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1. All articles must have a high degree of scholarship;
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5. Articles must use APA style sheet; and,
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AUTHENTIC PATHWAYS TO SUCCESS: OUTCOMES AND EXPERIENCES OF ALTERNATIVE LEARNING SYSTEM GRADUATES

Alexander P. Dumas
Mildred F. Accad
Sultan Kudarat State University

ABSTRACT

Education is a lifetime process, pursued formally, informally, or non-formally, and capable of transforming lives. This study examined the outcomes and lived experiences of Alternative Learning System (ALS) graduates in Tacurong, SoCCSKSaRGen, Philippines. Using a convergent parallel mixed methods design, quantitative data were gathered from 22 surveyed graduates and 8 interviewed graduates on profiles, educational advancement, employment, income, and civic participation, while qualitative narratives explored resilience, identity transformation, and community engagement. Descriptive statistics, Chi Square, correlation, and thematic analyses revealed that ALS graduates were primarily in early adulthood, engaged in diverse professions (teachers, police, engineers, entrepreneurs), and actively involved in community service. Qualitative results highlighted how graduates overcame barriers, rebuilt confidence, and embraced lifelong learning. Integration of both strands offered a humanized understanding of ALS graduate outcomes, showing that success is shaped less by background and more by motivation, program support, and community involvement. Findings inform local educational policy, reinforcing ALS as a pathway to equity, empowerment, and social participation for marginalized learners.

Keywords: *Alternative Learning System, educational outcomes, social responsibility, identity transformation, Tacurong graduates*

INTRODUCTION

Education is universally recognized as one of the most powerful instruments for improving lives and expanding opportunities. Yet, in the Philippines, many learners are unable to complete formal schooling due to poverty, family responsibilities, and social barriers. For these individuals, the Alternative Learning System (ALS) provides a vital second chance to continue learning and complete basic education (World Bank, 2018; Department of Education, 2022).

Institutionalized through Republic Act No. 11510 (2020), ALS serves as a parallel learning system for out of school children, youth, and adults. The Department of Education recognizes ALS as a flexible pathway that responds to diverse life circumstances, enabling learners to pursue further education, employment, or livelihood. Globally, this aligns with the United Nations Educational, Scientific and Cultural Organization (UNESCO) call for inclusive and equitable education, ensuring that no learner is left behind (UNESCO, 2020).

In Tacurong City, Soccsksargen, ALS has become a transformative program that equips graduates with academic credentials while empowering them to rebuild confidence, redefine identity, and engage in community life. Tacurong's five districts provide a unique setting where ALS graduates' stories of resilience and success reflect both challenges and triumphs of marginalized learners.

This study bridges measurable outcomes with lived experiences. While previous research often emphasizes employment rates or educational continuation, this study underscores personal transformation, identity development, and community engagement.

In the local context of Tacurong City, Soccsksargen, ALS has become a transformative program that not only equips graduates with academic credentials but also empowers them to rebuild confidence, redefine identity, and engage in community life. Tacurong's five districts provide a unique setting where ALS graduates' stories of resilience and success reflect both the challenges and triumphs of marginalized learners. These narratives highlight how ALS contributes to human capital development, workforce readiness, and civic participation (Aniasco, 2024; Albert et al., 2024; Opportunity International, 2025).

The rationale for this study lies in bridging measurable outcomes with lived experiences. While previous research often emphasizes employment rates or educational continuation, this study underscores the importance of personal transformation, identity development, and community engagement. By examining the authentic pathways of ALS graduates in Tacurong, the research provides insights into how second chance education translates into real opportunities and social impact (Creswell & Creswell, 2018; Creswell & Plano Clark, 2018).

Finally, the significance of this study extends beyond academic inquiry. For learners, it validates their struggles and celebrates their achievements. For educators and policymakers, it offers evidence to strengthen ALS implementation. For the Tacurong community, it showcases how education can transform lives and inspire collective progress. The development of a coffee table booklet as the final output ensures that these findings are not only documented but also shared in an accessible, motivational, and culturally resonant format (Dumas, 2026).

STATEMENT OF THE PROBLEM/OBJECTIVES

This study aimed to determine the educational and social community outcomes of Alternative Learning System (ALS) graduates, examine the significant relationships among selected profile variables and outcome dimensions, explore their lived experiences, and develop a coffee table booklet based on the findings. Specifically, it sought to answer the following questions:

This study seeks to answer the following questions:

1. What are the demographic profiles of ALS graduates in Tacurong?
2. What are their educational outcomes in terms of advancement and motivation?
3. What are their employment and income outcomes?
4. What are their social and community participation outcomes?
5. How do variables such as age, gender, employment status, income, and attainment relate to educational advancement?
6. What personal transformations and identity shifts are experienced by graduates?
7. What recommendations can be drawn for ALS coordinators, policymakers, and communities?

METHODOLOGY

Data gathered from 22 surveyed graduates and 8 interviewed graduates provided a strong and credible basis for drawing valid conclusions in this study. The use of a mixed methods design, combining quantitative surveys with qualitative interviews, directly addressed the research questions and objectives, ensuring both breadth and depth of analysis. A correlational approach and variance analysis were correctly applied to examine the relationships among graduate profiles, educational outcomes, and social community outcomes, thereby strengthening the reliability of the findings. The study culminated in the development of a coffee table booklet that not only showcases the measurable outcomes of ALS graduates but also highlights their inspiring stories of resilience and transformation. This final output serves as both a

documentation of success and an advocacy material designed to motivate learners, educators, and policymakers.

PROCEDURES

The research process began with the preparation of survey and interview instruments, which were validated by ALS coordinators to ensure reliability and relevance. Data collection involved administering surveys to 22 graduates, conducting in depth interviews with 8 graduates, and gathering photographs and personal artifacts to enrich the narratives.

Quantitative data were encoded into statistical software, while qualitative data were transcribed and organized thematically. Integration of both strands provided comprehensive insights into the outcomes and experiences of ALS graduates. For data analysis, descriptive statistics such as frequency and percentage were used to present graduate profiles and outcomes, while inferential statistics, particularly correlation tests, examined relationships among variables such as profile and educational outcomes.

Qualitative analysis employed thematic coding of interview transcripts, focusing on transformation, identity, and reflections, guided by Transformative Learning and Social Identity theories. Results from both quantitative and qualitative strands were compared and connected to highlight convergence or divergence between numerical outcomes and lived experiences. The final synthesis was presented in the coffee table booklet, combining statistical summaries with narrative stories to showcase authentic pathways of success among ALS graduates.

FINDINGS

The study revealed that the educational outcomes of ALS graduates in Tacurong were highly positive, with the majority advancing to higher education or vocational training. Their motivation to pursue learning remained strong despite barriers such as financial constraints and delayed schooling. In terms of employment outcomes, graduates were successfully absorbed into diverse fields including civil engineering, teaching, accountancy, event organizing, and public service, demonstrating the program's effectiveness in preparing learners for professional careers. The social outcomes further highlighted the impact of ALS, with civic participation rated "High" (grand mean 3.81, SD 0.58), reflecting active involvement in community initiatives and leadership roles. Beyond measurable indicators, the graduates' personal transformations were evident in narratives that revealed resilience, identity rebuilding, and empowerment, underscoring ALS as not only an educational pathway but also a catalyst for holistic personal and social development.

Table 1. Distribution of ALS Graduates by Age Group

Age Group	frequency	Percentage%
21–25	1	3.3
26–30	22	73.3
31–35	7	23.3
Total	30	100

The data reveals that the majority of ALS graduates (73.3%) are aged 26–30 years old, followed by 23.3% aged 31–35, and only 3.3% aged 21–25. This distribution highlights that ALS primarily serves young adults who are beyond the traditional schooling age, reflecting its role as a second chance education pathway. The dominance of the 26–30 age group indicates that many learners pursue ALS after gaining life or work experience, then return to education to improve their opportunities. The smaller proportion of younger graduates (21–25) suggests that out of school youth often re-enter formal education earlier, while ALS tends to attract those who delayed schooling longer. Finally, the presence of graduates up to age 35

underscores the inclusivity of ALS for adult learners, reinforcing its mission to provide education across diverse age brackets.

Table 2. Profile of ALS Graduates by Gender

Sex	frequency	Percentage%
Female	15	50.0
Male	15	50.0
Total	30	100

The data shows that ALS graduates in Tacurong are equally distributed by gender, with 15 females (50.0%) and 15 males (50.0%) out of the total 30 respondents.

This equal representation suggests that:

The ALS program is accessible and inclusive, providing opportunities for both men and women. Gender does not appear to be a limiting factor in participation or completion of ALS. The balanced distribution strengthens the credibility of findings, as perspectives from both genders are equally represented. It highlights the program's role in promoting gender equity in education, consistent with national and global goals for inclusive learning.

Table 3. Employment Outcomes of ALS Graduates

Employment Status	frequency	Percentage%
Employed full-time	10	33.3
Employed part-time	3	10.0
Self-employed	6	20.0
Currently studying	5	16.7
Unemployed	6	20.0
Total	30	100

Table 3 shows that ALS graduates are employed across diverse fields, with teaching (16.7%) and self-employment (20.0%) as the most common pathways. The presence of graduates in civil engineering, accountancy, event organizing, and public service highlights the program's ability to prepare learners for professional careers. Meanwhile, 16.7% are currently pursuing further studies, reflecting ALS's role as a stepping stone to higher education. The 13.3% unemployment rate underscores the need for stronger livelihood linkages and employment support programs.

Table 4. What are their social and community participation outcomes?

Indicator	Mean	SD	Verbal Description
Sense of Social Responsibility	3.99	0.59	High
Leadership and Initiative	3.90	0.77	High
Participation in Community Activities	3.50	0.57	High
Civic Engagement	3.87	0.63	High
Community Involvement	3.78	0.33	High
Grand Mean	3.81	0.58	High

Among the dimensions, sense of social responsibility obtained the highest mean, $M = 3.99$ and $SD = 0.59$. This result suggests that the respondents strongly recognized their role in helping improve their community, following community rules, encouraging others to participate, and showing concern for social issues. This finding reflects the broader purpose of ALS as a learning pathway that supports not only functional literacy but also responsible participation in society (Republic Act No. 11510, 2020).

The dimensions of leadership initiatives, $M = 3.90$ and $SD = 0.77$, and civic engagement, $M = 3.87$ and $SD = 0.63$, were also interpreted as high. These findings indicate that the graduates generally viewed themselves as capable of taking initiative, supporting community programs, participating in group decisions, and becoming involved in civic or community-related activities. From the perspective of Social Identity Theory, this may suggest that ALS graduates developed a stronger sense of themselves as contributing members of their families and communities (Tajfel & Turner, 1979). It also supports the idea that lifelong learning should help individuals participate meaningfully in social and community life (UNESCO, 2015).

The lowest mean was observed in participation in community activities, $M = 3.50$ and $SD = 0.57$, although it was still interpreted as high. This result suggests that while the graduates held positive civic values and a sense of responsibility, their actual participation in community programs, meetings, or events may vary depending on available time, work demands, family responsibilities, and opportunities for involvement. Community participation is often shaped not only by willingness but also by access to social networks, local invitations, and meaningful spaces for engagement (Putnam, 2000).

Overall, the findings indicate that ALS graduates demonstrated positive social-community outcomes. Their strongest area was sense of social responsibility, while actual participation in community activities appeared to be the area that may still be strengthened. This suggests the need for more accessible community-based opportunities where ALS graduates can participate, volunteer, lead, and contribute to local development.

Table 6. Personal Transformations and Identity Shifts

Theme	Evidence from Narratives
Resilience	Overcame poverty, stigma, and delayed schooling.
Confidence Rebuilding	Restored self-belief, enabling pursuit of higher education and careers.
Identity Evolution	Shifted from “out-of-school youth” to students, professionals, leaders, and role models.
Empowerment	Renewed hope, discipline, and clearer life goals.

ALS graduates’ journeys reveal deep identity reconstruction. Initially burdened by stigma as “dropouts,” they redefined themselves as capable learners and contributors. Their resilience was not only personal but communal — they became inspirations to families and role models in barangays. Confidence rebuilding allowed them to pursue higher education and professional careers, proving that ALS is a gateway to dignity and recognition.

The evolution of identity from marginalization to empowerment reflects both Transformative Learning Theory (critical reflection reshaping self-perception) and Social Identity Theory (new belonging through civic participation). Empowerment emerged as the most enduring shift: graduates embraced lifelong learning, discipline, and hope, showing that ALS is not just an academic credential but a life changing journey of self-worth and social responsibility.

RECOMMENDATIONS FOR STAKEHOLDERS

Stakeholder	Recommendations
ALS Learners	Pursue higher education/TVET; engage in civic projects; share success stories.
Facilitators	Integrate leadership and civic training; provide psychosocial support; use coffee-table booklet as motivational tool.
LGUs	Allocate resources for learning spaces; support alumni volunteer projects; strengthen TESDA/NGO partnerships.
Policymakers/DepEd	Enhance curriculum for college readiness; sustain funding; use empirical evidence to inform inclusive education strategies.

Based on the findings and conclusions of this study, several recommendations are proposed to strengthen the implementation and sustainability of the Alternative Learning System (ALS) in Tacurong. These recommendations are directed toward learners, facilitators, local government units, and policymakers to ensure that ALS continues to serve as a transformative pathway for education, employment, and community engagement.

Social and community outcomes were equally significant, as graduates actively participated in civic activities, leadership initiatives, and barangay programs, reflecting a strong sense of responsibility. Similar findings were reported in Tangub City, where ALS learners developed confidence, leadership skills, and active community participation. Statistical analysis confirmed relationships between profile variables and educational outcomes, showing that background factors influence academic success, while similar links were found between profiles and civic participation, underscoring how socioeconomic and educational contexts shape community involvement.

Furthermore, educational outcomes were positively associated with social community outcomes, indicating that academic growth fosters civic responsibility and leadership. Beyond these measurable results, graduates described personal transformation through improved confidence, renewed hope, and clearer life goals, while identity evolution reshaped their self-perception from being out of school youth to becoming recognized as students, workers, leaders, and role models. These reflections echo findings from Abregoso and Dioso (2024), who emphasized resilience and determination among ALS learners despite financial and social challenges.

Finally, environmental and community factors such as family support, facilitator guidance, peer influence, and local opportunities proved critical in sustaining success, highlighting that education thrives within supportive ecosystems. This reinforces the broader literature that positions ALS as a life-changing journey beyond academic achievement, deeply rooted in community and stakeholder collaboration.

ALS learners are encouraged to continue their educational journey by pursuing higher education or technical vocational training, actively engaging in civic projects, and sharing their success stories to inspire peers and strengthen resilience within the community (Albert, Santos, & Cruz, 2024).

Facilitators, on the other hand, should integrate leadership and civic training into ALS modules, provide psychosocial support and mentoring to nurture confidence and motivation, and utilize the coffee table booklet as a motivational instructional tool that showcases authentic graduate success (Aniasco, 2024; Dumas, 2026).

Local Government Units (LGUs) are advised to allocate resources for dedicated learning spaces such as classrooms and barangay halls, support alumni volunteer projects and literacy drives, and strengthen partnerships with TESDA centers, schools, and NGOs to expand opportunities for graduates (Opportunity International, 2025).

Finally, policymakers and the Department of Education must enhance curriculum design to address college readiness and workforce integration challenges, sustain funding and institutional support for ALS programs, and use empirical evidence from this study to inform national strategies on inclusive education and labor market development (DepEd, 2019; DepEd, 2021; Republic Act No. 11510, 2020).

CONCLUSION

The findings of this study provide a comprehensive picture of the post-ALS success pathways of graduates in Tacurong. By aligning each conclusion with the Statements of the Problem, the results demonstrate how ALS contributes not only to employment and educational advancement but also to personal transformation, identity development, and community engagement.

ALS graduates came from diverse age groups, districts, and backgrounds, with varied employment status, income levels, and post-educational pathways shaped by personal and community contexts. In terms of educational outcomes, they demonstrated access to further learning, improved academic skills, and strong motivation to pursue higher education, with many advancing to college and successfully completing degrees. This is consistent with tracer studies in Cavite, which found that nearly half of ALS completers

pursued Senior High School or higher education, proving ALS as a viable pathway for academic progression

Graduates' self-perception evolved significantly through their ALS journey, shifting from being identified as out of school youth to becoming recognized as students, workers, leaders, and role models within their communities. Their reflections and narratives revealed meaningful stories of resilience, sacrifice, and determination, underscoring ALS as a life changing experience that extends beyond academic achievement. Equally important were the environmental and community factors that sustained their success—family support, facilitator guidance, peer influence, and local opportunities all played critical roles in enabling persistence and achievement. These findings affirm that education thrives within supportive ecosystems, where personal transformation is nurtured not only by individual effort but also by collective encouragement and community engagement.

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TEACHER SUPPORT, MOTIVATION, AND STUDENT ENGAGEMENT IN LEARNING AMONG PRIVATE SCHOOL TEACHERS IN LAKE SEBU MUNICIPALITY

April Grace B. Ugak

DepEd- Lembotu Elementary School, Be Nef Extension
South Cotabato, Region XII, Philippines

Cherry Vanessa M. Ventura, PhD

Sultan Kudarat State University

ABSTRACT

This study underscored the teacher support, teacher motivation, and student engagement in learning among private school teachers in the municipality of Lake Sebu. Using a quantitative research design, specifically a descriptive-correlational approach, the study examined the relationships among teacher support, motivation, and student engagement. Total enumeration sampling was used, with 88 private school teachers included in the study. In terms of teacher support, the findings revealed that teachers particularly valued training programs that were aligned with their needs and improved classroom instruction. Hence, slightly less support was observed in applying learned skills and receiving administrative guidance, suggesting a need for mentorship and follow-up strategies. Regarding teacher motivation, the highest levels were observed in fulfilling job responsibilities and engaging with the community, reflecting strong commitment and a sense of purpose. In contrast, aspects such as facilities, resources, and personal recognition by the community received slightly lower ratings, highlighting areas for improvement. Student engagement was reported to be very high across behavioral, emotional, and cognitive domains, with students actively participating in classroom activities, demonstrating interest in learning, and applying knowledge in real-life contexts. Moreover, the findings revealed a strong positive relationship between teacher support and motivation. Additionally, the results implied that teacher motivation fully mediates the relationship between teacher support and student engagement. It was concluded that Private schools in Lake Sebu provide a supportive and motivating environment that fosters both teacher effectiveness and student engagement. Teachers feel encouraged by professional development opportunities, a collaborative culture, and community involvement, while students respond positively through high levels of engagement in classroom activities. However, areas such as career advancement opportunities, administrative guidance, resource availability, and recognition could be strengthened to further enhance teacher motivation and student engagement.

