this study.

### **Data Gathering Procedures**

The data gathering procedure will be done as follows; (1) the researcher will obtain necessary permits from the school division's office and the school principal stating its allowance to conduct the study in the institution and consents will be acquired, (2) upon securing permits, the researcher will coordinate with Grade 10 Mathematics teachers to schedule pretest, intervention and posttest, (3) pretest will be administered to 60 students in both experimental and control group, (4) intervention using Fast Draw Approach will be done for a period of 10 weeks, (5) both groups will take the post test, (6) students from experimental group will take the survey questionnaire and, (7) tests and survey responses will be collected, analyzed and interpreted.

### **Statistical Treatment of Data**

To analyze and interpret the data gathered, the researcher will use diverse treatments. Mean and Standard deviation will be used to measure the central tendency of the students' pretest and posttest scores. Weighted Mean will be used to analyze the responses towards the perception survey using a 4-point Likert Scale to determine the perceive effectiveness of Fast Draw Approach. Paired Sample T-test will be used to identify the significant difference of the pretest and posttest scores of both experimental and control group and Pearson r Correlation to measure the relationship between the students' perceived effectiveness towards Fast Draw Approach and the improvement of their academic performance improvement.

**Table 1.** *Likert Scale Range*

| <b>Mean Range</b> | <b>Interpretation</b> |
|-------------------|-----------------------|
| 3.50 – 4.00       | Very Effective        |
| 2.50 – 3.49       | Effective             |
| 1.50 – 2.49       | Less Effective        |
| 1.00 – 1.49       | Not Effective         |



## **Results and Discussion**

This chapter presents a summary of the findings, conclusions, and recommendations of the study. The analysis centers on the results obtained from the achievement tests and perception surveys of Grade 10 students at Francisco P. Felix Memorial National High School. The findings correspond with the specific research problems, and the recommendations are provided to assist and guide teachers, school leaders, and policymakers in developing mathematical instruction.

### **Summary of Findings**

This study explored the effectiveness of the Fast Draw Approach as an instructional strategy for teaching mathematics to Grade 10 students at Francisco P. Felix Memorial National High School. It focuses on their academic performance before and after instruction, their perceptions of the Fast Draw Approach on how engaged, enjoyable, understandable, and retainable it is, and the extent to which their perceptions were related to academic performance improvement.

In terms of the level of academic performance, both groups (control & experimental group) demonstrated measurable improvement after instruction, but the degree of growth was considerably different. The control group increased its mean from 22.90 (Developing) in the pretest to 26.83 (Developing) in the posttest. This represents slight improvement indicating a benefit from typical teaching methods, but ultimately indicates that students did not rise to a higher performance band, which suggests traditional instruction alone was not sufficient to help students climb outside their current level of mastery. The experimental group was found to have a significantly greater increase in performance, from 26.67 (Developing) in the pretest to a posttest average of 34.17 (Proficient). The literal shift from Developing to Proficient is transformation that signifies the Fast Draw Approach empowered these students to progress beyond basic skills to progress towards higher levels of proficiency.

With respect to how effective students perceived the Fast Draw Approach, the results indicated that overall students rated the Fast Draw Approach as Very Effective ( $M = 3.10$ ). In particular, the domain retention ( $M = 3.14$ ) was rated highest, followed closely by enjoyment ( $M = 3.13$ ) and understanding ( $M = 3.11$ ), and engagement was rated slightly lower at ( $M = 3.07$ ), but still within the Very Effective range. These results demonstrate that the Fast Draw Approach supported students to remember mathematical procedures, made the lessons more engaging, and improved their understanding of concepts. Students shared that the Fast Draw Approach encouraged them to participate and engage in the thinking process around problem solving and to be active, instead of passive, learners. Each result also indicated there are areas that could improve. The relatively lower ratings on sustaining motivation and reducing mathematics anxiety indicates that the Fast Draw Approach was successful in motivating students engagement, but more support may be needed, prior to, during, and/or after the Fast Draw Approach is

completed, to maintain the students' interest and foster longer-term confidence in mathematics.

The results also revealed significant academic performance differences, both within the groups and between them. Paired comparisons showed that the control and experimental groups were statistically significantly better in their pretest versus posttest performance, indicating that the instruction generally was helpful in improving performance. Of importance, only the experimental group progressed to a higher band in their level of proficiency, showcasing the unique benefit of the Fast Draw Approach to instruction. Furthermore, independent sample comparisons indicated that the experimental group significantly outperformed the control group on the posttest, confirming that the Fast Draw Approach was more effective than traditional approaches for overall student mathematics achievement.

Finally, the analysis demonstrated a significant positive correlation between students' perception of the Fast Draw Approach and their improvement in academic performance. The correlation analysis showed a coefficient of  $r = 0.37$ ,  $p = 0.043$ , indicating that students who positively perceived the strategy in regard to engagement, enjoyment, understanding, and retention were more likely to show a higher level of learning gains. The finding reinforced the importance of perceptions and attitudes of students as an academic performance tool. Positive perceptions of an instructional strategy appear to be motivational drivers that can spark students to work harder, persist longer when faced with obstacles, and execute the strategy with greater fidelity, which contributes to documented academic performance improvements.

To sum up, these results indicated the Fast Draw Approach is an effective method for teaching mathematics. It stands out as significantly increasing academic performance, allowing students to grow from Developing to Proficient, while also developing positive learner perception that supported their motivation and eventual success. Even with some noted pullback on long-term engagement and anxiety levels, the overall findings suggest strong potential for Fast Draw to be an effective learner-centered, visual approach to improving secondary mathematics instruction.

## **Conclusion**

Based on the findings of this study, the following conclusions were drawn:

**Fast Draw Approach significantly enhanced students' academic performance, allowing them to move beyond the "Developing" level and reach the "Proficient" level in mathematics.**

This development is not just indicative of increased test scores but demonstrates a greater understanding of mathematical concepts. Fast Draw's systematic, structured additive approach provided learners with a pathway for solving

problems sequentially thus limiting confusion or disorganized thinking due to participating in a more organic form of problem solving. Moreover, using clear visual representation established connections between abstract mathematical concepts and their applications. It is important to note that this progression illustrates Fast Draw's role in learners while augmenting both procedural fluency and conceptual understanding learners felt empowered as they worked through the problems and attempted the math task with greater confidence and accuracy.

**Students perceived the approach as very effective in fostering engagement, enjoyment, understanding, and retention.**

Learners also appreciated the ways in which this option encouraged them to engage in the lesson, made the lessons more enjoyable, clarified complex concepts or processes, and gave a sense of support for recalling steps/formulas. These learner insights further reinforce that Fast Draw is a learner centered strategy, based on academic theories that support visualization, being actively involved, and constructivist learning. The positive reception is particularly meaningful, given the complexity of the subject area; if mathematics was not seen as hostile, it could have been perceived as serious or demanding; nevertheless, students stated that they simply enjoyed this path or process. Ultimately, the findings suggests that through the use of creative or innovative strategies, Fast Draw for the purpose of illustrating mathematics simply makes it for engaging and applicable, and the findings affirm the impact or value in enhancing their motivation and overall learning experience.

**Fast Draw Approach outperformed traditional teaching methods, not only in terms of learning gains but also in raising proficiency levels.**

Though the control group that was taught using traditional lecture-based instruction was able to show small levels of improvement, only the experimental group showed a definitive upward shift to a higher level of proficiency. This illustrates that Fast Draw is more effective at creating meaningful and significant learning improvement compared to tradition methods. In this light, the strategy qualifies Fast Draw as a best teaching practice in mathematics instruction because evidence-based practice shows that structured visual imagery strategies are a better form of instruction than text- or teacher-centered methods.