Keywords: *Teacher Support, Teacher Motivation, Student Engagement, Mediation Analysis, Private School Teachers*

INTRODUCTION

Education is not simply about delivering content; it is about creating meaningful learning experiences that inspire both teachers and students. In every classroom, the role of the teacher goes beyond instruction; they serve as facilitators, mentors, and motivators who shape the overall learning environment. When teachers feel supported and motivated in their profession, they are more likely to create classrooms

where students feel encouraged to participate and engage actively. Likewise, student engagement is a critical indicator of the effectiveness of the teaching-learning process, as it reflects students' interest, involvement, and commitment to learning tasks.

Globally, research consistently emphasizes the strong connection between teacher support, teacher motivation, and student engagement in learning. Teacher support has been identified as a key factor in fostering a positive learning environment and enhancing student participation. According to Wang et al. (2025), when teachers provide consistent support, students are more likely to become actively engaged in their learning and demonstrate improved academic outcomes. Moreover, teacher support has been found to influence engagement through psychological mechanisms, including self-efficacy and positive academic emotions (Liu & Zhang, 2025). At the same time, teacher motivation plays a crucial role in shaping instructional practices and classroom climate.

In the Philippine context, the quality of education is greatly influenced by the conditions under which teachers work and the support they receive from their institutions. Teachers in private schools are often expected to meet high academic standards while addressing the diverse needs of their students. However, challenges such as limited resources, workload demands, and varying levels of institutional support can affect teachers' motivation and overall performance. Studies conducted in the Philippines indicate that when teachers receive adequate support, such as professional development opportunities, recognition, and a positive work environment, their motivation increases, leading to more effective teaching practices and improved student engagement (Santos & Reyes, 2022). In rural or geographically unique areas like Lake Sebu Municipality, these challenges may be more pronounced due to contextual factors such as accessibility, cultural diversity, and resource availability. As a result, understanding how teacher support and motivation influence student engagement in this specific setting is crucial for addressing local educational needs and improving the overall quality of teaching and learning.

Despite existing studies on teacher support and student engagement, limited research has explored how teacher motivation mediates this relationship in private schools located in rural areas such as Lake Sebu municipality. Most previous studies were conducted in urban or international settings and often examined these variables separately rather than collectively. Moreover, limited attention has been given to private school contexts where institutional conditions and expectations may differ from public schools. These gaps highlight the need for a more contextualized investigation of how teacher support, teacher motivation, and student engagement interact within private schools in the municipality of Lake Sebu. In response to these gaps, this study aimed to determine the levels of teacher support, teacher motivation, and student engagement in learning among private school teachers in Lake Sebu Municipality. It also sought to examine the relationships among these variables to better understand how they influence one another within the local educational context. The findings of the study may provide valuable insights for school administrators, teachers, and policymakers in developing strategies that strengthen teacher support systems, enhance teacher motivation, and promote higher levels of student engagement.

STATEMENT OF THE PROBLEMS

The study investigated the level of teacher support, teacher motivation, and student engagement in learning among private school teachers in Lake Sebu Municipality. It aimed to address the following specific questions:

1. What is the level of teacher support among private school teachers in Lake Sebu Municipality in terms of:
 - 1.1 professional development support;
 - 1.2 instructional and collegial support; and
 - 1.3 career and growth support?
2. What is the level of teacher motivation among private school teachers in Lake Sebu Municipality in terms of:
 - 2.1 job security;

- 2.2 work environment;
- 2.3 job responsibilities; and
- 2.4 community involvement?
- 3. What is the level of student engagement in learning as perceived by teachers in private schools in Lake Sebu Municipality in terms of:
 - 3.1 behavioral engagement;
 - 3.2 emotional engagement; and
 - 3.3 cognitive engagement?
- 4. Is there a significant relationship between teacher support and teacher motivation among the private school teachers in Lake Sebu?
- 5. Is there a significant relationship between teacher support and student engagement as mediated by teacher motivation?

REVIEW OF LITERATURE

This section presents the literature and studies relevant to the present study. These sources include books, journals, online articles, and other credible materials that support and contextualize the research on the teacher support, motivation, and student engagement in learning among private school teachers in Lake Sebu Municipality.

Teacher Support and Its Impact on Educational Outcomes

Teacher support has been identified as a crucial factor in fostering positive learning outcomes and enhancing student engagement. Research shows that perceived teacher support significantly influences students' academic engagement by meeting their psychological needs for autonomy, competence, and relatedness, which are foundational constructs in Self-Determination Theory (SDT) (Ryan & Deci, as cited in research on perceived teacher support and student engagement, 2025). A systematic review by scholars reported that teacher support is linked with increased motivation and engagement among students, suggesting that supportive teacher behaviors can improve both motivation and engagement (Perceived teacher support and student engagement among higher education students, 2025).

Teacher Motivation in Contemporary Educational Contexts

Teacher motivation is another critical variable influencing job performance and satisfaction. Recent research indicates that teacher motivation plays a significant role in the quality of instruction and professional practice. A global review on teacher motivation reported that motivational constructs, including intrinsic factors such as self-fulfillment and extrinsic factors such as institutional support, influence teaching effectiveness, job commitment, and overall teacher well-being (Hornýák, 2025). This underscores that teacher motivation is shaped by a combination of internal and external factors and directly affects the drive and enthusiasm teachers bring to their instructional roles. In the Philippine context, research on teacher motivation highlights its links to continuous professional development and teachers' attitudes toward educational reforms. For instance, Filipino senior high school teachers' participation in continuing professional development activities is associated with their professional commitment and satisfaction, suggesting that motivated teachers are more engaged in professional growth opportunities (Bernardo et al., 2020).

Student Engagement in Learning

Student engagement has emerged as a central indicator of learning success and academic achievement. Engagement is typically conceptualized in three dimensions: behavioral, emotional, and cognitive, each reflecting how students participate, feel, and think about their learning experiences. Global research highlights that when students are engaged, they are more likely to demonstrate academic persistence, positive attitudes toward learning, and a deeper understanding of content (Research linking

student motivation and academic engagement, 2024). These outcomes are fostered by classroom environments where teachers provide supportive interactions, meaningful feedback, and opportunities for autonomous learning. Studies examining the relationship between teacher support and student engagement confirm that positive teacher behaviors—such as encouragement, care, and academic guidance that enhance students’ psychological needs —thereby increase their intrinsic motivation and engagement in learning tasks (Enhancing online learning engagement, 2025).

METHODOLOGY

Research Design

The study relied on teachers’ self-reported perceptions which may have influenced the accuracy of some responses. This study employed a quantitative descriptive correlational research design to examine the relationship between teachers’ support, motivation, and student engagement in learning among private school teachers. Specifically, the study determined the levels of support, motivation, and student engagement in learning by the private school teachers. A quantitative research design was considered appropriate because it allowed the researcher to systematically measure variables and test relationships using numerical data (Creswell, 2014). According to Creswell (2018), a quantitative research design facilitates the testing of hypothesized relationships and provides empirical evidence through statistical analysis. The study's research design enabled researchers to quantify teachers’ support and motivation, and students’ engagement, and to analyze the relationships among these variables.

Respondents

The subjects of the study were Eighty-eight (88) teachers from private schools in the municipality of Lake Sebu. All teaching personnel at each school were included because the study used total enumeration sampling.

Sampling Technique

The Eight (8) private schools were included in the study through complete enumeration sampling. Complete enumeration was used because the population size at each private school is small and manageable, allowing the researcher to include all members and ensure comprehensive, accurate data (Creswell, 2014).

Instrument

A researcher-developed survey questionnaire was used to collect quantitative data. The experts validated the questionnaire using Robles’s (2019) instrument validation tool. The consolidated validation results of the survey questionnaire were utilized. The questionnaire consists of four parts. Part I of the questionnaire covered the demographic profile of private school teachers in Lake Sebu municipality, including sex, age, years of service, and educational attainment. Part II addressed the level of teacher support in professional development, instructional and collegial support, and career and growth support. Part III of the questionnaire assessed teacher motivation in terms of job security, work environment, job responsibilities, and community involvement. Part IV refers to the level of student engagement in learning, as perceived by teachers in private schools, in terms of behavioral, emotional, and cognitive engagement. Each item in Parts II, III, and IV was measured using a 5-point Likert Scale, as shown below. 5-point Likert Scale, Numerical Rating, and Verbal Description

Numerical Rating	Verbal Description
5	Strongly Agree
4	Agree
3	Moderately Agree
2	Disagree
1	Strongly Disagree

FINDINGS OF THE STUDY

Table 5. Mean Distribution of the Respondents on the Level of Teacher Support in terms of Professional Development

Indicators	Mean	SD	Verbal Description
The school provides relevant training opportunities that improve my teaching skills.	4.06	.79	High Support
The professional development activities are aligned with my needs as a teacher.	4.24	.77	Very High Support
The school supports my participation in seminars, workshops, and training programs.	4.20	.83	Very High Support
The training programs help me improve my classroom instruction.	4.24	.86	Very High Support
I receive sufficient support to apply what I learned from the training programs.	4.01	.92	High Support
Section Mean	4.15	.83	High Support

Table 5 reveals that private school teachers in Lake Sebu Municipality generally perceive a high level of support for their professional development. The findings suggest that schools are responsive to teachers' professional needs by providing training opportunities that enhance classroom instruction and teaching effectiveness. The high ratings on the alignment of professional development activities with teachers' needs indicate that schools recognize the importance of relevant and practical training programs. Although the indicator on receiving sufficient support to apply learned training programs obtained the lowest mean among the indicators, it still reflects a positive perception. This may imply that while professional development opportunities are available, some teachers may still encounter minor challenges in fully implementing newly acquired skills in actual classroom practice. Such challenges may involve limited resources, insufficient follow-up support, or contextual classroom constraints. Overall, the findings imply that supportive professional development environments contribute positively to teachers' instructional improvement, motivation, and student engagement. Continuous institutional support is therefore essential in helping teachers effectively translate training experiences into improved teaching practices.

This result is supported by the study of Zhou et al. (2023), which highlights that professional development training has a significant positive effect on teachers' self-efficacy, indicating that teachers who receive adequate training feel more confident in their teaching abilities and classroom management skills. Similarly, schools that support teachers through continuous professional development improve instructional competence and teaching practices, which enhances overall instructional quality and teacher effectiveness (Dayagbil & Alada, 2024). Moreover, Tran (2024) emphasized that teacher participation in professional development programs is positively associated with increased motivation, self-efficacy, and improved instructional practices.

Table 6. Mean Distribution of the Respondents on the Level of Teacher Support in terms of Instruction and Collegiality

Indicators	Mean	SD	Verbal Description
My colleagues support me in planning and improving lessons.	4.13	.76	High Support
Teachers share instructional materials and teaching strategies with each other.	4.22	.73	Very High Support

School administrators provide guidance to improve my teaching performance.	3.93	.81	High Support
The school promotes a collaborative culture among teachers	4.26	.72	Very High Support
There are regular meetings or discussions for teachers to share best practices	4.11	.78	High Support
Section Mean	4.13	.76	High Support

Table 6 shows that private school teachers generally perceive a high level of support in instruction and collegiality. The strongest aspect identified was the promotion of a collaborative culture among teachers, indicating that schools foster teamwork and professional interaction. This suggests that teachers benefit from sharing instructional practices, exchanging ideas, and supporting one another in improving classroom instruction. A collaborative environment may also contribute to stronger professional relationships and more effective teaching practices. Meanwhile, administrative guidance on improving teaching performance received the lowest rating, although it remained within the high support category. This implies that teachers may experience less direct instructional supervision or mentoring from school administrators compared to the support they receive from colleagues. The finding highlights the important role of peer collaboration in sustaining teachers' professional growth. Overall, the high level of teacher support indicates that private schools provide a generally supportive professional environment. Such support can enhance teachers' confidence, instructional effectiveness, and commitment to improving student learning outcomes. The result further suggests that strengthening administrative instructional support may help reinforce the existing culture of collaboration among teachers.

These findings are supported by Tallman (2019), who emphasized that teacher collaboration plays an important role not only in improving instructional approaches but also in creating an avenue for teachers to reflect on their practices and share knowledge. Moreover, teachers who participate in collaborative activities often develop greater trust and a greater openness to adopting new teaching strategies. Similarly, teachers in supportive school environments collaborate by sharing instructional materials and strategies and co-constructing teaching practices, thereby enhancing instructional quality (Pozas & Letzel-Alt, 2023).

Table 7. Mean Distribution of the Respondents on the Level of Teacher Support in terms of Career and Growth

Indicators	Mean	SD	Verbal Description
The school supports my professional growth and career development.	4.05	.88	High Support
I receive recognition for my performance and achievements.	3.74	.96	High Support
Opportunities for promotion or career advancement are available in my school.	3.61	1.04	High Support
The school provides mentorship or coaching to help me grow professionally.	3.83	.93	High Support
The school encourages me to pursue higher education or professional qualifications.	4.08	.90	High Support
Section Mean	3.86	.94	High Support

Table 7 indicates a high level of support for career and professional growth. The findings suggest that schools provide opportunities that encourage teachers to enhance their competencies and pursue professional advancement. This reflects the schools' commitment to fostering continuous learning and professional improvement among teachers. Among the indicators, support for professional growth and

encouragement to pursue higher education received the highest ratings. These findings imply that teachers feel motivated to develop their skills and qualifications, which may contribute to greater confidence and effectiveness in their teaching roles. The result also suggests that schools recognize the importance of continuous professional development in improving instructional quality. Overall, the high level of support for career and professional growth indicates that teachers generally experience a positive environment for professional advancement. Such support may enhance teacher motivation, job satisfaction, and long-term commitment to the profession. This is consistent with Ramirez (2021) emphasizes that, to maintain teacher motivation and commitment, recognition and clear promotion are important considerations.

Table 8. Summary on the Level of Teacher Support among Private School Teachers in Lake Sebu Municipality

Indicators	Mean	SD	Verbal Description
Professional Development Support	4.15	.83	High Support
Instructional and Collegial Support	4.13	.76	High Support
Career and Growth Support	3.86	.94	High Support
Grand Mean	4.05	.84	High Support

Table 8 reveals a consistently high level of teacher support across the domains of professional development, instructional and collegial support, and career and growth support. The findings suggest that schools generally provide an environment that promotes collaboration, continuous learning, and professional advancement among teachers. The overall high support rating indicates that teachers feel encouraged not only in improving their instructional practices but also in developing their careers and professional competencies. This supportive environment may contribute to increased teacher motivation, stronger professional relationships, and improved teaching effectiveness. Moreover, the results imply that school support systems play an important role in fostering teachers' professional growth and commitment to their work. Overall, the findings highlight the importance of maintaining supportive school practices that strengthen collaboration and professional development opportunities for teachers.

These findings are consistent with contemporary research indicating that, to foster school commitment, job satisfaction, and retention, school administrators must encourage a positive working environment among teachers (Anog et al., 2024). Similarly, private schools that provide supportive environments encourage professional development, collaboration, and career growth by fostering positive working conditions and collaborative practices among teachers (Basister et al., 2025).

Table 9. Mean Distribution of the Respondents on the Level of Teacher Motivation in terms of Job Security

Indicators	Mean	SD	Verbal Description
I feel confident that my job as a teacher is stable and secure	3.91	.95	High Motivation
I am not worried about losing my job in the near future.	3.88	.96	High Motivation
The school provides clear policies that ensure job stability.	4.00	.93	High Motivation
I feel secure about my employment due to consistent school operations.	3.81	1.08	High Motivation
I am confident that I will continue teaching in this school for a long time.	3.95	1.00	High Motivation
Section Mean	3.91	.98	High Motivation

Table 9 indicates that private school teachers in Lake Sebu Municipality demonstrate a high level of motivation in terms of job security. The findings suggest that teachers generally feel confident about the stability of their employment and their continued service in their respective schools. This sense of security may encourage teachers to remain committed to their professional responsibilities and perform their duties effectively. The results further imply that clear school policies and confidence in long-term employment contribute positively to teachers' motivation and overall work attitude. When teachers perceive stability in their jobs, they are more likely to develop stronger commitment, satisfaction, and dedication to their profession. Job security therefore serves as an important factor in sustaining teacher motivation and promoting a positive work environment within private schools.

These findings are consistent with previous research, which highlights that fostering job security plays an important role in enhancing organizational commitment and adopting effective instructional strategies to enhance teacher performance (Tan & Cagubcub, 2025). Similarly, teacher motivation is strongly influenced by employment-related factors such as job stability and security, which contribute to better performance and commitment (Kumari & Kumar, 2023).

Table 10. Mean Distribution of the Respondents on the Level of Teacher Motivation in terms of Work Environment

Indicators	Mean	SD	Verbal Description
The school environment is conducive to teaching and learning.	4.07	.75	High Motivation
I feel comfortable and supported in my workplace.	4.13	.79	High Motivation
The school provides a safe and positive working environment.	4.02	.82	High Motivation
The school facilities and resources support my teaching responsibilities.	3.77	.85	High Motivation
The school administration ensures a fair and respectful working environment.	3.93	.78	High Motivation
Section Mean	3.98	.80	High Motivation

Table 10 reveals that the work environment serves as a significant source of motivation among private school teachers in Lake Sebu Municipality. The findings suggest that teachers generally perceive their schools as providing a supportive, safe, and conducive environment for teaching and professional performance. A positive work environment may help teachers feel more comfortable, valued, and motivated in carrying out their responsibilities effectively. The results also imply that factors such as administrative fairness, workplace safety, and collegial support contribute to teachers' positive attitudes toward their work. However, the relatively lower rating for facilities and resources indicates that material support remains an area that may still require improvement. Enhancing school facilities and instructional resources may further strengthen teacher motivation and improve overall teaching effectiveness. Overall, the findings highlight the importance of maintaining a positive and supportive work environment to sustain teacher motivation and performance.

These findings are consistent with studies showing that teacher engagement, satisfaction, and retention can be strengthened through a supportive work environment (Garcia & Santos, 2023; Lopez et al., 2022; Smith & Rivera, 2022). Additionally, Sanlao et al. (2024) stressed that a positive work environment significantly enhances teachers' motivation and competence, highlighting the importance of supportive school conditions.

Table 11. Mean Distribution of the Respondents on the Level of Teacher Motivation in terms of Job Responsibilities

Indicators	Mean	SD	Verbal Description
My job responsibilities are clear and well-defined.	4.32	.69	Very High Motivation
I am motivated to fulfill my teaching responsibilities effectively.	4.48	.66	Very High Motivation
I feel confident in performing my teaching tasks and duties.	4.43	.60	Very High Motivation
I receive adequate support to complete my teaching responsibilities.	4.08	.65	High Motivation
I feel motivated to take on additional responsibilities when needed.	4.23	.69	Very High Motivation
Section Mean	4.31	.66	Very High Motivation

Table 11 indicates that job responsibilities strongly influence the motivation of private school teachers in Lake Sebu Municipality. The very high level of motivation suggests that teachers clearly understand their roles and responsibilities and are highly committed to fulfilling their duties effectively. This reflects a strong sense of accountability and dedication toward their profession. The findings further imply that teachers' confidence in performing their tasks, together with the support they receive in the workplace, contributes to their willingness to take on responsibilities and remain productive. When teachers clearly understand their expected roles, they are more likely to demonstrate initiative, engagement, and positive work performance. Overall, the results highlight that well-defined responsibilities and supportive working conditions play an important role in strengthening teacher motivation, commitment, and effectiveness in the school setting.

These results are consistent with research emphasizing the importance of well-defined responsibilities and support in sustaining teacher motivation and performance (Garcia & Santos, 2023; Lopez et al., 2022; Smith & Rivera, 2022). On the contrary, teacher motivation is influenced by job-related demands, including responsibilities, workload, and role expectations, which can either enhance or hinder it depending on the level of support and manageability (Sahito et al., 2025).

Table 12. Mean Distribution of the Respondents on the Level of Teacher Motivation in terms of Community Involvement

Indicators	Mean	SD	Verbal Description
I feel motivated when parents and the community actively support school activities.	4.40	.63	Very High Motivation
I feel valued and appreciated by the community for my role as a teacher.	4.33	.69	Very High Motivation
I feel motivated when the community participates in school programs..	4.42	.69	Very High Motivation
I feel encouraged by the community's involvement in students' learning.	4.42	.62	Very High Motivation
Strong community support for the school motivates me as a teacher.	4.35	.70	Very High Motivation
Section Mean	4.38	.67	Very High Motivation

Table 12 reveals that community involvement greatly influences the motivation of private school teachers in Lake Sebu Municipality. The very high level of motivation suggests that teachers feel more

encouraged and committed when parents and community members actively participate in and support school activities. Strong community engagement may create a positive environment that strengthens teachers' sense of value and purpose in their profession. The findings further imply that recognition and support from the community contribute positively to teachers' morale and enthusiasm in carrying out their responsibilities. When teachers experience active cooperation from parents and stakeholders, they are more likely to feel appreciated and motivated to improve student learning and school performance. Overall, the results highlight the important role of community participation in enhancing teacher motivation and fostering a supportive educational environment.

These findings are consistent with research emphasizing the positive influence of community engagement on teacher motivation, job satisfaction, and retention (Garcia & Santos, 2023; Lopez et al., 2022; Smith & Rivera, 2022). Moreover, Teachers' active involvement in community activities strengthens their sense of responsibility, professional identity, and motivation, as they see their role extending beyond the classroom into societal impact (As-il, 2024).

Table 13. Summary on the Level of Teacher Motivation among Private School Teachers in Lake Sebu Municipality

Indicators	Mean	SD	Verbal Description
Job Security	3.91	.98	High Motivation
Work Environment	3.98	.80	High Motivation
Job Responsibilities	4.31	.66	Very High Motivation
Community Involvement	4.38	.67	Very High Motivation
Grand Mean	4.16	.62	High Motivation

Table 13 indicates that private school teachers in Lake Sebu Municipality generally demonstrate a high level of motivation across the domains of job security, work environment, job responsibilities, and community involvement. The findings suggest that both school-related and community-related factors contribute positively to teachers' motivation and professional engagement. The results further reveal that job responsibilities and community involvement obtained the strongest levels of motivation, implying that teachers are highly encouraged when they clearly understand their roles and receive active support from parents and the community. These factors may strengthen teachers' sense of purpose, commitment, and enthusiasm in performing their duties. Meanwhile, job security and work environment also contributed positively to teacher motivation, indicating that stable employment and supportive working conditions remain essential in maintaining teachers' satisfaction and productivity. Overall, the findings highlight that a combination of institutional support, meaningful responsibilities, and community participation plays a vital role in sustaining teacher motivation and commitment in private schools.

These results align with previous studies emphasizing the importance of clear responsibilities, support, and community involvement, especially in motivating teachers (Garcia & Santos, 2023; Lopez et al., 2022; Smith & Rivera, 2022). However, excessive job responsibilities and community-related tasks increase stress and burnout, leading to lower motivation, suggesting that these aspects are not always perceived as very high in a positive sense (Inocian et al., 2020).

Table 14. Mean Distribution of the Respondents on the Level of Student Engagement in terms of Behavior

Indicators	Mean	SD	Verbal Description
Students actively participate in classroom activities.	4.51	.59	Very High Engagement
Students complete their assignments on time.	4.15	.72	High Engagement
Students follow classroom rules and routines consistently.	4.30	.70	Very High Engagement

Students show effort and persistence when faced with difficult tasks.	4.28	.71	Very High Engagement
Students actively participate in discussions and group work	4.50	.61	Very High Engagement
Section Mean	4.35	.67	Very High Engagement

Table 14 reveals that students in private schools in Lake Sebu Municipality demonstrate a very high level of engagement in terms of observable behaviors. The findings suggest that students actively participate in classroom activities, complete assigned tasks, and cooperate in discussions and group work, reflecting their strong involvement in the learning process. The results further imply that students' adherence to classroom rules and persistence in accomplishing difficult tasks are indicators of responsibility, discipline, and commitment to learning. Such behavioral engagement may contribute positively to classroom interaction, academic performance, and the overall learning environment. Overall, the findings highlight that active participation and consistent involvement in school activities are important indicators of students' motivation and investment in their education.

These findings are consistent with research indicating that, for students to achieve academic success and for classroom management to be effective, behavioral engagement should be considered (Fredricks et al., 2022; Skinner & Pitzer, 2021; Reeve & Tseng, 2022). Moreover, behavioral engagement is demonstrated through observable student actions such as participation, attention, and interaction, which reflect their level of involvement in the learning process (Mahmood, 2024).

Table 15. Mean Distribution of the Respondents on the Level of Student Engagement in terms of Emotion

Indicators	Mean	SD	Verbal Description
Students show interest and enjoyment in learning activities.	4.51	.61	Very High Engagement
Students demonstrate positive attitudes towards school.	4.33	.64	Very High Engagement
Students feel a sense of belonging in the classroom.	4.51	.55	Very High Engagement
Students express motivation to learn and succeed.	4.51	.64	Very High Engagement
Students respond positively to teacher feedback and encouragement.	4.50	.59	Very High Engagement
Section Mean	4.47	.67	Very High Engagement

Table 15 indicates that students in private schools in Lake Sebu Municipality demonstrate a very high level of emotional engagement in learning. The findings suggest that students generally show strong interest, enthusiasm, and positive attitudes toward their educational experiences, which may contribute to a more active and meaningful participation in classroom activities. The results further imply that students' sense of belonging, motivation to succeed, and responsiveness to teacher feedback strengthen their emotional connection to the school and learning process. When students feel valued, motivated, and emotionally connected to their learning environment, they are more likely to participate actively and develop positive academic behaviors. Overall, the findings highlight the importance of emotional involvement in promoting student participation, learning development, and positive educational outcomes.

These results are consistent with studies emphasizing that emotional engagement plays an important role in fostering academic success (Fredricks et al., 2022; Skinner & Pitzer, 2021; Reeve & Tseng, 2022). Furthermore, emotional engagement significantly contributes to students' academic performance, as positive emotions enhance motivation to learn and academic outcomes (Liu et al., 2024).

Table 16. Mean Distribution of the Respondents on the Level of Student Engagement in terms of Cognitive

Indicators	Mean	SD	Verbal Description
Students show deep understanding of lesson concepts.	4.26	.73	Very High Engagement
Students use critical thinking skills in class activities.	4.25	.78	Very High Engagement
Students apply what they learn to real-life situations.	4.34	.74	Very High Engagement
Students show persistence in solving complex problems.	4.27	.75	Very High Engagement
Students demonstrate self-regulated learning behaviors such as planning and monitoring their work.	4.26	.81	Very High Engagement
Section Mean	4.28	.76	Very High Engagement

Table 16 reveals that students in private schools in Lake Sebu Municipality demonstrate a very high level of cognitive engagement. The findings suggest that students actively process and understand lesson concepts, apply critical thinking skills, and make meaningful connections between classroom learning and real-life situations. The results further imply that students show persistence in solving challenging tasks and practice self-regulated learning behaviors, reflecting their strong commitment to academic improvement. Such cognitive involvement indicates that students are not only participating in learning activities but are also engaging deeply with the content and taking responsibility for their own learning process. Overall, the findings highlight the importance of cognitive engagement in promoting deeper understanding, problem-solving skills, and independent learning among students.

These findings align with research emphasizing the importance of cognitive engagement in fostering academic success, problem-solving skills, and lifelong learning (Fredricks et al., 2022; Reeve & Tseng, 2022; Skinner & Pitzer, 2021). Moreover, cognitive engagement significantly contributes to the development of higher-order thinking skills such as problem solving, critical thinking, and creativity, which are essential for lifelong learning (Zhang, 2023).

Table 17. Summary on the Level of Student Engagement among Private Schools in Lake Sebu Municipality

Indicators	Mean	SD	Verbal Description
Behavioral Engagement	4.35	.67	Very High Engagement
Emotional Engagement	4.47	.67	Very High Engagement
Cognitive Engagement	4.28	.76	Very High Engagement
Grand Mean	4.37	.70	Very High Engagement

Table 17 indicates that private school students in Lake Sebu Municipality demonstrate a very high level of overall engagement across the domains of behavioral, emotional, and cognitive engagement. The findings suggest that students are actively involved in classroom activities, emotionally connected to their learning experiences, and intellectually engaged in understanding and applying lesson concepts. The consistently high ratings across all domains imply that students not only participate in school activities but also show strong interest, motivation, and commitment toward learning. This combination of active participation, positive emotional involvement, and deep cognitive processing may contribute to improved academic performance and meaningful learning experiences. Overall, the findings highlight that student

engagement in private schools extends beyond classroom participation, encompassing emotional connection and critical thinking that support holistic student development.

These results support research showing that multi-dimensional student engagement is essential for academic success, motivation, and long-term learning outcomes (Fredricks et al., 2022; Skinner & Pitzer, 2021; Reeve & Tseng, 2022). Moreover, teachers' motivational beliefs significantly influence students' behavioral, emotional, and cognitive engagement, showing that motivated teachers enhance students' participation, emotional involvement, and cognitive investment in learning (Zhang, 2023).

Relationship Between the Level of Teacher Support and the Level of Teacher Motivation

Table 18. Pearson r Correlation Between the Level of Teacher Support and the Level of Teacher Motivation among Private School Teachers in Lake Sebu Municipality

Variables	Mean	SD	r	p-value	Interpretation
Teacher Support x	4.05	.65	.85	.000	Strong Positive Relationship
Teacher Motivation	4.15	.53			

.05 level of Significance (2-tailed)

Table 18 shows a significant relationship between teacher support and teacher motivation among private school teachers in Lake Sebu municipality, since the r-value is .85, which is higher than the p-value of .000. This indicates that the level of teacher support and teacher motivation is related. This suggests that the two variables – teacher support and teacher support are dependent on each other. Based on the coefficient of determination (R^2) of 0.72, 72% of the variance in teacher motivation is attributable to teacher support. In comparison, 28% of the variance was caused by other factors. The results suggest that as teacher support increases, teacher motivation also increases. This implies that teachers who perceive greater support from their school—such as professional development opportunities, mentoring, recognition, and encouragement—tend to experience higher motivation. These findings align with previous research that emphasizes the influence of organizational support on teacher motivation. According to Dinham and Scott (2021), teacher support positively affects motivation, job satisfaction, and commitment. Similarly, Gupta and Sharma (2022) found that professional development, mentoring, and collegial support significantly enhance intrinsic and extrinsic teacher motivation. The results indicate a strong relationship between teacher support and teacher motivation; thus, the null hypothesis No. 1, “There is no significant relationship between the teacher support and teacher motivation,” is hereby rejected.

Relationship Between Teacher Support and Student Engagement as Mediated by Teacher Motivation

Table 19. Mediation Analysis

95% Confidence Interval							
Effect	Estimate	SE	Lower	Upper	Z	p	% Mediation
Indirect	0.2115	0.0898	0.0472	0.402	2.354	0.019	80.1
Direct	0.0526	0.1106	-0.1779	0.265	0.476	0.634	19.9
Total	0.2641	0.0843	0.0889	0.430	3.133	0.002	100.0

In table 19, mediation analysis was utilized to determine if teacher motivation mediates the relationship between teacher support and student engagement. The analyses reveal that the direct effect is no longer significant between teacher support and student engagement but the indirect effect is significant. Thus, the results show that teacher motivation mediates the relationship of teacher support and student engagement ($B=.21$, 95% CI [0.0472 to 0.402]). Notably, approximately 80.1% of the total effect was mediated. This means that teacher support indirectly related to student engagement through teacher motivation. This suggests that private school teachers who are feel supported by the institution also have

the tendency to be motivated which, in turn, can increase student engagement in learning. This finding is consistent with a recent study by Yanhong Shao et al. (2025) that teacher support significantly enhances student engagement through mediating variables such as academic self-efficacy and psychological resilience. Their findings highlight that support alone is insufficient; internal motivational processes play a critical role in translating support into engagement outcomes. Similarly, Lihua Hou et al. (2022) demonstrated that teacher support influences student engagement via motivational pathways, particularly by satisfying psychological needs. Their study, grounded in self-determination Theory, confirms that motivation acts as a key mechanism linking external support to engagement.

CONCLUSION

Based on the findings of the study, the following conclusions were made:

- Private schools in Lake Sebu municipality foster both teacher effectiveness and student engagement by providing a supportive and motivating environment. Teachers feel encouraged by professional development opportunities, a collaborative culture, and community involvement, while students respond positively through high levels of engagement in classroom activities.
- However, areas such as career advancement opportunities, administrative guidance, resource availability, and recognition could be strengthened to further enhance teacher motivation and student engagement. Overall, the study highlights that, in promoting an effective learning environment, teacher support, motivation, and student engagement must be interconnected.
- Furthermore, the study demonstrated that teacher support influences student engagement indirectly by enhancing teacher motivation. Therefore, teacher motivation serves as a key mechanism linking teacher support to student outcomes.

RECOMMENDATIONS

Based on the findings of the study, several recommendations were drawn:

- Schools may continue to improve professional development programs and ensure mentoring to help teachers implement the strategies they learn.
- Schools may also strengthen collegial and administrative support by promoting collaboration, guidance, and recognition to maintain high motivation. Attention may be given to providing career advancement pathways and improving facilities and resources, thereby further empowering teachers and enhancing teaching performance.
- Schools may encourage community involvement and establish systems to recognize teacher contributions, while continuing to implement student-centered teaching strategies that sustain high student engagement.
- Future research may explore additional factors influencing student engagement and assess the long-term effects of teacher support and motivation on student performance.

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ENHANCING REAL-TIME MOTORCYCLE SAFETY GEAR COMPLIANCE THROUGH YOLO11 DETECTION AND BOT-SORT INTEGRATION

Beneditto Alfonso A. Tiu, Aaron James A. Makinano, and Godwin S. Monserate, PhD

Department of Computer, Information Sciences, and Mathematics
University of San Carlos
Cebu City, Philippines

ABSTRACT

Ensuring compliance with motorcycle safety gear regulations remains a persistent challenge for traffic enforcement in the Philippines, where motorcycles dominate urban mobility. This study presents a real-time compliance detection system that identifies helmet usage and proper footwear in accordance with national traffic laws. The system combines the YOLO11 object detection model, chosen for its C3k2 feature extraction and efficiency, with the BoT-SORT tracking algorithm for occlusion handling in congested traffic footage. A diverse dataset of 43,504 images was assembled through a multi-source pipeline that unified nine public datasets into a 7-class taxonomy: motorcycle, rider, helmet, no helmet, footwear, improper footwear, and tricycle. A single unified YOLO11 detector was trained end-to-end on these classes, avoiding the latency of class-specific cascades, while BoT-SORT maintained stable motorcycle and rider identities. Helmet and footwear evidence was associated with each rider using spatial overlap and containment rules. The model achieved an overall mAP@0.5 of 91.37% and mAP@0.5-0.95 of 70.65%, while sustaining real-time performance at 42 frames per second on consumer-grade GPU hardware. The findings demonstrate that a unified detector paired with robust tracking offers an accurate and deployment-ready alternative to manual enforcement, with strong potential to support automated traffic management in dense Philippine urban conditions.

Keywords: *Artificial intelligence, computer vision, object detection, YOLO11, BoT-SORT, deep learning, traffic enforcement*

INTRODUCTION

Wearing motorcycle helmets and proper safety gear is essential for the safety of riders, especially in the Philippines, where motorcycles dominate the roads and offer affordable mobility for commuting, travel, and deliveries (Asian Development Bank, 2020). However, they also account for a significantly large share of road accidents, which frequently result in severe injuries or fatalities (Philippine Statistics Authority, 2023). A major contributing factor to this high mortality rate is the inconsistent use of safety gear. Despite the enactment of Republic Act No. 10054, commonly known as the Motorcycle Helmet Act of 2009 (Congress of the Philippines, 2009), non-compliance with helmet and closed footwear requirements remains prevalent due to uneven manual enforcement.

Manual monitoring methods, such as roadside checks and CCTV reviews, are labor-intensive, prone to human error, and ineffective for real-time enforcement (Shoman et al., 2024). One way to enforce transportation rules and regulations is to use computer vision technology. While advances in Artificial Intelligence enable automated detection, existing surveillance systems often struggle with granular dataset creation and false positives in crowded scenes. Furthermore, while detecting the presence of a helmet is computationally standard, accurately penalizing violators requires the explicit recognition of the absence

of gear. Therefore, this study expands its scope to explicitly target a no helmet class and an improper footwear class, aligning the system more closely with actual Philippine traffic dynamics and enforcement protocols.

Beyond standard motorcycles, tricycles constitute a dominant Public Utility Vehicle (PUV) in Philippine cities. Because they share structural visual features with motorcycles, they frequently trigger false positives in automated detection systems. To address this, the study introduces an explicit tricycle class to visually differentiate 3-wheeled PUVs from motorcycles, retaining it as a contextual class for reducing false positives rather than as a compliance target.

This study aims to develop a deep learning-based system using YOLO11 for the real-time detection of motorcycle safety gear compliance. To achieve this, the research focuses on constructing a comprehensive 7-class taxonomy from consolidated multi-source datasets and deploying BoT-SORT to maintain stable motorcycle and rider identities during dense traffic occlusion. The enhancements made will be highly beneficial to the automated implementation of transportation rules and regulations using computer vision technology.

STATEMENT OF THE PROBLEM

This study sought to address the limitations of manual motorcycle safety gear enforcement in the Philippines through the development of a real-time, computer vision-based compliance detection system. Specifically, the study aimed to answer the following objectives:

1. To construct a unified 7-class taxonomy (motorcycle, rider, helmet, no helmet, footwear, improper footwear, and tricycle) by merging nine publicly available datasets into a single, consistent training corpus of 43,504 images.
2. To train and optimize a YOLO11 object detection model on the unified taxonomy and identify the hyperparameter configuration that maximizes detection accuracy across both compliance and non-compliance classes.
3. To integrate the BoT-SORT tracking algorithm with the YOLO11 detector in order to maintain stable motorcycle and rider identities under short-term occlusion in dense traffic footage.
4. To design and implement spatial association rules that link helmet and footwear evidence to the correct rider, enabling per-rider compliance decisions rather than frame-level detection only.
5. To evaluate the overall accuracy (mAP@0.5 and mAP@0.5-0.95) and runtime performance (FPS) of the developed system on held-out test data and on real Philippine CCTV traffic footage from the Lapu-Lapu City Traffic Management System.