**There is a significant positive relationship between students' perceptions of Fast Draw and their academic performance.**

Learners that perceived the strategy to be engaging, fun, and reflective of understanding and retention, also showed the greatest degree of increase in academic performance, suggesting that perception and attitude toward an instructional strategy are key to learning outcomes, not peripheral issues. This positive perception translates into more behavioral engagement, cognitive engagement, and emotional engagement with the work assigned to students, which is reflected in students' achievement. Therefore, not only was the learning success of Fast Draw demonstrated, but it was strengthened with positive student

engagement that creates a positive attitude for highly engaged learners that leads to academic success.

**While Fast Draw was highly effective overall, it showed limitations in sustaining long-term motivation and reducing math anxiety.**

Students expressed challenges with sustaining motivation over long periods of time and continued to express math problems even when the strategy was working. This indicates that while Fast Draw offers an effective scaffold for learning, it does not solve the entire problem of math education. To optimize its effects, there should be other strategies linked to and used at the same time as Fast Draw. Strategies could include gamification ideas to maintain students' motivation, cooperative learning opportunities to develop peer engagement and supports, and some confidence-building exercises to mitigate students' anxiety about math. Bringing in some of these would ensure that students are taking the platform and success of Fast Draw to positively impact their long-term growth, persistence through struggle, and positive dispositions about math.

## **Recommendations**

Below are some recommendations based on the conclusions of the study.

### **Strengthening Mathematics Proficiency Through Structured Visualization**

**Institutionalize Training on Fast Draw Across Grade Levels:** To maximize the impact of the Fast Draw Approach, schools should work to institutionalize teacher training through organized professional development. Schools can best accomplish this task through workshops, seminars, and in-service training opportunities that will allow teachers at all grade levels to be comfortable in not just knowing the steps of Fast Draw but knowing how to adapt the strategy with other topics and students. Institutionalized training can show teachers how the method scaffolds learning from less complex arithmetic to more complex problem-solving tasks, and scaffolding learning is important for vertical alignment across grade levels. Furthermore, institutionalized teacher training is critical to the engaging teachers in consistent professional learning that provide teachers with the opportunity to collaborate, share ideas, and refine their use of the implementation to grow the revolutionary culture in schools.

**Integrate Fast Draw in Lesson Planning:** It is important that the Fast Draw Approach is more than just a training initiative. There must be a systematic effort to embed Fast Draw into the day-to-day instruction in schools. Schools should support mathematics teachers in embedding Fast Draw into lesson plans, exemplars, and activity sheets to ensure that visual scaffolds are used systematically as part of instruction, rather than merely bolted on. By embedding the steps of Fast Draw in lesson planning, students will encounter a regular structured visualization as they work through word problems, thereby normalizing

the use of any structured visual as a viable strategy. Additionally, it allows teachers to align their approach with the curriculum standards, especially the DepEd K to 12 Mathematics Curriculum Guide (2016), which focuses on problem-based, learner-centered instruction. This inclusion of Fast Draw in lesson documentation provides teachers with a way to become accountable in the use of Fast Draw, and provide consistency in the use of visuals, minimizing tension and varying practices, in effect allowing all learners across classrooms access into, and the benefits of Fast Draw.

**Provide Supplemental Practice Materials:** Another important recommendation involves creating additional practice resources to utilize the Fast Draw strategy beyond discussions in the classroom. Schools could work with a teacher and curriculum developer to create student workbooks through the Fast Draw process for a variety of math contexts, problem sets, or even digital modules that support students in completing the steps of Fast Draw through independent practice. With practice opportunities at home or during intervention or remediation, students not only would practice more, but their practice would further enhance retention and fluency of using Fast Draw. Additional resources are very important to address diverse student needs—struggling students practice to ensure that their use is intentional and repeated, while more advanced students use it as part of enrichment and to practice on similar, but more challenging problems. The use of digital modules will also allow students to engage with the Fast Draw strategy in a more interactive and accessible way, likely increasing motivation to work in math. In the end, providing additional resources and materials will keep students consistently practicing, reinforce skills learned in class, and assist in ongoing curiosity and mastery of mathematical problem solving.