REVIEW OF LITERATURE

YOLO Models in Safety Gear Detection

The YOLO (You Only Look Once) series has been widely adopted for motorcycle helmet detection and safety monitoring due to its high speed and CNN-based structure. Early iterations, such as YOLOv4, were used by Karlsson et al. (2022) to detect various Personal Protective Equipment (PPE) with high accuracy in controlled environments. Soltanikazemi et al. (2023) utilized an optimized YOLOv5 model for helmet violation detection in traffic surveillance videos, achieving a mAP of 66.67%. Aboah et al. (2023) employed YOLOv8 with few-shot data sampling, yielding an mAP@0.5 of 58.60%. For broader PPE compliance, Islam et al. (2024) developed a YOLOv7-based system achieving 87.70% mAP@0.5, highlighting the shift toward multi-class compliance frameworks. Tomas and Doma (2024) applied deep learning to classify motorcycle rider helmet compliance in low-light video, demonstrating applicability to Philippine traffic conditions. Puspita et al. (2024) and Zhang et al. (2024) further leveraged YOLOv8-based architectures for real-time helmet detection in traffic enforcement contexts. Hu et al. (2023) proposed SG-YOLOv5, a lightweight helmet detection model suited for resource-constrained deployments. Zhao et al.

(2025) extended the YOLOv8 framework with a Slim-neck design for face mask compliance detection, demonstrating its adaptability across multiple safety gear categories.

YOLO11 Architecture

Building on foundational convolutional architectures (Krizhevsky, Sutskever, & Hinton, 2012; Simonyan & Zisserman, 2014) and single-shot detection frameworks (Liu et al., 2016; Redmon, Divvala, Girshick, & Farhadi, 2016), YOLO11 represents the latest evolution in the YOLO series, improving upon YOLOv8 by incorporating C3k2 (Cross Stage Partial with Kernel 2) blocks and C2PSA (Spatial Attention) mechanisms (Ultralytics, 2024). These enhancements provide superior feature extraction for small objects, such as footwear, without significantly increasing computational cost. The algorithm achieves high detection accuracy while maintaining real-time performance, making it highly suitable for complex urban traffic analysis where detecting granular features is critical.

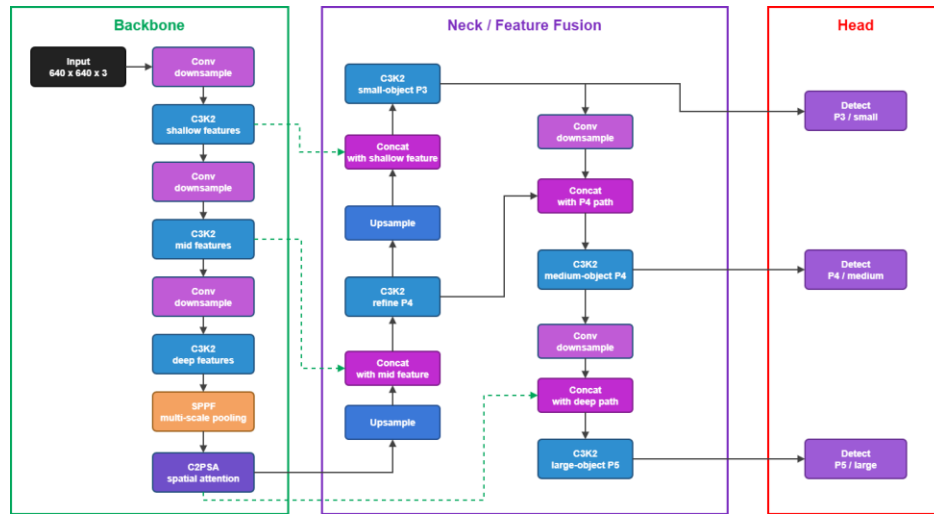


Figure 1. Simplified architecture of the YOLO11 object detection model.

BoT-SORT Tracking in Traffic Scenarios

Effective safety compliance requires not just detection, but accurate tracking to maintain rider identity across frames. Tracking objects in dense Southeast Asian traffic presents severe challenges regarding overlapping vehicles. This research adopts BoT-SORT, a SORT-based multi-object tracking method that combines motion cues, camera-motion compensation, and appearance cues. In the PyTorch runtime, BoT-SORT can use ReID (Re-Identification) appearance embeddings to support identity persistence; exported runtimes can fall back to motion-only association when the same native feature hooks are unavailable. This tracking capability is suitable for handling the short-term occlusion frequently seen in roadside CCTV footage, allowing identities to be re-associated when a motorcycle or rider temporarily passes behind a larger vehicle (Nguyen & Pham, 2025). Complementary vehicle tracking approaches, including improved DeepSORT for multi-target tracking (Guo, Li, Shuai, & Zhou, 2024) and nighttime pedestrian trajectory analysis (Zhao, Ren, & Tan, 2024), further underscore the importance of robust identity continuity in complex traffic scenarios.

Unified Detectors versus Cascaded Specialists

Recent literature in computer vision debates the efficacy of cascaded specialist models versus unified multi-class architectures. Cascaded models isolate classification tasks by utilizing a primary model to detect a vehicle, cropping the result, and utilizing secondary models to analyze the passengers and gear. While this approach can improve some localized class scores by reducing background clutter, it introduces additional latency, coordination points, and memory requirements because multiple models must be loaded and executed. By contrast, training a centralized detector simultaneously on all target classes offers

deployment simplicity, real-time viability, and allows the network to learn the visual features of violations directly (Islam et al., 2024).

METHODOLOGY

Research Design and System Workflow

This study employed an experimental and developmental research design. The experimental component involved the systematic construction, training, and optimization of a deep learning model across multiple hyperparameter configurations to identify the most accurate detection setup.

The developmental component involved the design and implementation of a fully operational real-time compliance system, integrating object detection, multi-object tracking, and spatial association logic into a deployable software pipeline. Together, these two approaches allowed the study to both measure detection performance under controlled conditions and validate system functionality in real-world traffic environments. The proposed system follows a five-layer workflow architecture. The Input Layer acquires raw visual data from static images, live camera feeds, or recorded traffic footage. The Detection Layer utilizes a consolidated YOLO11 detector trained on the 7-class taxonomy. During deployment, the tricycle class functions only as a contextual disambiguation class and is excluded from the final compliance evaluation pipeline.

The detected bounding boxes are forwarded to the Tracking and Association Layer, where BoT-SORT assigns stable identities to motorcycles and riders. Rider-to-motorcycle matching is performed using intersection-over-area calculations, while helmet and footwear detections are associated with the most appropriate rider using overlap and containment rules. The grouped data proceeds to the Compliance Decision Layer, which evaluates explicit evidence of violations, including no helmet and improper footwear classifications. Finally, the Output Layer generates annotated visual displays, aggregates live monitoring statistics, and optionally records non-compliance events into a persistent event logging system.

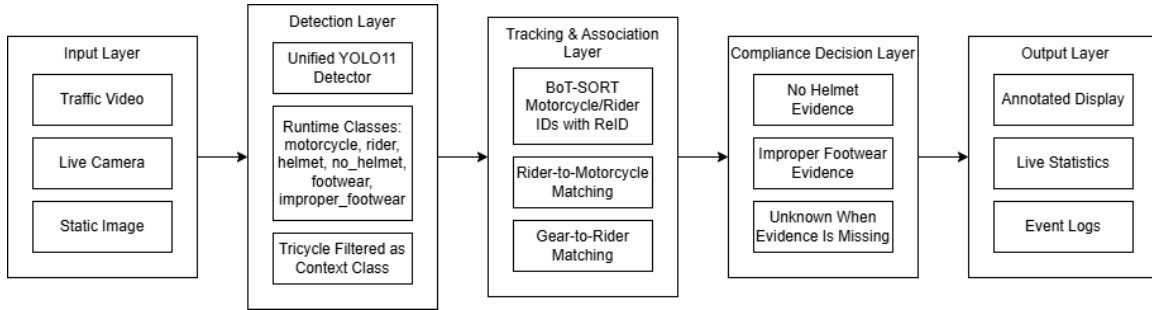


Figure 2. Five-layer workflow of the proposed real-time motorcycle safety gear compliance system.

Data Gathering

The dataset utilized in this study was assembled to encompass diverse, highly congested traffic scenarios. Raw video footage was acquired from the City Traffic Management System (CTMS) in Lapu-Lapu City, which is reserved strictly for held-out, in-domain test evaluation to verify real-world robustness. For the training phase, a vast and diverse dataset of 43,504 images was sourced from nine public datasets to ensure comprehensive exposure to various rider profiles and camera angles.

Data Pre-Processing and Annotation

To create a cohesive training environment, the nine public datasets underwent a multi-source unification pipeline. Per-source label files were programmatically remapped into a standardized 7-class master taxonomy: motorcycle, rider, helmet, no helmet, footwear, improper footwear, and tricycle. Conflicting annotations across sources (e.g., generic “head” bounding boxes versus explicit “helmet/no

helmet” boxes) were resolved using deterministic, source-specific mapping rules. The images were subsequently reviewed and refined by human annotators to ensure strict adherence to the new taxonomy before model training.

Data Augmentation

Various image enhancement techniques were employed to augment the training dataset and increase the model’s resilience to input variations. Standard YOLO data augmentations were applied, including mosaic generation, Hue-Saturation-Value (HSV) adjustments, and horizontal flipping (fliplr). Multi-scale augmentation was disabled to preserve hardware efficiency and ensure spatial consistency for the small object classes (footwear).

Scaling and Inference Splitting

To ensure uniformity in image dimensions during training, input images were resized to a resolution of 640×640 pixels. During deployment, inference size is configurable; the CUDA target used 640×640 for the reported performance, while exported runtimes use their fixed export resolution. The unified, pre-processed dataset of 43,504 images was then definitively split: 30,451 images were allocated for training, 8,705 images for validation, and 4,348 images for testing.

Model Training and Hyperparameter Configuration

To determine the optimal training configuration, the YOLO11s model underwent a systematic hyperparameter tuning process. Table 1 isolates the critical variables adjusted across three distinct optimization milestones, categorized by their resulting performance hierarchy: Phase 6 (baseline), Phase 8 (intermediate), and Phase 13 (optimal).

Table 1. Hyperparameter Tuning Progression and Performance Impact

Parameter / Metric	Phase 6	Phase 8	Phase 13
Epochs	40	80	150
Patience	12	20	30
Batch Size	8	16	16
Initial LR (lr0)	0.0005	0.0005	0.01
Copy-Paste Augmentation	0.1	0.4	0.3
Close Mosaic	8	10	15
mAP@0.5	73.10%	85.56%	91.37%
mAP@0.5-0.95	47.84%	66.70%	70.65%

As detailed in Table 1, the baseline Phase 6 configuration yielded an initial mAP@0.5 of 73.10%. By doubling the epoch count and batch size in Phase 8, the model achieved a significant intermediate improvement to 85.56%. Finally, Phase 13 secured the optimal system performance by extending training to 150 epochs, increasing the initial learning rate (lr0) to 0.01 to escape local minima, and refining the mosaic augmentation strategy by closing mosaic augmentation in the final 15 epochs. Across all phases, the optimizer was consistently configured to Stochastic Gradient Descent (SGD) with a momentum of 0.937 and a weight decay of 5×10^{-4} . To maximize hardware throughput during compatible CUDA deployments, FP16 inference and export were enabled where supported.

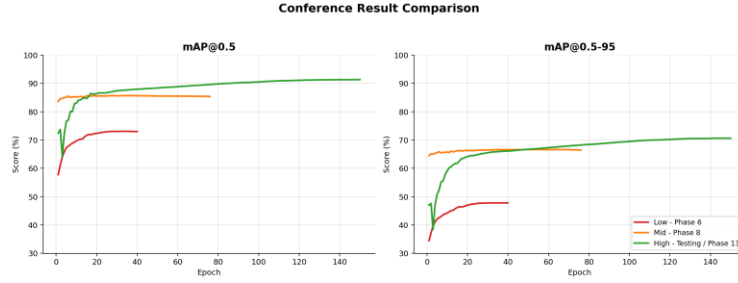


Figure 3. Comparison of $mAP@0.5$ and $mAP@0.5-0.95$ learning progression across the three tuning phases.

Tracking Integration and Compliance Logic

The system's real-time inference workflow leverages a multi-threaded producer-consumer pipeline. Upon receiving YOLO11 detections, the tracking thread utilizes BoT-SORT as a post-processing algorithm. BoT-SORT assigns track IDs exclusively to the motorcycle and rider classes, preserving stable IDs for large objects that require identity continuity. ReID appearance matching is used when the active PyTorch runtime exposes native detector features, while exported TensorRT or OpenVINO runtimes can use a motion-only BoT-SORT fallback.

Compliance is subsequently calculated through association rules applied to the tracked motorcycles and riders. Riders are associated to motorcycles using intersection-over-area calculations. Helmet, no helmet, footwear, and improper footwear detections are preserved from YOLO prediction and associated to the best matching rider using bounding box overlap, with containment fallback for small gear boxes. A safety violation is logged only when explicit non-compliance evidence is attached to a rider: confident no helmet evidence without corresponding helmet evidence, or improper footwear evidence. Missing helmet or footwear evidence alone is treated as unknown rather than a violation. Repeated violation events are suppressed using stable motorcycle and rider track IDs. The tricycle class is explicitly filtered out of this compliance logic to prevent false-positive vehicle classifications.

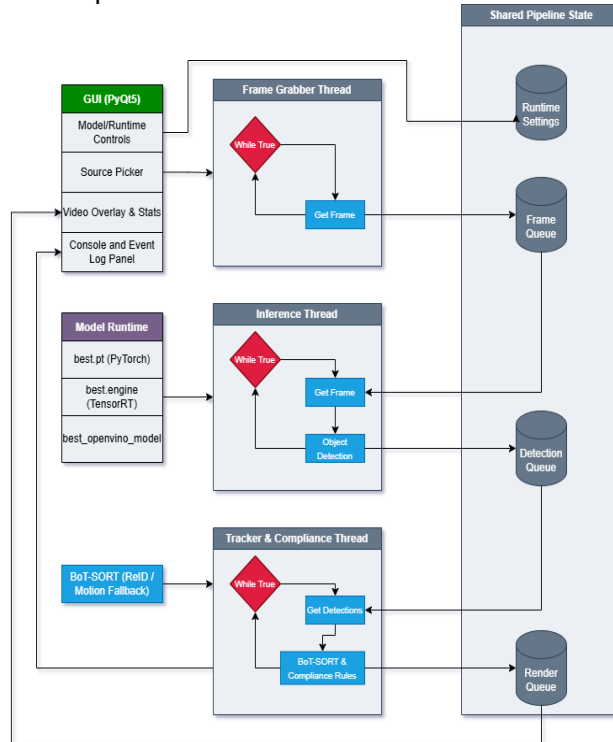


Figure 4. System architecture illustrating the multi-threaded producer-consumer pipeline

Model Validation

The model was evaluated using standard computer vision metrics to generate a robust quantitative representation of its efficacy. Precision evaluates the accuracy of the positive predictions (Precision = $TP / (TP + FP)$), while Recall measures the ability of the model to find all true positive instances (Recall = $TP / (TP + FN)$), where TP, FP, and FN denote True Positives, False Positives, and False Negatives, respectively. To evaluate overall system performance across all classes, the mAP is utilized, which computes the mean of the Average Precision (AP) across all N distinct target classes. The primary target performance thresholds for this study were established at $mAP@0.5 \geq 90\%$ and $mAP@0.5-0.95 \geq 60\%$ across the unified classes.

FINDINGS

The findings of the study are presented according to the five research objectives.

Objective 1: Construction of the Unified 7-Class Taxonomy

The study successfully merged nine publicly available datasets into a unified training corpus consisting of 43,504 annotated images under a standardized 7-class taxonomy composed of motorcycle, rider, helmet, no helmet, footwear, improper footwear, and tricycle classes. The multi-source annotation pipeline ensured label consistency across all datasets while minimizing conflicting annotations between sources.

Objective 2: YOLO11 Model Training and Optimization

The system's detection performance was evaluated using standard computer vision metrics. The unified YOLO11s model successfully converged over 150 epochs. To validate the core architectural choice of the system, this single unified YOLO11s model was evaluated alongside a cascaded (multi-model) experimental baseline. Evaluating the per-class granular performance, the unified tricycle class achieved 90.81% $mAP@0.5-0.95$, helmet achieved 73.60%, footwear achieved 70.57%, rider achieved 67.46%, no helmet achieved 65.31%, improper footwear achieved 64.68%, and motorcycle achieved 62.13%.

As detailed in Table 2, the cascaded multi-model baseline achieved a slightly higher overall $mAP@0.5$ of 92.93% (compared to the unified 91.37%), primarily because isolated cascaded models analyze pre-cropped targets that reduce background clutter. However, the single unified YOLO11s model achieved a slightly superior, more balanced overall F1-Score of 89.54% (compared to the cascaded 89.48%), alongside a higher overall $mAP@0.5-0.95$ of 70.65% (compared to 70.01%). This indicates that the unified model provided more balanced localization quality while avoiding the deployment overhead of multiple class-specific models.

Table 2. Detailed Performance Comparison: Multi-Model versus Single-Model Architecture

Class / Metrics	Precision	Recall	F1-Score	mAP@0.5	mAP@0.5-0.95
motorcycle	91.71%	85.50%	88.50%	92.40%	69.76%
rider	87.66%	80.10%	83.71%	87.77%	65.05%
helmet	91.80%	91.80%	91.80%	96.02%	74.18%
no helmet	90.73%	89.89%	90.31%	91.73%	69.51%
footwear	89.49%	86.95%	88.20%	92.68%	64.80%
improper footwear	92.87%	91.95%	92.41%	96.77%	72.14%
tricycle	92.68%	90.21%	91.43%	93.17%	74.63%
Overall (Cascaded)	90.99%	88.06%	89.48%	92.93%	70.01%
Unified YOLO11s (Single-Model)	90.50%	88.60%	89.54%	91.37%	70.65%

Objective 3: BoT-SORT Tracking Integration

Following detection, qualitative testing on the stable CTMS CCTV footage confirmed that BoT-SORT effectively maintained motorcycle and rider track identities through heavy traffic congestion. By utilizing ReID feature embeddings in the PyTorch runtime, the tracker supported identity recovery after temporary occlusions, such as when a motorcycle passed behind a larger vehicle. This reduced identity switches and visual flickering, allowing gear evidence to remain associated with the correct matched rider and enabling unique violations to be logged without duplicate penalties.

This indicates that the integration of BoT-SORT improved identity continuity and reduced duplicate violation logging during temporary occlusion events.

Objective 4: Spatial Association and Compliance Logic

The implemented spatial association rules successfully linked helmet and footwear detections to their corresponding riders using overlap and containment logic. This enabled reliable per-rider compliance evaluation instead of frame-level detection only. The association pipeline also reduced false-positive violation assignments by preserving stable motorcycle and rider identities during real-time inference.

Objective 5: System Accuracy and Runtime Performance Evaluation

To assess the system's deployment viability, inference speed was measured in Frames Per Second (FPS) on the target hardware (NVIDIA RTX 3070 Ti). As presented in Table 4, the unified YOLO11s model sustained real-time throughput across all tested runtime configurations, while the cascaded multi-model architecture recorded significantly reduced inference speeds due to sequential cropping overhead.

Table 4. Runtime Performance Comparison of Unified and Cascaded Detection Architectures

Configuration	Runtime	Avg. FPS	Real-Time?
Unified YOLO11s	PyTorch (CUDA)	42 FPS	Yes
Unified YOLO11s	TensorRT (FP16)	68 FPS	Yes
Unified YOLO11s	OpenVINO	29 FPS	Yes
Cascaded Multi-Model	PyTorch (CUDA)	17 FPS	No

The unified system's consistent throughput supported stable frame-by-frame BoT-SORT updates, maintaining stable motorcycle and rider track identities throughout inference. Additionally, qualitative evaluation using real CCTV footage from the Lapu-Lapu City Traffic Management System (CTMS) confirmed that the developed system maintained stable tracking under congested Philippine urban traffic conditions while preserving real-time performance.

DISCUSSION

The results of this study demonstrate the viability of a unified deep learning architecture for real-time motorcycle safety gear compliance in Philippine urban traffic conditions. The YOLO11s model, trained on a carefully consolidated 7-class taxonomy, surpassed the study's target threshold of $mAP@0.5 \geq 90\%$, achieving 91.37%. This outcome confirms that a single unified detector can handle a complex multi-class compliance taxonomy without resorting to cascaded specialist models, which introduce latency and memory overhead.

The per-class analysis reveals that gear-level classes such as helmet (73.60% $mAP@0.5-0.95$) and footwear (70.57%) performed consistently, despite the inherent challenge of detecting small objects in wide-angle surveillance footage. The notably high tricycle class performance (90.81% $mAP@0.5-0.95$) confirms that the model reliably distinguishes tricycles from motorcycles, validating its role as a contextual filter that reduces false-positive compliance flags.

Compared to related literature (Table 3), the proposed system achieves competitive accuracy while managing a broader taxonomy than most prior works. Studies such as Aboah et al. (2023) and Soltanikazemi et al. (2023) focused solely on helmet violations, yielding lower mAP scores of 58.60% and 66.67% respectively. The current study's 91.37% across seven classes — including both compliance and non-compliance categories — represents a meaningful advancement in scope and accuracy.

The integration of BoT-SORT further strengthened system reliability by maintaining stable rider identities under short-term occlusion, allowing violation evidence to persist across frames rather than being reset per frame. This is particularly important for dense Philippine traffic where vehicles frequently overlap. The 42 FPS runtime on consumer-grade GPU hardware confirms deployment feasibility without requiring specialized infrastructure, reinforcing the system's practical applicability for municipal traffic management agencies.

Architectural Trade-offs and Consistency

In designing the detection pipeline, a critical architectural trade-off was evaluated between a multi-model (cascaded) pipeline and a single unified model. While cascaded routing can slightly inflate absolute mAP scores for individual gear classes by cropping out background noise, it adds latency and coordination overhead compared with a unified detector. As observed in the detailed comparison, the multi-model approach introduced computational overhead that can lead to frame dropping and tracking desynchronization under heavy load. Furthermore, a cascaded architecture requires loading multiple independent neural networks into GPU memory simultaneously (e.g., a vehicle detector, a head detector, and a foot detector).

This increases the system's overall file size and VRAM footprint. By contrast, the unified 7-class YOLO11s model consolidates all parameters into a single, highly efficient weight file. This significantly reduces memory overhead and supports stable, consistent frame-to-frame detections. This consistent 42 FPS throughput supported frame-by-frame BoT-SORT updates, helping maintain stable motorcycle and rider track IDs for reliable gear association and duplicate-event suppression. These findings demonstrate the practicality of deploying unified deep learning-based traffic enforcement systems in highly congested Philippine urban environments where manual monitoring remains inconsistent and labor-intensive. This highlights the feasibility of integrating automated compliance monitoring into existing smart traffic infrastructure.

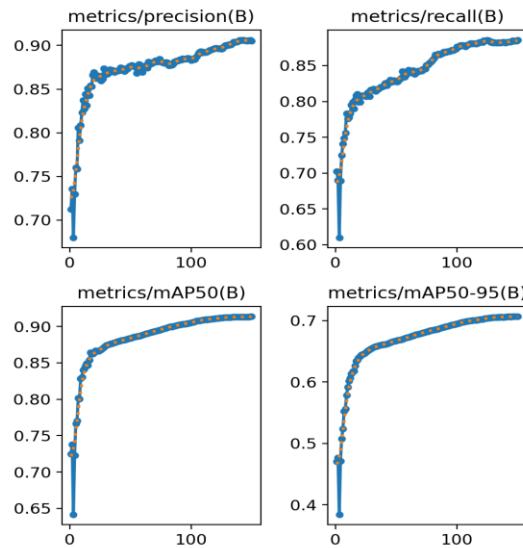


Figure 5. Training metrics (precision, recall, $mAP@0.5$, $mAP@0.5-0.95$) of the optimal unified YOLO11s model.

Analysis of Unified Detection Efficacy

The unified model demonstrated exceptional accuracy in detecting standard entities and violations within a single taxonomy. The tricycle class achieved an exceptional 90.81% mAP@0.5-0.95. This confirms that the model accurately differentiates 3-wheeled PUVs from motorcycles, allowing the system to use the tricycle class as a contextual filter to reduce false positives in the final compliance logic.

Comparison with Related Literature

To contextualize the performance of the proposed system, the detection results were compared against recent studies in motorcycle safety gear and PPE detection. As shown in Table 3, while edge-specific models like Sanjeevani et al. (2024) report high absolute mAP values on narrower PPE scopes (e.g., hard hats and vests), the proposed model efficiently manages a significantly more complex 7-class taxonomy.

Table 3. Performance Comparison versus Related Studies

Study	Scope	mAP@0.5
Aboah et al. (2023)	Helmet Violations	58.60%
Soltanikazemi et al. (2023)	Helmet Violations	66.67%
Islam et al. (2024)	PPE and Footwear	87.70%
Sanjeevani et al. (2024)	PPE Edge AI	95.00%
Current Study	7-Class Taxonomy	91.37%

The proposed system achieved 73.60% mAP@0.5-0.95 for helmet detection and 70.57% for compliant footwear. Unlike forensic footwear analysis (Budka et al., 2021), which classifies static shoe impressions, real-time surveillance-based footwear compliance introduces unique challenges including continuous motion, perspective variation, and partial occlusion. Detecting smaller objects like footwear in wide-angle surveillance footage is difficult because foot regions often occupy only a minimal fraction of each frame. These results indicate that the unified YOLO11s model, equipped with C3k2 blocks, retained enough fine-grained spatial information to distinguish compliant footwear from improper footwear reliably. Ultimately, these results reinforce the value of training a single consolidated detector on a carefully curated dataset rather than relying on a cascade of class-specific models.



Figure 6. Qualitative evaluation of the system processing highly congested CCTV traffic footage.

CONCLUSIONS

Based on the findings of this study, the following conclusions are drawn regarding the developed real-time motorcycle safety gear compliance system:

1. The integration of a unified 7-class YOLO11 detector with BoT-SORT tracking successfully automated the detection of helmet use and footwear compliance, addressing key limitations of manual roadside enforcement.
2. The system achieved high overall accuracy with an mAP@0.5 of 91.37% and mAP@0.5-0.95 of 70.65%, confirming that a single consolidated detector can manage a complex multi-class safety taxonomy without resorting to cascaded specialist models.
3. The multi-source unification pipeline, which merged nine public datasets under a unified taxonomy into a corpus of 43,504 images, effectively mitigated the scarcity of Philippine-specific training data while preserving annotation consistency.
4. BoT-SORT provided stable motorcycle and rider identity tracking under short-term occlusion, and the spatial association rules reliably attached helmet and footwear evidence to the correct rider for per-rider compliance evaluation. This enabled more reliable rider-level compliance monitoring in dense urban traffic scenarios.
5. Running at an average of 42 FPS on consumer-grade GPU hardware, the system demonstrated real-time viability and provided a context-aware, deployment-ready alternative to manual apprehension for traffic management agencies.

RECOMMENDATIONS

In line with the conclusions drawn, the following recommendations are proposed to further enhance the system and support its broader adoption in Philippine traffic enforcement:

1. Explore instance segmentation or Oriented Bounding Boxes (OBB) to better separate overlapping riders in highly congested scenarios, improving association accuracy where rider boundaries frequently overlap.
2. Apply hardware-oriented optimizations such as INT8 or FP16 quantization to facilitate edge deployment on local traffic poles, reducing dependence on centralized GPU infrastructure and lowering municipal deployment costs.
3. Expand the unified taxonomy to cover additional Philippine-specific vehicle categories (e.g., e-bikes and pedicabs) and additional safety-gear classes (e.g., reflective vests and headlight compliance).
4. Continuously re-train the model with locally captured CTMS footage to maintain robustness as traffic patterns, vehicle types, and rider demographics evolve over time.
5. Integrate the system with existing traffic management information systems and adopt a standardized violation-logging protocol to support automated citation issuance and long-term compliance analytics.

Future studies may further evaluate the system under varying weather, lighting, and camera-angle conditions to strengthen long-term deployment robustness in Philippine traffic environments.

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COLLEGE STUDENTS' MATHEMATICAL MINDSET: A DESCRIPTIVE-COMPARATIVE ANALYSIS

Cherry Amor Viray-Ariola, MAEd
University of La Salette, Inc.
Santiago City, Philippines

ABSTRACT

This study aimed to examine the mathematical mindset of college students and determine whether significant differences exist according to gender. A descriptive quantitative design was used to analyze data, including frequency, percentage, mean, and cross-tabulation, among 583 college students enrolled in a core mathematics course. This study utilized a questionnaire adapted from the study of Saefudin (2022), where results are categorized into four: very strong fixed mindset (FF), fixed-growth mindset (FG), growth-fixed mindset (GF), and very strong growth mindset (GG). Frequencies, percentages, means, and an independent samples t-test were used to analyze the data. Results showed that the majority of respondents have a growth mindset with a little fixed mindset (GF) or 67.07%, with females (68.35%) slightly more represented in this category than males. Notably, no students were classified under the strong fixed mindset (FF) category. Results of the independent samples t-test indicated no statistically significant difference in mathematical mindset scores between male and female students, $t(581) = -0.726$, $p = .468$. Overall, the results suggest that students generally exhibit a growth mindset towards mathematics, and gender does not appear to be associated with notable differences. These findings imply that teachers may build on these ideas and consider addressing students' mathematical mindset through classroom discussions that normalize occasional errors and emphasize effort over ability, thereby further enriching learning and engagement in mathematics.

Keywords: *Mathematical Mindset, Growth Mindset, Fixed Mindset, Growth-Fixed Mindset, Fixed-Growth Mindset, College Students*

INTRODUCTION

Mathematics is frequently perceived as a challenging course that elicit anxiety and difficulty across college students. Studies highlight that students' difficulties in mathematics are not only cognitive but also affective and contextual in nature, encompassing conceptual and cognitive barriers, mathematics anxiety, instructional limitations, socio-cultural factors, and access to learning resources (Mangarin & Caballes, 2024), all of which may shape learners' attitudes and engagement in mathematics. Mindset also plays a crucial role in how students respond to these difficulties by shaping how they interpret errors, manage cognitive load, and sustain attention when facing challenging tasks. Growth-minded learners are more likely to view difficulties as opportunities for learning and persist in problem-solving, whereas students with a fixed mindset may perceive difficulties as threats to their competence, leading to avoidance or disengagement (Ojo et al., 2023).

There are two main ideas integral to the theory of mindset, as introduced by Carol Dweck (2006): the key beliefs are a fixed mindset and a growth mindset. Students with a fixed mindset perceive intelligence as static and unchangeable, which may lead them to avoid challenges, especially when faced with difficulties. Tendencies are, students may be less inclined to adjust strategies or persist when encountering difficulty. On the other hand, students with a growth mindset believe that their abilities can be developed

through effort and persistence. When growth-oriented beliefs are reinforced, students are more likely to select challenging tasks and invest time in strategy development, which may contribute to improved achievement over time (Bostwick et al., 2017; Richardson et al., 2020; Zeng, 2025).

In addition, growth mindset aligns with mastery-oriented motivation, while fixed mindset is often associated with performance-oriented goals. This distinction has implications for students' help-seeking behavior, persistence, and responses to instructional interventions, which ultimately influence long-term achievement in mathematics (Richardson et al., 2020; Mutluer & Altun, 2023; Diekman et al., 2018). Overall, these perspectives highlight that students' mindset plays a crucial role in shaping how they approach learning experiences in mathematics.

In the context of mathematics education, a mathematical mindset has gained increasing attention, as it reflects students' beliefs about their capacity to learn and succeed in mathematics. The mathematical mindset has been widely studied in relation to students' learning behaviors and achievement; however, findings regarding gender differences remain inconsistent across studies. In addition, most existing research has focused on general classifications of fixed and growth mindsets, with limited emphasis on examining how these patterns appear among college students in higher education contexts. As a result, there is still a need to further describe students' mathematical mindsets and determine how they vary by gender.

Thus, this study focuses on describing students' mathematical mindsets and determining how they vary by gender. The findings aim to contribute to a clearer understanding of students' beliefs about learning mathematics, which may inform instructional practices and support the development of more responsive learning environments.

STATEMENT OF THE PROBLEM

This study aimed to examine the mathematical mindset of college students in a higher education institution, and was guided by the following research questions:

1. What is the distribution of respondents in terms of gender?
2. What is the mathematical mindset of the respondents when categorized into:
 - 2.1 very strong growth mindset;
 - 2.2 growth-fixed mindset;
 - 2.3 fixed-growth mindset; and
 - 2.4 very strong fixed mindset?
3. How does the mathematical mindset of the respondents vary across different genders?
4. Is there a significant difference in the mathematical mindset of the respondents according to gender?

REVIEW OF LITERATURE

The concept of mindset has been widely examined in educational research, particularly regarding students' learning behaviors and academic performance. Several studies suggest that students who demonstrate a growth mindset—characterized by the belief that abilities can be developed through effort—tend to achieve more favorable academic outcomes than those with a fixed mindset (Gouédard, 2021; Yuksel et al., 2021). These differences are often explained by variations in how students respond to academic challenges, with growth-oriented learners showing greater willingness to persist, engage in difficult tasks and employ adaptive strategies.

Supporting this perspective, Blackwell, Trzesniewski, and Dweck (2007) found that students who adopt a growth mindset are more likely to value effort and persistence, both of which are considered essential in learning mathematics. Students who interpret challenges as opportunities for improvement tend to demonstrate more adaptive learning behaviors. Other related studies similarly emphasize the role of resilience and sustained effort in helping learners navigate difficulties in mathematics.

At the same time, mindset is not always a fixed or uniform construct. Glerum et al. (2019) introduced the idea of a mixed mindset, suggesting that individuals may hold both fixed and growth beliefs depending on the context. For example, a student may feel confident in improving their mathematical ability through effort, yet believe their skills in another subject are limited. This perspective highlights the complexity of mindset and suggests the need to examine it within specific domains, particularly mathematics, rather than treating it as a general trait.

In this regard, the mindset in mathematics can be better understood through key belief dimensions that reflect how students interpret learning experiences. Drawing from existing literature, this study examined six interrelated dimensions: mathematical skills and intelligence, challenge, obstacle, effort, criticism, and the success of others. These dimensions collectively operationalize how growth- or fixed-oriented beliefs are expressed in mathematical learning contexts.

The first dimension, mathematical skills and intelligence, reflects beliefs about the malleability of mathematical ability. Growth-oriented students believe that mathematical competence can be developed through practice, strategy use, and reflection, whereas fixed-oriented students view mathematical talent as innate and relatively unchangeable (Dweck, 2006; Gnagnarella et al., 2020). Research suggests that such domain-specific beliefs about ability predict persistence and strategy use in solving challenging mathematical tasks (Xu et al., 2022; Xu & Dieckmann, 2025).

The second dimension, challenge, reflects students' willingness to engage with difficult mathematical tasks. Growth-minded learners tend to perceive challenges as opportunities for learning and improvement, while fixed-minded learners may avoid them to protect their perceived competence (Dweck, 2006; Blackwell et al., 2007).

The third dimension, obstacle, captures how students interpret setbacks during learning. A growth mindset frames obstacles as temporary and solvable through alternative strategies, whereas a fixed mindset interprets failure as evidence of limited or unchangeable ability (Dweck, 2006; Yeager & Dweck, 2020).

The fourth dimension, effort, reflects the meaning attached to hard work in learning mathematics. For growth-oriented learners, effort is essential for mastery and improvement, while for fixed-oriented learners, effort may be seen as a sign of low ability or as ineffective in the face of perceived limits (Dweck, 2006).

The fifth dimension, criticism, refers to students' responses to feedback. Growth-minded students typically view corrective feedback as valuable information for learning, whereas fixed-minded students may interpret criticism as a judgment of ability, which can negatively affect motivation and persistence (Dweck, 2006; Paechter et al., 2020).

The sixth dimension, success of others, involves social comparison processes in learning mathematics. Growth-oriented students may be inspired by the success of others and use it as a model for improvement, while fixed-oriented students may perceive it as a threat to self-worth. Supportive learning environments that normalize peer success can therefore strengthen adaptive beliefs about learning (Dweck, 2006; Xu et al., 2022).

Beyond individual belief systems, the role of the learning environment has also been emphasized. Vrikki et al. (2018), using the Dynamic Model of Educational Effectiveness (DMEE), pointed out that teacher practices can shape both students' learning experiences and their underlying beliefs about ability. The educational environment, including teacher practices and classroom culture, significantly influences students' mathematical mindsets. Sun, Boaler, and Williams (2016) found that classrooms encouraging exploration, mistake-making, and collaborative problem-solving foster a growth mindset. Hattie and Timperley (2007) emphasized that feedback focused on effort and strategies, rather than inherent ability, is crucial for promoting a growth mindset and enhancing learning outcomes.

Broader contextual factors have also been linked to students' mathematical learning experiences, including socioeconomic and cultural influences. In the Philippine context, Descartin (2022) discussed how ongoing educational reforms aim to improve student outcomes by promoting more inclusive and supportive learning environments. These reforms highlight both the opportunities and challenges in addressing systemic factors that may affect how students develop their beliefs about learning mathematics.

Taken together, the literature indicates that the mathematical mindset is shaped by multiple factors, including effort, classroom environment, and broader social conditions. While many studies have explored these factors in relation to academic achievement, there is also a need to better understand how the mathematical mindset itself is manifested among learners.