### **Enhancing Student Engagement and Enjoyment in Mathematics**

**Promote Interactive and Participatory Problem-Solving Sessions:** One of the key benefits of the Fast Draw Approach is that it allows abstract mathematical problems to be transformed into visual representations students can collaboratively build and reflect upon. To build on this benefit, teachers could create group problem-solving experiences for students to enact the Fast Draw steps and participate cooperatively with others in the visual representation of those mathematical concepts. From a collaborative experience, learners can share their voice, negotiate mathematical understandings, and collaboratively exhibit the visual interpretations of mathematical concepts. Not only does this deepen their understanding of the concepts, it also facilitates social engagement and teamwork. Participatory learning also builds students' sense of ownership over the learning process, moving them from passive knowledge receive to co-builders of knowledge understanding. The literature on cooperative learning supports that meaningful and structured group activities in the classroom allow students to be more engaged, persistent, and critical thinkers in mathematics (Gillies, 2016; Rahman, Ahmad, & Rusli, 2017). Thus, using the Fast Draw approach in participatory sessions support students both cognitively and socially.

**Integrate Gamification with Fast Draw Activities:** Sustaining in mathematics is dependent on effective teaching methods, and new approaches to maintain learners' interest over a longer duration. Schools can implement gamification into Fast Draw activities by developing opportunities for collaborative and competitive problem-solving challenges. For instance, schools can design “drawing races”, where students strive to reasonably complete Fast Draw solutions in a certain amount of time, or arrange contests amongst the learners, where students score one another's drawing representation. Gamified mathematics activities encourage newness and enthusiasm into classroom mathematics lessons, allowing students to consider problem-solving as enjoyable engagement rather than a solely academic task. Pozo-Sánchez, García-Peñalvo, and García-Holgado (2020) report that gamification has demonstrated to heighten learner motivation and engagement through elements of play, reward, and competition into the learning process. Therefore, embedding these elements into Fast Draw will stimulate sustained excitement, engagement and help reinforce problem structure.

**Encourage Reflective Sharing:** In addition to solving mathematical problems, students gain a considerable amount from articulating their thinking and justifying their solution. Teachers should bring reflective sharing into Fast Draw activities as part of the learning experience. After all a problem has been completed, learners can be asked to explain their drawings, describe the rationale behind each step, and make connections to math ideas through the representations. The act of the students sharing their thought processes in written or verbal form solidifies their understanding of the problem by encouraging students to wrap their thinking in words. Additionally, it promotes confidence in students when they begin to not only present their work in front of others, but actually defend and share their ideas. Reflective sharing also supports metacognitive awareness, allowing students to assess their strategies and question their approach. As Schoenfeld (2016) points out, sense-making and explanation are at the center of a productive mathematics learning experience, enabling the bridge between procedural fluency and conceptual understanding. By including reflection with Fast Draw activities, teachers do not only ensure students solve the problem correctly, but students also forge deeper skills in reasoning, communication, and self-regulation.

### **Supporting Conceptual Understanding and Retention**

**Combine Fast Draw with Distributed Practice:** Although the Fast Draw approach has been demonstrated to improve immediate recall of mathematical ideas, to maintain knowledge over time, exposure and retrieval of that information must occur repeatedly. In order to maximize the retention effects of Fast Draw, teachers can bring to students' attention problems previously solved in earlier lessons, rather than viewing the previous problem-solving process as a one-time learning episode. This can be thought of as distributed practice, or applying Fast Draw steps to problems in a familiar context spaced out over weeks. Research findings indicate that distributed learning promotes better encoding of information and reduces forgetting (Baars et al., 2017). If teachers adopt Fast Draw along with the principle of distributed practice, they will promote recall of steps

and formulas during testing and build retention of those steps or formulas for future use in higher-order problem solving.