Another important consideration in recent studies is the role of gender. Despite increased access to education, differences remain in how male and female students perceive and engage with mathematics. As noted by Xu, Boaler, and Dieckmann (2026), variations in mathematical mindset across gender groups continue to be observed across different academic disciplines. These differences suggest the importance of examining how the mathematical mindset may vary according to gender, particularly within specific educational contexts.

Overall, the literature consistently underscores the importance of fostering a growth mindset to enhance students' mathematical achievement. By addressing key dimensions such as effort, challenge, feedback, peer influence, and classroom environment, educators can create learning conditions that support persistence and resilience. The findings from these studies provide a comprehensive understanding of how various elements contribute to students' mathematical mindsets and their academic success.

METHODOLOGY

This study employed a descriptive quantitative research design to provide a comprehensive overview of students' mathematical mindsets and to determine whether differences exist according to gender. Quantitative data were collected and analyzed to describe the distribution of mathematical mindset categories among respondents and to examine statistically significant differences between groups.

The study was conducted at the University of La Salette, Inc., focusing on first-year students enrolled in the core mathematics course GEC 002: Mathematics in the Modern World during the first semester of the academic year 2025-2026. The study utilized a non-probability sampling method, specifically convenience sampling with voluntary participation. All valid responses collected were included in the analysis. The study involved 583 students who voluntarily answered the survey administered via Google Forms. This group of participants provides a diverse and representative sample of students at the beginning of their higher education journey, offering valuable insights into the early formation of mathematical mindsets.

The primary instrument used in this research is the Mathematical Mindset Questionnaire, adopted from Saefudin (2022), which is based on the mindset measurement scale by Dweck (2006) and Chen et al. (2026). The questionnaire consists of 20-item mathematical mindset statements, categorized into the following dimensions: Mathematical Skill and Intelligence, Challenge, Obstacles, Effort, Criticism/Praise, and Success of Others. Each statement was rated using a four-point Likert scale: Strongly Agree (SA), Agree (A), Not Agree (NA), Strongly Disagree (SD). Respondents' mathematical mindsets were then categorized into: very strong fixed mindset (FF), fixed mindset with a little growth mindset (FG), growth mindset with a little fixed mindset (GF), and very strong growth mindset (GG). No additional expert validation was conducted in the present study due to its direct adaptation from an established instrument. To further ensure reliability in the current context, internal consistency was examined using Cronbach's alpha, which yielded a coefficient of $\alpha = 0.62$. This indicates acceptable reliability for exploratory educational research. The moderate reliability value may be attributed to the multidimensional nature of the construct and the relatively small number of items per dimension.

Ethical considerations were strictly observed throughout the study. Participation was voluntary, and informed consent was obtained through a consent statement presented at the beginning of the Google Forms survey. Respondents were required to indicate their agreement before proceeding to the questionnaire. The consent form explained the purpose of the study, the voluntary nature of participation, and the rights of respondents. Confidentiality and anonymity were ensured, as no personally identifiable information was collected. All data were used solely for academic and research purposes. Permission to conduct the study was obtained from the appropriate university authorities before data collection.

Prior to statistical analysis, the collected data were subjected to data cleaning procedures. Responses were screened for completeness and accuracy, and duplicate or repeated entries were identified and removed. This process ensured that only valid and unique responses were included in the final dataset used for analysis. Reverse coding was applied to negatively oriented items, and total scores were computed for each respondent to determine their mathematical mindset classification.

Descriptive statistics, including frequencies and percentages, were used to describe the distribution of mathematical mindset categories. To examine differences in mathematical mindset scores according to gender, an independent samples t-test was conducted at a 0.05 level of significance. Before the test, assumptions of normality and homogeneity of variance were considered to ensure the appropriateness of the statistical procedure.

FINDINGS

Table 1. Distribution of respondents in terms of gender

Gender	n	%
Male	267	45.80
Female	316	54.20
Total	583	100.00

Table 1 presents the distribution of respondents according to gender. Out of the total sample of 583 respondents, 316 (54.20%) were female, while 267 (45.80%) were male. The relatively balanced distribution between male and female respondents provides adequate representation of both groups, allowing meaningful comparison of mathematical mindset across gender categories.

Table 2. Respondents' mathematical mindset

Mindset	n	%
GG	22	3.77
GF	391	67.07
FG	170	29.16
FF	-	-
Total	583	100.00

Note: Very Strong Growth Mindset (GG) 65-80, Growth-Fixed Mindset (GF) 54-64, Fixed-Growth Mindset (FG) 41-53, Very Strong Fixed Mindset (FF) 20-40.

Table 2 presents the distribution of respondents according to the mathematical mindset category. The majority of the respondents were classified under the Growth-Fixed mindset (GF) category (n = 391, 67.07%) of the total sample. This was followed by the Fixed-Growth mindset (FG) category with 170 respondents (29.16%). Only 22 respondents (3.77%) were categorized as having a Very Strong Growth Mindset (GG), while no respondent fell under the Very Strong Fixed Mindset (FF) category.

The prevalence of the GF category suggests that most students generally possess growth-oriented beliefs about learning mathematics while still exhibiting some fixed-mindset tendencies. This finding supports the view that mindset exists on a continuum rather than as a strictly dichotomous construct. As argued by Glerum et al. (2019), individuals may simultaneously hold both growth and fixed beliefs depending on the context, resulting in what they describe as a mixed mindset. The absence of respondents in the FF category further indicates that strongly fixed beliefs about mathematical ability were uncommon among the participants.

From an educational perspective, the concentration of students within the GF category is encouraging because it suggests a generally favorable disposition toward learning mathematics. Students

who predominantly exhibit growth-oriented beliefs are more likely to view mathematical ability as improvable through effort, strategy use, and persistence (Dweck, 2006). However, the relatively small proportion of respondents classified as GG implies that growth-oriented beliefs may not yet be fully internalized by most students. This suggests that educational interventions that reinforce productive responses to challenges, setbacks, and feedback may further strengthen students' growth-oriented mathematical beliefs.

Table 3. Respondents' mathematical mindset when grouped according to gender

Mindset	Gender	n	%
GG	Male	10	3.75
	Female	12	3.80
GF	Male	175	65.54
	Female	216	68.35
FG	Male	82	30.71
	Female	88	27.85
Total		583	100.00

Note: Very Strong Growth Mindset (GG) 65-80, Growth-Fixed Mindset (GF) 54-64, Fixed-Growth Mindset (FG) 41-53, Very Strong Fixed Mindset (FF) 20-40.

Table 3 presents the distribution of mathematical mindset categories according to gender. For both male and female respondents, the Growth-Fixed (GF) category was the most prevalent mindset profile, followed by the Fixed-Growth (FG) category, while only a small proportion of respondents were classified under the Very Strong Growth Mindset (GG) category. No respondents from either gender were categorized as having a Very Strong Fixed Mindset (FF).

The similar distribution of mindset categories across gender groups suggests that male and female students share comparable patterns of beliefs regarding the learning of mathematics. Although female respondents exhibited slightly higher proportions in both the Growth-Fixed (68.35%) and Very Strong Growth Mindset (3.80%) categories compared to males, the observed differences were relatively small. Likewise, male respondents showed a marginally higher proportion in the Fixed-Growth category.

This observation is consistent with the view that a mathematical mindset is shaped by learning experiences, classroom environments, and exposure to challenges rather than by gender alone (Dweck, 2006). Furthermore, the results align with Xu, Boaler, and Dieckmann (2026), who reported that gender effects on mathematical mindset were comparatively minor and often intertwined with broader educational and disciplinary contexts. Taken together, the findings suggest that while slight variations may exist between male and female students, both groups generally demonstrate a tendency toward growth-oriented beliefs about learning mathematics.

Table 4. Differences in the respondents' mathematical mindset when grouped according to their gender

Mathematical Mindset	Gender	N	Mean	SD	t	df	p-value	Decision
	Male	267	56.25	4.173	-0.726	581	0.468	Not
	Female	316	56.51	4.284				Significant

**at 0.05 significance level*

An independent samples t-test was conducted to determine whether there was a significant difference in mathematical mindset scores between male and female students. Results showed that male students ($M = 56.25$, $SD = 4.17$, $n = 267$) had slightly lower mean scores compared to female students ($M = 56.51$, $SD = 4.28$, $n = 316$). However, this difference was not statistically significant, $t(581) = -0.726$, $p = 0.468$.

Although female students obtained a marginally higher mean score, the negligible difference suggests that both male and female students exhibit relatively comparable beliefs regarding their

mathematical abilities. In the context of mindset theory, this implies that growth- or fixed-oriented beliefs are not meaningfully differentiated by gender among first-year college students in this study.

In relation to prior research, this finding is consistent with studies suggesting minimal or inconsistent gender differences in mathematical mindset across contexts (Xu et al., 2022; Xu et al., 2026). These studies argue that variations in mindset are more strongly influenced by classroom experiences, feedback practices, and cultural learning environments than by gender alone. However, it contrasts with earlier assumptions that gender may significantly influence confidence and engagement in mathematics, indicating that such differences may be diminishing in contemporary educational settings.

CONCLUSIONS

This study aimed to examine college students' mathematical mindsets and determine how they vary by gender among the respondents included in the study. The study concludes that:

1. There is a slightly higher proportion of female students. This relatively balanced gender representation within the sample allows for a meaningful comparison between groups.
2. In terms of mathematical mindset, the majority of the respondents exhibit a combination of growth and fixed mindset characteristics, with a greater inclination toward a growth-oriented perspective. This suggests that, among the respondents, positive beliefs about learning mathematics were evident, although opportunities remain to further strengthen growth-oriented thinking.
3. Both males and females demonstrated a similar pattern, with the growth-fixed mindset being the most prevalent category. While female respondents showed a slightly greater tendency toward growth-oriented mindsets, the difference between the two groups was minimal. The findings suggest that gender was not associated with substantial differences in mathematical mindset within this sample.
4. The findings provide valuable insights into students' mathematical mindsets of the respondents, which may help teachers design appropriate instructional strategies for better learning experiences and outcomes in mathematics.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are proposed:

Since minimal differences were observed in the mathematical mindset between male and female students, educators are encouraged to adopt gender-neutral instructional strategies that support all learners.

1. Given that a slightly higher proportion of female students demonstrated a growth-oriented mindset, teachers may encourage peer-modeling activities in the classroom. Students who exhibit strong growth-oriented behaviors can share their learning strategies, problem-solving approaches, and study habits with their peers to enhance collaborative learning and reinforce growth mindset practices.
2. Since students showed openness toward mathematics, the curriculum may be updated to include more challenging, open-ended problems that reward creativity, critical thinking, and persistence. Such activities can engage students in meaningful learning experiences while further promoting growth-oriented attitudes toward mathematics.
3. Teachers may benefit from workshops or training programs focused on designing instructional strategies and feedback mechanisms that emphasize growth and effort, rather than solely correct answers. This can help educators reinforce a growth mindset and support students in developing confidence, resilience, and persistence in mathematics learning.
4. Future studies may consider using probability sampling techniques or including a wider range of participants to improve the generalizability of findings. Additionally, researchers can explore other factors that may influence mathematical mindset, such as teaching strategies, academic performance, or classroom environment.

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TEACHING AND COMPETENCIES OF TEACHERS IN THE UNIVERSITY OF LA SALETTE, SANTIAGO CITY, ISABELA

Jayson L. Jamco, EdD, Dominick R. Domingo
University of La Salette Inc. Isabela, Philippines

ABSTRACT

This study determines the teaching and competencies of teachers in the University of La Salette, Santiago City, Isabela, as perceived by both teachers and students. The research focused on four major areas: instructional skills, teaching approaches, instructional resources, and evaluative techniques. A descriptive–quantitative research design was utilized, employing a survey questionnaire as the primary data-gathering instrument. The respondents of the study consisted of teachers and selected students from various programs of the university. Statistical tools such as frequency, percentage, weighted mean, t-test, and Pearson r were used to analyze and interpret the data. Findings revealed that teachers demonstrated a high level of competence in instructional skills, particularly in lesson organization, questioning strategies, and student motivation. Teaching approaches were found to be varied and learner-centered, promoting interaction and critical thinking. The use of instructional resources was also evident, with teachers integrating textbooks, multimedia materials, and other learning aids to enhance understanding. In terms of evaluative techniques, teachers utilized multiple assessment tools such as written tests, demonstrations, and performance-based assessments to measure student learning. However, slight differences were observed between teachers’ self-assessment and students’ perceptions in some areas of instructional delivery and evaluation. Overall, the study concluded that teachers in the University of La Salette possess strong teaching skills and competencies that contribute to effective classroom instruction and improved student learning outcomes. It is recommended that continuous professional development programs be implemented to further enhance instructional practices, encourage innovative teaching strategies, and strengthen assessment methods to meet the evolving demands of higher education.

Keywords: *Teaching Skills, Competencies, Instructional, Resources, Evaluative techniques*

INTRODUCTION

The quality of higher education in the Philippines is largely influenced by the teaching skills and competencies of professors. In universities and colleges, professors are expected to demonstrate mastery of subject matter, effective instructional delivery, classroom management, and appropriate assessment techniques. These competencies are essential in facilitating meaningful learning experiences and improving students’ academic performance. Recent studies emphasize that instructional leadership and faculty competence play a significant role in ensuring quality teaching and learning in Higher Education Institutions (HEIs) in the Philippines, particularly in maintaining accreditation standards and improving student outcomes. Moreover, the shift toward outcomes-based education and competency-based instruction in Philippine higher education has increased the demand for competent professors. A recent 2025 study conducted at Pangasinan State University found that competency-based education enhances learners’ readiness and performance, highlighting the importance of teachers’ instructional competence in improving academic outcomes. This indicates that professors’ teaching skills directly influence students’ mastery of professional knowledge and preparation for licensure examinations.

In addition, faculty readiness and professional development have become essential components of teaching competence in Philippine higher education. A 2025 scoping review on distance education emphasized that faculty members must demonstrate technological competence, pedagogical adaptability, and openness to innovation to ensure effective learning delivery. The study further noted that professional development programs are necessary to address competency gaps and improve instructional quality.

Similarly, recent research conducted in Philippine higher education institutions highlights that instructional leadership, faculty capability, and quality-assured teaching practices contribute to improved institutional performance and student achievement. These findings suggest that professors' competencies in lesson planning, delivery, and assessment remain central to improving the quality of education.

Furthermore, studies on teaching competencies indicate that personal and professional competencies of teachers significantly influence their performance and effectiveness in the classroom. A 2023 study in the Philippines revealed that teaching competence is closely related to teachers' level of performance and serves as a basis for professional development programs aimed at improving instructional quality.

Given these developments, evaluating the teaching skills and competencies of professors in the Philippines is essential. Rapid changes in higher education, including technology integration, flexible learning modalities, and outcomes-based instruction, require professors to continuously improve their competencies. Assessing these competencies will help institutions identify strengths and areas for improvement, design faculty development programs, and enhance the overall quality of higher education.

STATEMENT OF THE PROBLEM

This study aims to determine the teaching and competencies of teachers at the University of La Salette, Inc. Santiago City, Isabela.

Specifically, it seeks to answer the following questions:

1. What is the profile of the respondents in terms of:
 - 1.1 Age;
 - 1.2 Sex;
 - 1.3 Civil Status;
 - 1.4 Educational attainment;
 - 1.5 Years of teaching experience; and
 - 1.6 Trainings/seminars attended related to education
2. What are the teaching skills and competencies as perceived by the teachers and students in terms of:
 - 2.1 Instructional skills;
 - 2.2 Instructional Resources;
 - 2.3 Approaches ; and
 - 2.4 Evaluative techniques
3. What is the difference in the perception of the two groups in terms of:
 - 3.1 Instructional skills;
 - 3.2 Instructional Resource
 - 3.3 Approaches ; and
 - 3.4 Evaluative techniques
4. What is the relationship between the teaching skills and competencies and the respondent profile?

REVIEW OF RELATED LITERATURE AND STUDIES

Recent international literature emphasizes that teaching competencies are critical in ensuring effective instruction and improved student outcomes. According to Cruz Molina et al. (2025), key teaching competencies include content mastery, communication skills, digital literacy, and innovative teaching strategies. Their study highlighted that modern educators must integrate technology with pedagogy to meet the demands of 21st-century learning environments. Similarly, Darling-Hammond et al. (2023) stressed that effective teaching involves a combination of instructional planning, classroom management, adaptability, and reflective practice. These competencies allow teachers to address diverse learning needs and foster inclusive classroom environments. The study further emphasized that teacher quality is one of the most significant factors affecting student achievement.

Moreover, a study by König and Kramer (2024) found that teachers' professional competence, particularly in instructional delivery and assessment practices, significantly influences students' academic performance. The study revealed that teachers who demonstrate strong pedagogical skills and assessment literacy are more effective in facilitating higher-order thinking skills among students.

In addition, research conducted by Voogt et al. (2023) highlighted the importance of integrating digital competencies in teaching. The study found that teachers who effectively utilize digital tools and instructional technologies create more engaging and interactive learning environments, which positively impact student motivation and learning outcomes. In the Philippine context, teaching competencies have been widely studied as determinants of instructional effectiveness. According to Oducado and Estoque (2023), Filipino teachers demonstrated strong competencies in instructional planning, classroom management, and communication skills, which significantly contributed to student satisfaction and academic success.

A study by Malbas et al. (2024) revealed that teachers' content knowledge and pedagogical skills are strongly associated with effective teaching performance. The findings showed that teachers who are well-equipped with subject matter expertise and appropriate teaching strategies are more capable of delivering meaningful learning experiences. Furthermore, Reyes and De Guzman (2025) emphasized that learner-centered teaching approaches, such as collaborative learning and inquiry-based instruction, enhance student engagement and critical thinking. Their study also highlighted that teachers must continuously adapt their teaching methods to address the diverse needs of learners.

Another study conducted by Santos et al. (2024) focused on the use of instructional resources and technology integration among Filipino teachers. The results indicated that the use of multimedia materials, online platforms, and interactive tools significantly improved students' comprehension and participation. Additionally, research by DepEd (2023) on the implementation of the Most Essential Learning Competencies (MELCs) emphasized that teachers' competencies in curriculum alignment and assessment play a vital role in achieving learning objectives. Teachers who effectively implement MELCs are more likely to ensure quality and standardized.

RESEARCH METHODOLOGY

Research Design

This study utilized a descriptive quantitative research design to determine the teaching skills and competencies of teachers as perceived by both teachers and students. The descriptive quantitative method was appropriate for this study because it systematically describes existing conditions and quantifies respondents' perceptions using numerical data. It focused on measuring instructional skills, instructional resources, teaching approaches, and evaluative techniques without manipulating any variables.

Respondents of the Study

The respondents of the study were composed of teachers and students of the University of La Salette, Santiago City, Isabela. A total of 37 teachers participated in the study through self-assessment. Their

respective students also evaluated their teaching skills and competencies. Students were selected using purposive sampling to ensure that they were enrolled in classes handled by the teacher-respondents.