**Promote Student-Generated Visuals:** To promote independence and encourage retention, students should be urged to evolve their own drawing templates and heuristics as opposed to ever relying explicitly on those presented by a teacher. When students are prompted to develop their own visual models, they share ownership of the learning process with the teacher, and their metacognitive skills are strengthened by deciding how best to draw relationships between the information given, operations required, and solutions. Flavell's (1979) theory of metacognition illustrates that students who monitor and regulate their learning strategies are more likely to retain information over time. Maccini, Mulcahy, and Wilson (2016) also agree that students' graphic organizers are more effective than teachers' graphic organizers in facilitating the retention of information. When students are given the responsibility to generate their possibilities for visual representation, Fast Draw not only becomes a strategy for teaching but also a means for developing the student's ability to self-direct mathematical thought and to internalize the experience of "doing" mathematics.

**Embed Retention Checks in Assessments:** In order to ensure continuity beyond the context of school practice with Fast Draw, schools may want to have retention checks integrated as a part of regular quizzes or exams. In this context, questions are made to include pictorial representations of the steps of the problem-solving process, which invites students to recall and apply the Fast Draw sequence in order to go through the problem solving process. By embedding assessments of this nature, students can practice the elements of visualization during each evaluative task, and support retention via high stakes application of visualization. In addition, this provides the opportunity for teachers to see if students have internalized not only the skill of getting to the right answer, but also the process of problem solving as an important way of demonstrating conceptual understanding (Chai, Deng, & Tsai, 2021). Importantly, DupEd's K to 12 Mathematics Curriculum (2016) requires assessments to include as part the procedural nature of learning and to include a representation of mastery of basic skills. If schools plan for retention checks as part of assessments, they ensure that Fast Draw is not simply a teaching task or tool, but part of long-term practices that involve intended teaching and assessment practices.

### **Addressing Math Anxiety and Sustaining Motivation**

**Integrate Confidence-Building Activities:** While the Fast Draw Approach improves students' understanding and problem-solving abilities, there's still a lot of students who encounter the problem of mathematics anxiety, which can prevent students from performing at their best, especially when strategies improve. One way for teachers to approach this issue is to combine Fast Draw with aspects of cooperative learning methods, like peer tutoring, group challenges, and team-based competitions. Using cooperative learning activities promotes an emotionally supportive or safe environment in the classroom. Students are encouraged to take

risks to solve problems in math content without the fear of failing. Gillies (2016) indicated that cooperative learning helps build trust, interdependence, and peer support, which can also lower the stress that is often associated with solving problems by gaining the confidence of a peer for support, rather than the student only solely relying on themselves in one independent form of assessing the mathematics content. Rahman, Ahmar, and Rusli (2017) reinforced that collaborative environment also helped students and eliminated some of the negative effects of anxiety by altering the focus on the individual, and moved to teamwork to achieve a common goal. By helping students feel confident and engaging with students mentally, the teachers which place fast draw with these confidence building activities can help ensure the student not only obtain some mathematical efficiency but they build the grit and tenacity to attempt to solve difficult problems preferences.

**Provide Affective Support Programs:** In addition to clearly defined pedagogies, schools need to support the emotional side of math learning with deliberate affective support. Guidance counselors and teachers can come together to offer short, classroom-based support to assist students in managing stress, practicing mindfulness, and motivation-based sessions focused on a growth mindset. These exercises all reiterate that learning entails making mistakes and that math is not simply about right and wrong. Likewise, Pekrun et al. (2017) recognized the role that positive achievement emotions would play in, amongst other things, academic perseverance and performance, and affective support sustains active learning within mathematics lessons. Involving structured affective support allows for both Fast Draw and the socio-emotional support within mathematics lessons to have balance and support for all aspects of learner needs, which are associated with cognitive and emotional understanding.

**Adopt Gamified Review Systems:** To maintain motivation and a consistency of engagement, schools might utilize some type of gamified review system that utilizes the Fast Draw Approach on digital platforms or implement a point-based reward system. For example, teachers may create an online module for practice with badges or points to earn based on completing Fast Draw-based tasks, or simply develop "leaderboards" in the classroom to celebrate persistence and progress. Pozo-Sánchez, García-Peñalvo, and García-Holgado (2020) explored this concept and found that, "Gameful learning increases student motivation for learning and deepens positively the students' engagement through learning materials or activities which used game mechanics such as rules, points, challenges, achievements, and scores." (p. 4). By framing practice or experience as enjoyable and/or rewarding, gamified systems can maintain a long-term motivation and lessen the boredom associated with monotony and repetition of drills. Overall, the combination of gamified systems with Fast Draw guarantees that practice will not only be cognitively expansive, but also engage the learner emotionally to foster persistence in and greater willingness to use problem-solving strategies with little gaps in-between in time-and-space.



**Policy and Curriculum Support Align with DepEd’s K to 12 and MATATAG Priorities:** The K to 12 Curriculum of the Department of Education and the more recent MATATAG reform framework, focus on mastery of basic skills, contextualized instruction, and learner-centered practices. As such, school leaders and those who are developing curriculum should make the Fast Draw Approach a best practice for problem-solving and visual mapping. One practical way to recognize this best practice is to feature the approach in Learning Action Cell (LAC) sessions, a professional learning community for teachers. In LAC, teachers can share experiences, co-develop lesson exemplars, and tackle issues of implementation around Fast Draw. This recommendation would also align with the role of visual scaffolds in the mathematics curriculum guide (DepEd 2016) and is timely considering the continuing gaps in national mathematics performance on the DepEd National Achievement Test (2023). With the introduction of Fast Draw into LAC sessions, teachers can see the practice as enhancing different instructional practices. This embedding of Fast Draw into LAC sessions ensures that strategies are not just providing best practice examples for individual units of study, but that they are providing the foundations for a system that becomes a practice and culture in instruction that is aligned with national policy intent.

**Incorporate Fast Draw in Remediation Programs:** Fast Draw has significant potential as a remediation strategy for struggling learners due to its usefulness in linking abstract ideas with concrete representations. Schools may formally apply the strategy by incorporating it into the intervention class, after-school tutorials, or summer bridging programs for at-risk students to catch up in mathematics. Remediation through visualization provides learners with step-by-step guidance that helps simplify difficult problem-solving, sweeping cognitive load away and building students' confidence (Chai, Deng, & Tsai, 2021). Furthermore, using Fast Draw for remediation is aligned with DepEd e-Saliksik (2021), which endorses drawing-based heuristics such as GADS to support learners with ongoing and persistent challenges in solving problems. Fast Draw provides opportunities for schools to address equity issues in mathematics learning by providing explicit support for students who are most at-risk of failure. Through targeted intervention programs, growers can be assured that learners receive relevant support to help them develop and demonstrate proficiency.

**Encourage Research-Based Innovations:** In order to maintain the relevance and functionality of the Fast Draw Approach, the educational community should foster the idea of innovation through the lens of action research and graduate studies. Teachers and graduate students may be encouraged to incubate and pilot innovations of their own such as digital Fast Draw applications, integration with mathematics technologies like Desmos or GeoGebra, and to create local problem sets grounded in their students' sociocultural contexts. These types of innovations could not only serve to modernize the approach but also increase its utility for teaching mathematics within diverse contexts and among various learners. As Mayer (2017) asserted in his book scoped around multimedia learning, embedding visuals with digital platforms to support learning improves both retention and transfer of knowledge, making digitalized Fast Draw applications very plausible.

Additionally, local problem sets serve to ground the content, which both the K to 12 Curriculum Guide (DepEd, 2016) and the MATATAG framework supports. Therefore, a goal of action research to adapt and innovate the Fast Draw Approach is to sharpen the usefulness of the framework, increase evidence of its effectiveness, and position it as nimble, culturally responsive, sustainable approach to mathematics education in the Philippines.

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