Research Instrument

Data were gathered through the structured questionnaire derived from Saddul (2005) and some parts are ideas of the researcher. It is made up of two parts. Part I covers the profile of the respondents. Part II is the information proper such as the teaching skills and competencies of the respondents, instructional resources, teaching approaches, and evaluative tools. For degrees and extents spread along several concerns the Five (5) Point Likert Scale was used, the legend of which is:

Scale	Range	Interpretation
5	4.50 – 5.00	Outstanding (O)
4	3.50 – 4.49	Very Satisfactory (VS)
3	2.50 – 3.49	Satisfactory (S)
2	1.50 – 2.49	Fair (F)
1	1.00 – 1.49	Poor (P)

Data Gathering Procedure

A letter of permission was secured from the university administration before conducting the study. After approval, the questionnaires were distributed to the teacher-respondents for self-assessment and to students for evaluation of their teachers. The purpose of the study was explained to the respondents, and confidentiality of responses was assured. After completion, the questionnaires were collected, tallied, and prepared for statistical analysis.

Statistical Treatment of Data

The data gathered in this study were analyzed using appropriate statistical tools to determine the teaching skills and competencies of teachers at the University of La Salette, Santiago City, Isabela. The following statistical treatments were utilized:

Frequency and Percentage. These were used to describe the profile of the respondents. Frequency counted the number of responses for each category, while percentage determined the proportion of respondents in terms of selected profile variables.

Weighted Mean. Used to determine the level of teaching skills and competencies of teachers in terms of instructional skills, instructional resources, teaching approaches, and evaluative techniques. It was also used to compute the composite mean for overall interpretation.

Standard Deviation. Used to measure the variability or dispersion of responses, indicating the consistency of respondents' perceptions.

T-test (Independent Samples t-test). Used to determine whether there was a significant difference between the assessments of teachers and students regarding teaching skills and competencies.

Pearson r Correlation Coefficient. Used to determine the significant relationship between teaching skills and competencies variables. This test identified the degree and direction of the relationship among instructional skills, instructional resources, teaching approaches, and evaluative techniques.

Ethical Issues

Prior to the conduct of the study, ethical approval was secured from the appropriate authorities of the University of La Salette, Santiago City, Isabela. Permission to administer the questionnaire was obtained from the university administration and concerned college deans.

Participation in the study was voluntary. The respondents, composed of teachers and students, were informed about the purpose of the research, and they were assured that their responses would be used solely for academic purposes. Informed consent was obtained before the distribution of the questionnaires. Confidentiality and anonymity of the respondents were strictly maintained. Names and personal identifiers

were not required in the questionnaire to ensure privacy. All gathered data were treated with utmost confidentiality and were used only for analysis related to the study.

RESULTS AND DISCUSSIONS

Profile of Teachers

Table 1.1 presents the age distribution of the 37 respondents. The data show that the majority of respondents are relatively young adults. The 26–30 years old group has the highest frequency with 14 respondents (37.84%), indicating that most participants belong to this age bracket. This is followed closely by the 21–25 years old group with 13 respondents (35.14%), suggesting that a large portion of respondents are early-career individuals. The 31–35 years old group includes 3 respondents (8.11%), showing a noticeable decline in frequency after age 30. The 36–40 years old group has the lowest representation with only 1 respondent (2.70%). The age groups 41–45, 46–50, and Above 50 years old each have 2 respondents (5.41%), indicating minimal participation from older age categories.

1.1 Age;		
Age Group	f	%
21-25 years old	13	35.14
26-30 years old	14	37.84
31-35 years old	3	8.11
36-40 years old	1	2.70
41-45 years old	2	5.41
46-50 years old	2	5.41
Above 50 years old	2	5.41
Total	37	100

Overall, the data reveal that the respondents are predominantly young adults aged 21–30 years old, comprising 72.98% of the total sample. This suggests that the study is largely influenced by the perspectives of younger individuals, possibly early-career professionals. Meanwhile, respondents aged 31 years old and above are less represented, accounting for only 27.02% of the sample. This age distribution implies that findings of the study may reflect younger respondents' experiences, perceptions, and competencies, with limited input from older and more experienced participants.

Table 1.2 presents the distribution of respondents according to sex. The data show that the majority of the respondents are female. There are 25 female respondents, representing 67.57% of the total population. On the other hand, 12 respondents are male, accounting for 32.43% of the sample.

1.2 Sex;		
Sex	f	%
Male	12	32.43
Female	25	67.57
Total	37	100

This indicates that female respondents dominate the study, comprising more than half of the total participants. The higher proportion of females suggests that the findings of the study may largely reflect female perspectives, experiences, and responses. Meanwhile, male respondents are fewer in number, which means their views are less represented in the overall results.

Table 1.3 presents the distribution of respondents according to civil status. The data indicate that the majority of the respondents are single. There are 27 respondents who are single, representing 73.00% of the total sample. Meanwhile, 10 respondents are married, accounting for 27.00% of the respondents.

There are no respondents who are widowed (0.00%), indicating that this civil status is not represented in the study.

1.3 Civil Status;

Civil Status	f	%
Single	27	73.00
Married	10	27.00
Widow	0	0.00
Total	37	100

The findings reveal that most of the respondents are single, comprising nearly three-fourths of the total population. This suggests that the study is largely influenced by individuals who may have fewer family responsibilities and possibly more flexibility in their professional or academic roles. On the other hand, married respondents make up slightly more than one-fourth of the participants, indicating moderate representation. The absence of widowed respondents shows that this group does not contribute to the perspectives gathered in the study.

Table 1.4 presents the distribution of respondents according to their highest educational attainment. The data indicate that the respondents possess varying levels of academic qualifications, with the majority having graduate-level education. The Master's Degree holders comprise the largest group with 13 respondents (35.14%), indicating that most participants have completed graduate studies. This is followed by Bachelor's Degree holders with 12 respondents (32.43%), representing about one-third of the total sample. There are 5 respondents (13.51%) with Bachelor's Degree with Master's units, suggesting that some participants are currently pursuing graduate education. Meanwhile, 4 respondents (10.81%) have already completed a Doctoral Degree, reflecting a notable number of highly qualified individuals. Additionally, 3 respondents (8.11%) have Master's Degree with Doctoral units, indicating they are pursuing doctoral-level studies.

1.4 Educational Attainment

Highest Educational Attained	f	%
Bachelor's Degree	12	32.43
Bachelor's with Master Units	5	13.51
Master's Degree	13	35.14
Master's Degree with Doctoral units	3	8.11
Doctoral Degree	4	10.81
Total	37	100

The results reveal that the majority of respondents have advanced educational qualifications, with more than half having graduate and post-graduate education. Specifically, respondents with Master's Degree and above account for 54.06% of the total sample. This suggests that the participants are academically prepared and professionally qualified, which may contribute to informed and reliable responses in the study. Furthermore, the presence of respondents with doctoral degrees and doctoral units indicates a strong representation of highly educated individuals. This implies that the findings of the study are derived from respondents with substantial academic background and expertise. Overall, the data show that the respondents are academically qualified, with the majority holding graduate-level education.

Table 1.5 shows the distribution of respondents according to their years of teaching experience. The results indicate that most of the respondents have relatively short teaching experience. The majority of the respondents fall under 5 years and below, with 25 respondents (67.57%). This means that more than half of the participants are beginning teachers or are still in the early stage of their teaching careers. This is followed by respondents with 6–10 years of teaching experience, which includes 7 respondents (18.92%). These participants may already possess moderate teaching experience and developed instructional

practices. Meanwhile, 16 years and above has 3 respondents (8.11%), indicating a small number of highly experienced teachers. The 11–15 years category has the least number of respondents with 2 (5.41%), showing minimal representation from mid-career teachers.

1.5 Years of teaching experience

Years of Teaching Service	f	%
5 years and below	25	67.57
6-10 years	7	18.92
11-15 years	2	5.41
16 years and above	3	8.11
Total	37	100

The findings reveal that the respondents are predominantly early-career teachers, with 67.57% having five years and below teaching experience. This suggests that the results of the study are largely influenced by teachers who are still gaining professional experience and developing their teaching competencies. Only 32.43% of the respondents have more than five years of teaching experience, indicating that fewer seasoned teachers are included in the study. The limited number of respondents with long teaching experience may imply that the perspectives of veteran educators are less represented. Overall, the data indicate that most respondents are new or less experienced teachers, with fewer participants having long-term teaching experience.

Table 1.6 presents the distribution of respondents according to the level of seminars attended related to education. The data show that most respondents have participated in higher-level professional development activities. The National level has the highest number of respondents with 19 (51.35%), indicating that more than half of the participants have attended seminars conducted at the national level. This is followed by the international level with 10 respondents (27.03%), showing that a considerable number of respondents have also participated in global educational seminars. Meanwhile, School level seminars were attended by 6 respondents (16.22%), reflecting moderate participation in institution-based training. The Regional level has the lowest number with 2 respondents (5.41%), indicating minimal participation at this level.

1.6 Trainings/seminars attended related to education

Level of Seminars Attended Related to Education	f	%
School	6	16.22
Regional	2	5.41
National	19	51.35
International level	10	27.03
Total	37	100

The findings reveal that the majority of respondents have attended national and international seminars, which together account for 78.38% of the total sample. This suggests that most participants are exposed to broader professional development opportunities beyond their institution and region. The high participation in national and international seminars implies that the respondents are actively engaged in upgrading their knowledge, skills, and competencies in education. This exposure may contribute to improved teaching practices and awareness of current educational trends. On the other hand, fewer respondents attended school and regional level seminars, which may indicate limited availability or preference for higher-level professional development programs. Overall, the data indicate that respondents are professionally active, with most attending national and international seminars related to education.

Teaching Skills and Competencies of Teachers as Perceived by Teachers and Students

Table 2.1 presents the teachers respondents' assessment of instructional skills. The results indicate that all indicators obtained high mean scores, suggesting that the respondents demonstrate strong instructional competencies in teaching. The results show that teachers rated their instructional skills at a composite mean of 4.58 (SD = 0.53), which falls under the Outstanding level. This indicates that teachers perceive themselves as highly competent in planning, delivering, and facilitating classroom instruction.

Among the indicators, the highest mean score was encouraging students to think and clarify lessons through effective questioning (M = 4.70, SD = 0.46), interpreted as Outstanding. This suggests that teachers strongly promote higher-order thinking and active participation among students. Similarly, motivating students through questioning to develop critical thinking and creativity and relating lessons to real-life situations both obtained high mean scores of 4.68, indicating that teachers effectively connect instruction to meaningful learning experience. Moreover, presenting the lesson systematically and analytically also received an Outstanding rating (M = 4.51, SD = 0.56), implying that teachers organize content clearly and logically to enhance understanding. On the other hand, planning and organizing classroom schedules and utilizing instructional materials effectively both obtained mean scores of 4.46, interpreted as Very Satisfactory. While still high, these results suggest slight room for improvement in time management and optimization of instructional resources.

2.1 Instructional skills;

A. On Instructional Skills	Mean	SD	Interpretation
1.I plan, organize schedules are priorities in classroom work	4.46	0.61	VS
2.I present the lesson systematically and analytically	4.51	0.56	O
3.I encourage the students to think & clarify lessons through effective questioning	4.70	0.46	O
4.I motivate the students by asking questions effectively to develop critical thinking & creativity	4.68	0.47	O
5.I relate lesson to the existing conditions & real-life situation	4.68	0.47	O
6. I utilizes instructional materials effectively in achieving teaching objectives.	4.46	0.61	VS
Composite Mean	4.58	0.53	O

Legend: O – Outstanding; VS – Very Satisfactory

A study by Sarvary and Schmidt (2026) highlighted that effective teaching practices, particularly those that incorporate structured instructional strategies and guided learning activities, significantly enhance students' critical thinking and engagement in classroom learning. The study emphasized that well-developed instructional skills enable teachers to create meaningful learning experiences that promote deeper understanding and active participation.

The table 2.2 presents the students' assessment of teachers' instructional skills. The results reveal that students rated the teachers' instructional skills with a composite mean of 4.26 (SD = 0.72), interpreted as Very Satisfactory. This indicates that students generally perceive their teachers as effective in delivering instruction, organizing lessons, and facilitating learning, although not at the highest level. Among the indicators, encouraging students to think and clarify lessons through effective questioning and relating lessons to existing conditions and real-life situations both obtained the highest mean of 4.30, interpreted as Very Satisfactory. This suggests that students recognize teachers' efforts to promote understanding and connect lessons to meaningful real-world contexts. Similarly, motivating students by asking questions to develop critical thinking and creativity received a mean of 4.28, indicating that teachers effectively stimulate students' thinking skills. Planning and organizing classroom schedules also garnered a high rating (M = 4.27), reflecting that teachers maintain structured and organized classroom activities. Meanwhile, presenting lessons systematically and analytically obtained a mean of 4.23, while utilizing instructional materials effectively received the lowest mean of 4.20, though still interpreted as Very Satisfactory. These

results suggest that while teachers perform well in these areas, improvements may still be made to further enhance clarity of presentation and maximize the use of instructional materials.

2.2 Instructional Skills

A. On Instructional Skills	Mean	SD	Interpretation
1. Teacher plans and organizes schedules, which are priorities in classroom work	4.27	0.71	VS
2. Teachers present the lesson systematically and analytically	4.23	0.77	VS
3. Teacher encourages the students to think & clarify lessons through effective questioning	4.30	0.67	VS
4. Teacher motivates the students by asking questions effectively to develop critical thinking & creativity	4.28	0.72	VS
5. Teachers relate the lesson to the existing conditions & real-life situations	4.30	0.77	VS
6. Teachers utilize instructional materials effectively in achieving teaching objectives.	4.20	0.71	VS
Composite Mean	4.26	0.72	VS

Legend: VS – Very Satisfactory

Overall, the findings imply that students view teachers' instructional skills as consistently effective, particularly in questioning strategies and real-life application of lessons, which contribute to a supportive and engaging learning environment. A study by Dinamling and Depaynos (2025) found that student-perceived effective teaching includes transformative pedagogical practices, optimized learning support, and strong classroom interaction, all of which significantly enhance student engagement and meaningful learning experiences. The study highlighted that when students perceive teachers as instructionally competent, they are more likely to actively participate and develop deeper understanding of course content.

Table 2.3 presents the teachers' assessment of their use of instructional resources. The findings reveal that teachers very strongly agree that they effectively utilize instructional resources in teaching, as reflected by the composite mean of 4.28 (SD = 0.73), interpreted as Very Satisfactory (VS). This indicates that teachers consistently incorporate a variety of learning materials to support student understanding and skill development. Specifically, teachers strongly agreed that they make use of technological materials and gadgets for learning, which obtained the highest mean of 4.57 (SD = 0.60) interpreted as Outstanding (O). This suggests that teachers actively integrate technology into instruction to enhance engagement and improve learning outcomes. The use of varied materials to address both knowledge and skills development also received a high rating with a mean of 4.49 (SD = 0.69), indicating that teachers employ diverse resources to support holistic learning.

Furthermore, teachers reported that they do not rely solely on textbooks but explore other avenues of learning experiences (M = 4.35, SD = 0.68), demonstrating flexibility and creativity in resource utilization. Meanwhile, the use of recent research findings (M = 4.00, SD = 0.82) and subscription to different reference materials (M = 4.00, SD = 0.85) were both interpreted as Very Satisfactory, suggesting that teachers moderately integrate updated academic sources into their teaching.

2.3 Instructional Resources;

B. On Instructional Resources	Mean	SD	Interpretation
1. I make use of recent research findings	4.00	0.82	VS
2. I make use of technological materials technological and gadgets for learning	4.57	0.60	O
3. I cater to both knowledge and skills development through the use of varied materials	4.49	0.69	VS

4. I subscribe to different reference materials	4.00	0.85	VS
5. I do not rely only on books but on other avenues of learning experience, etc.	4.35	0.68	VS
Composite Mean	4.28	0.73	VS

Legend: O – Outstanding; VS – Very Satisfactory

Table 2.4 presents the students' assessment of teachers' use of instructional resources. The results indicate that students very satisfactorily assessed the teachers' use of instructional resources, as reflected in the composite mean of 4.27 (SD = 0.75) interpreted as Very Satisfactory (VS). This suggests that, from the students' perspective, teachers consistently utilize a variety of materials and resources to facilitate effective learning experiences.

Among the indicators, teachers' use of technological materials and gadgets for learning (M = 4.30, SD = 0.74) and teachers' ability to explore other avenues of learning beyond textbooks (M = 4.30, SD = 0.74) obtained the highest means, both interpreted as Very Satisfactory. This implies that students observe their teachers integrating technology and diverse learning resources to enhance engagement and understanding. Additionally, students perceived that teachers cater to both knowledge and skills development through the use of varied instructional materials (M = 4.27, SD = 0.78) and subscribe to different reference materials (M = 4.27, SD = 0.73), indicating that teachers provide balanced and comprehensive learning support. The use of recent research findings (M = 4.22, SD = 0.76) also received a Very Satisfactory rating, suggesting that teachers incorporate updated information to enrich lesson content.

2.4 On Instructional Resources

B. On Instructional Resources	Mean	SD	Interpretation
1. Teachers make use of recent research findings	4.22	0.76	VS
2. Teachers make use of materials techno-logical and gadgets for learning	4.30	0.74	VS
3. Teachers cater to both knowledge and skills development through the use of varied materials	4.27	0.78	VS
4. Teachers subscribe different reference materials	4.27	0.73	VS
5. Teachers do not rely only on books but on other avenues of learning experience etc.	4.30	0.74	VS
Composite Mean	4.27	0.75	VS

Legend: VS-Very Satisfactory

Overall, the findings reveal that students recognize teachers' consistent use of instructional resources, including technology, varied materials, and multiple references, which contribute to meaningful and effective classroom instruction.

Table 2.5 presents the teachers' self-assessment of their teaching approaches. Approaches .The results show that teachers very satisfactorily assessed their teaching approaches, as indicated by the composite mean of 4.49 (SD = 0.60) interpreted as Very Satisfactory (VS). This suggests that teachers consistently apply varied and effective instructional approaches to enhance students' learning experiences.

Among the indicators, the use of a variety of activities such as discussions, group work, and lectures obtained the highest mean of 4.57 (SD = 0.55) interpreted as Outstanding (O). This implies that teachers actively employ diverse classroom activities to promote engagement and participation. Similarly, providing evaluative activities appropriate to students' abilities, interests, and needs (M = 4.51, SD = 0.56) and utilizing activities that help students understand the lesson (M = 4.51, SD = 0.61) were also rated Outstanding, indicating that teachers carefully select instructional approaches that support learner comprehension and inclusivity.

Meanwhile, utilizing instructional materials that sustain students' attention (M = 4.43, SD = 0.65) and using different teaching techniques, approaches, and strategies to make lessons interesting and

meaningful ($M = 4.43$, $SD = 0.65$) were both interpreted as Very Satisfactory. These findings suggest that teachers consistently integrate varied methods to maintain student interest and improve lesson delivery.

2.5 Approaches

C. On Approaches	Mean	SD	Interpretation
1. I provide evaluative activities appropriate to students' abilities, interests, and needs.	4.51	0.56	O
2. I utilize instructional materials that sustain students' attention in achieving teaching activities	4.43	0.65	VS
3. I used different teaching techniques, approaches & strategies to make the lesson interesting & meaningful.	4.43	0.65	VS
4. I am able to utilize activities that are helpful for students to understand the lesson.	4.51	0.61	O
5. I use a variety of activities (discussions, group work, lectures) during class time	4.57	0.55	O
Composite Mean	4.49	0.60	VS

Legend: O-Outstanding VS-Very Satisfactory

Overall, the results indicate that teachers effectively employ diverse teaching approaches, including varied activities, appropriate evaluative tasks, and engaging instructional strategies. These practices contribute to meaningful learning experiences and support students' understanding of lesson content.

Table 2.6 presents the students' assessment of teachers' teaching approaches and techniques. The results reveal that students assessed the teachers' approaches and techniques as Very Satisfactory, as shown by the composite mean of 4.15 ($SD = 0.85$). This indicates that teachers generally employ effective teaching strategies and classroom activities that support student learning and engagement. Among the indicators, the use of a variety of activities such as discussions, group work, and lectures received the highest mean of 4.20 ($SD = 0.88$), interpreted as Very Satisfactory. This suggests that students observe teachers incorporating diverse classroom activities to promote participation and interaction. Similarly, teachers' provision of evaluative activities appropriate to students' abilities, interests, and needs ($M = 4.17$, $SD = 0.78$) and the utilization of instructional materials that sustain students' attention ($M = 4.17$, $SD = 0.83$) were also rated Very Satisfactory, indicating that teachers apply learner-centered approaches. Furthermore, the use of different teaching techniques and strategies to make lessons interesting and meaningful ($M = 4.12$, $SD = 0.85$) and the utilization of activities that help students understand the lesson ($M = 4.10$, $SD = 0.90$) were likewise interpreted as Very Satisfactory. These findings suggest that teachers consistently employ varied instructional techniques, though with slightly lower ratings compared to other indicators.

2.6 Approaches

C. On Approaches/Techniques	Mean	SD	Interpretation
1. Teachers provide evaluative activities appropriate to students abilities, interest & needs.	4.17	0.78	VS
2. Teachers utilize instructional materials that sustains students attention in achieving teaching activities	4.17	0.83	VS
3. Teachers use different teaching techniques , approaches & strategies to make the lesson interesting & meaningful.	4.12	0.85	VS
4. Teachers able to utilize activities that are helpful for students to understand the lesson.	4.10	0.90	VS
5. Teachers use variety of activities (discussions, group work, lecture) during class time	4.20	0.88	VS
Composite Mean	4.15	0.85	VS

Legend: VS-Very Satisfactory

Overall, the results imply that students perceive teachers as using appropriate and varied teaching approaches and techniques. These practices contribute to maintaining student interest, supporting comprehension, and enhancing the overall effectiveness of classroom instruction.

The table 2. 7 presents the teachers' self-assessment of their use of evaluative techniques in instruction. The findings indicate that teachers assessed their evaluative techniques as Very Satisfactory, with a composite mean of 4.30 (SD = 0.75). This suggests that teachers consistently use various assessment tools to measure students' learning and monitor instructional effectiveness.

Among the evaluation tools, the use of tests (written/oral) obtained the highest mean of 4.62 (SD = 0.59) interpreted as Outstanding (O). This implies that teachers frequently utilize formal assessments to determine students' level of understanding and mastery of the lessons. Meanwhile, the use of demonstrations (M = 4.41, SD = 0.69) and small group task-oriented activities (M = 4.41, SD = 0.69) were both rated Very Satisfactory, indicating that teachers also apply performance-based and collaborative assessment strategies. Furthermore, the use of textbook assignments (M = 4.05, SD = 0.91) and portfolios (M = 4.03, SD = 0.87) were interpreted as Very Satisfactory, though they received comparatively lower means. This suggests that while teachers utilize these assessment methods, they may be employed less frequently compared to tests and demonstrations.

2.7 Evaluative techniques

D. On Evaluative Techniques	Mean	SD	Interpretation
I use different evaluation tools to gauge the program of instruction, such as:			
a. Test (written/oral)	4.62	0.59	O
b. Demonstration	4.41	0.69	VS
c. Portfolio	4.03	0.87	VS
d. Textbook Assignment	4.05	0.91	VS
e. Small group, such as task-oriented	4.41	0.69	VS
Composite Mean	4.30	0.75	VS

Legend: O-Outstanding VS-Very Satisfactory

Overall, the results reveal that teachers use a variety of evaluative techniques, including traditional tests, performance-based assessments, and group tasks, to effectively gauge student learning. These practices demonstrate a balanced approach to assessment that supports both knowledge acquisition and skill development.

Table 2.8 presents the students' assessment of teachers' use of evaluative techniques. The results indicate that students perceived teachers to consistently use varied evaluative techniques in assessing the program of instruction, as reflected by the composite mean of 4.21 (SD = 0.86) interpreted as Very Satisfactory. This suggests that teachers employ multiple assessment tools to measure students' learning and performance effectively. Among the specific indicators, the use of tests (written/oral) obtained the highest mean of 4.37 (SD = 0.71), interpreted as Very Satisfactory, indicating that formal assessments remain the most commonly used evaluation method. This was followed by demonstration with a mean of 4.30 (SD = 0.74) and small group task-oriented activities with 4.24 (SD = 0.92), both interpreted as Very Satisfactory, showing that teachers also incorporate performance-based and collaborative assessments. Meanwhile, textbook assignments received a mean of 4.08 (SD = 0.97) and portfolio with 4.05 (SD = 0.98), both still interpreted as Very Satisfactory, though slightly lower compared to other techniques. These findings imply that while alternative assessments are utilized, they are implemented somewhat less frequently than traditional testing methods.

2.8 Evaluative Techniques

D. On Evaluative Techniques	Mean	SD	Interpretation
1. Teachers use different evaluate tools to gauge program of instruction such as:			
a. Test (written/oral)	4.37	0.71	VS
b. Demonstration	4.30	0.74	VS
c. Portfolio	4.05	0.98	VS
d. Textbook Assignment	4.08	0.97	VS
e. Small group such as task oriented	4.24	0.92	VS
Composite Mean	4.21	0.86	VS

Legend: VS-Very Satisfactory

Overall, the results demonstrate that teachers use a combination of traditional and authentic assessment strategies, which supports comprehensive evaluation of student learning outcomes and aligns assessment practices with instructional objectives. This variety in evaluative techniques helps address different learning styles and provides students with multiple opportunities to demonstrate their understanding.

Differences in the Perception Teaching Skills and Competencies of Teachers and Students

The table 3.1 shows the results of the t-test for equality of means comparing groups (likely teachers' self-assessment vs. students' assessment) on instructional skills. Based on the table it was revealed that the p-value is less than 0.05, indicating a statistically significant difference between the two groups. There is a significant difference between teachers' and students' assessment of instructional skills.

3.1. Instructional Skills

		Levene's Test for Equality of Variances		t-test for Equality of Means			Decision
		F	p-value	t	df	p-value	
Instructional Assessment on Instructional Skills	Equal variances assumed	5.806	.018	2.791	95	.006	Significantly Different
	Equal variances not assumed			3.079	4.738	.003	

This suggests that teachers rate their own instructional skills higher than students do. The difference indicates a perceptual gap, where teachers perceive themselves as more competent in planning, presenting lessons, and encouraging critical thinking than what students perceive in practice. This highlights the importance of aligning self-perception with students' feedback to further improve instructional effectiveness. Kulachai (2025) found that teachers often rate their instructional competencies higher than students' evaluations, highlighting a consistent gap between self-assessment and learner perceptions. The study suggests that while teachers may feel confident in their lesson delivery and engagement strategies, students' experiences may reveal areas needing improvement, such as clarity, interaction, or activity engagement.

3.2 Instructional Resources;

		Levene's Test for Equality of Variances		t-test for Equality of Means			Decision
		F	p-value	t	df	p-value	
Instructional Assessment on Instructional Resources	Equal variances assumed	1.116	.293	.089	95	.929	Not Significantly Different
	Equal variances not assumed			.091	82.267	.927	

The table shows the results of the t-test for equality of means comparing teachers' and students' assessments on teaching approaches. Since the p-value is greater than 0.05, the assumption of equal variances is met. The p-value is less than 0.05, indicating a statistically significant difference between teachers' and students' assessments. Significantly Different – Teachers' and students' assessments of teaching approaches are not the same.

This suggests that teachers perceive themselves as more effective in using varied teaching approaches than students perceive. While teachers report high use of discussions, group work, and diverse strategies, students' assessment is slightly lower, indicating a perceptual gap. The difference highlights the need for teachers to continuously monitor student engagement and understanding, ensuring that their intended teaching approaches are effectively reaching learners. Based on the study of Kulachai (2025) found that teachers often self-rate their instructional strategies higher than students do, revealing gaps in perceptions of engagement, lesson clarity, and interaction. The study emphasizes the importance of student feedback in evaluating the effectiveness of teaching approaches and ensuring alignment between instructional intentions and student experiences.

Evaluative techniques

		Levene's Test for Equality of Variances		t-test for Equality of Means			Decision
		F	p-value	t	Df	p-value	
Instructional Assessment on Evaluative Techniques	Equal variances assumed	4.944	.029	.653	95	.515	Not Significantly Different
	Equal variances not assumed			.703	92.300	.484	

The table presents the results of the t-test for equality of means comparing teachers' and students' assessments on evaluative techniques. The p-value is greater than 0.05, indicating no statistically significant difference between teachers' and students' assessments. Not Significantly Different – Teachers' and students' assessments of evaluative .This indicates that teachers and students have similar perceptions regarding the use of evaluative techniques. Both groups agree that teachers employ multiple assessment tools, such as tests, demonstrations, portfolios, and group tasks, to gauge student learning effectively. The result reflects a consensus on evaluation practices, suggesting that teachers' assessment strategies are well-recognized and appreciated by students.

Based on the study of Rodriguez et.al (2024) found that when teachers employ diverse assessment strategies—including performance-based tasks, portfolios, and collaborative assessments—both instructors and students report high levels of satisfaction and perceive these methods as effective in supporting learning and skill development.

Relationship between Teachers' Perceived Teaching Skills and Competencies and their Profile

The table presents the correlation analysis between demographic variables and overall teaching skills and competencies of the respondents. The r-values indicate the strength and direction of the relationship, while the p-values indicate whether the relationship is statistically significant at the 0.05 level. All p-values are greater than 0.05, meaning that there is no significant relationship between overall teaching skills and competencies and any of the demographic variables.

Variables		R	p-value	Decision
Overall Teaching Skills and Competencies	Age Group	.033	.846	Not Significant
	Sex	.228	.175	Not Significant
	Civil Status	-.037	.827	Not Significant
	Highest Education Attained	-.209	.216	Not Significant
	Years of Teaching Service	.029	.863	Not Significant
	Seminars Attended	.188	.266	Not Significant

This suggests that teachers' teaching skills and competencies are independent of age, sex, civil status, highest education attained, years of teaching service, and seminars attended. In other words, these demographic characteristics do not significantly influence how teachers perceive or demonstrate their teaching skills. According to the study of Khan et al. (2024) reported that teachers' instructional competencies were not significantly associated with their age or gender but were instead determined by teaching experience and engagement in continuous professional development.

CONCLUSIONS

1. Teachers possess strong instructional skills, particularly in planning, motivating students, and utilizing materials, though students perceive slightly lower effectiveness, highlighting the importance of student feedback.
2. Both teachers and students agree on the use and effectiveness of instructional resources and evaluative techniques.
3. Teaching approaches and techniques show perceptual differences between teachers and students, suggesting the need for greater alignment in instructional strategies.
4. Demographic factors do not significantly influence teaching competencies, indicating that effective teaching is largely determined by skills, professional development, and reflective practices rather than age, experience, or educational attainment.
5. Continuous professional development, including seminars and workshops, remains essential for maintaining and enhancing instructional quality.

RECOMMENDATIONS

1. For Teachers:
 - Increase the use of student-centered teaching strategies, such as active learning, group work, and problem-solving activities, to enhance engagement.
 - Continue participating in professional development programs, particularly in emerging instructional technologies and innovative teaching approaches.
2. For School Administrators:
 - Support teachers by providing access to diverse instructional materials and technological tools.
 - Facilitate workshops and seminars that focus on improving teaching approaches and assessment practices.

3. For Future Researchers:

- Conduct longitudinal studies to examine how teaching competencies develop over time and the effect of continuous professional development.
- Explore additional variables, such as classroom environment, leadership support, or teacher motivation, that may influence teaching effectiveness.

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PERCEPTION OF SUSTAINABLE TOURISM PRACTICES IN BAGUIO CITY

Jhermie T. Mocay
Nathaleen C. Luzano
Airsih D. Gallangi
Susana C. Binumga

Baguio Central University

ABSTRACT

This study explored the perceptions of sustainable tourism practices in Baguio City, examining how community involvement, cultural preservation, local economies, and environmental conservation are influenced by tourism development. Using a qualitative descriptive design, data were collected through purposive sampling, semi-structured interviews, and thematic analysis of 11 respondents representing tourists, residents, business owners, and government officials. Findings revealed barriers such as the perceived high cost of eco-friendly goods, limited financial and technical support, and varying awareness of ordinances, while enablers included stakeholder participation, government initiatives, and community-driven projects. Results highlight the need for education, participatory platforms, and long-term strategies to balance economic growth with ecological and cultural preservation. The study concludes that Baguio City can serve as a model for eco-cultural tourism in the Cordillera Region by fostering collaboration, implementing regenerative measures, and embedding sustainability into its tourism identity.

Keywords: *Baguio City, Community Based Tourism, Ecotourism, Stakeholders Perceptions, Sustainable Tourism*

INTRODUCTION

Sustainable tourism has become an important approach in protecting the environment, preserving culture, and supporting the economy of tourist destinations. It aims to balance tourism development with the responsible use of natural and cultural resources to ensure that future generations can still benefit from them. In many tourist destinations, sustainable tourism promotes environmental conservation, community participation, and economic opportunities while minimizing the negative impacts of tourism activities. However, the growing number of tourists and the increasing demand for tourism services continue to create challenges such as pollution, traffic congestion, waste management problems, and threats to cultural heritage. Because of this, sustainable tourism practices are now being encouraged in different parts of the world, especially in destinations that are highly dependent on tourism.

Baguio City, known as the “Summer Capital of the Philippines,” is one of the country’s most visited tourist destinations because of its cool climate, natural attractions, and rich cultural heritage. Tourism greatly contributes to the city’s economy by providing income, employment, and business opportunities to local residents. Despite these benefits, Baguio City also experiences several environmental and social issues caused by the continuous growth of tourism, including overcrowding, traffic congestion, improper waste disposal, depletion of natural resources, and the gradual loss of cultural identity. These concerns highlight the importance of implementing sustainable tourism practices that can protect the city’s environment and cultural heritage while still supporting tourism development and economic growth.

While many studies have discussed sustainable tourism in general, limited research has focused on the perceptions of stakeholders regarding sustainable tourism practices specifically in Baguio City. Previous

studies mainly emphasized the environmental and economic impacts of tourism but gave less attention to how local communities, tourists, tourism workers, and other stakeholders understand and support sustainability efforts in the city. Since stakeholders play a vital role in the success of sustainable tourism, it is necessary to examine their perspectives, level of awareness, and participation in promoting sustainable practices. A localized investigation is important because Baguio City faces unique environmental, cultural, and tourism-related challenges that may differ from other tourist destinations in the Philippines.

This study aims to examine the perceptions of stakeholders toward sustainable tourism practices in Baguio City. Specifically, it seeks to identify the challenges and opportunities in implementing sustainable tourism, determine the level of awareness and participation of stakeholders, and understand how sustainable practices affect environmental conservation, cultural preservation, community involvement, and local economic development. The study also intends to identify barriers that hinder the successful implementation of sustainable tourism and explore possible strategies to strengthen sustainability efforts in the city.

The findings of this study may contribute new knowledge that can help local government units, tourism stakeholders, community members, and tourism students develop more effective and inclusive sustainable tourism programs and policies. The study may also increase awareness regarding the importance of responsible tourism practices and encourage stronger cooperation among stakeholders in preserving the natural and cultural heritage of Baguio City. Furthermore, this research can serve as a useful reference for future researchers who plan to conduct related studies about sustainable tourism and sustainability practices in other tourist destinations.

STATEMENT OF THE PROBLEM

1. What are the barriers and enablers to the adoption of sustainable tourism practices from the perspectives of stakeholders?
2. What are the recommended strategies employed by stakeholders in response to sustainable tourism practices?

REVIEW OF LITERATURE

This section of the paper presents the relevant theories, concepts and descriptions that provided support to the study of Perception of Sustainable Tourism Practices in Baguio City.

Stakeholder Theory holds that an organization's performance is directly related to its connections with diverse persons and groups who have a "stake" in its operations. These stakeholders, ranging from employees and customers to suppliers, communities, and government agencies, can affect or be influenced by the organization's goals. The notion contended that enterprises should address and balance the interests of all stakeholders rather than focusing primarily on increasing shareholder value. This was a more expansive and inclusive approach which was encouraged sustainability, ethical decision-making, and long development term connections (Freeman, 2010).

The Stakeholder Theory was supported to be used in recent research develop sustainable tourism in Baguio City. It showed that joint efforts by local governments, communities, and tourism stakeholders enhanced garbage management in Burnham Park, increasing its environmental and tourist attractiveness. Similarly, the Asian Development Bank's Baguio Resilient City Tourism Project emphasized the importance of stakeholder participation in developing sustainable tourism infrastructure. Together, these examples demonstrated that active stakeholder participation resulted in more effective and sustainable tourist outcomes (Todyog and Alvarado, 2021).

Community-Based Tourism (CBT) emphasizes local community participation in the development, management, and operation of tourism activities. CBT, which is based on ideas of empowerment, cultural preservation, and socioeconomic fairness, redefined tourism as a mechanism for inclusive development

rather than just an economic activity. CBT served as a governance model that is strongly aligned with the Sustainable Development Goals (SDGs), particularly those relating to equitable economic growth, responsible consumption, and heritage conservation. His findings indicated that when communities take the lead in tourist activities, the outcomes are more sustainable and more customized to local settings (Maldonado, 2024).

Building on this insight, the creation of the CHALOK Ecopark Communities, which include locations like Country Club, Happy Hallow, Atok Trail, Lucnab, Outlook Drive, and Kias villages, was one noteworthy project. Through "nature plus culture immersion," this project sought to promote sustainable tourism by enticing tourists to interact with local customs and communities while protecting the environment. Plans called for the construction of non-intrusive tourist amenities such as boardwalks, gardens, view decks, and areas for regional produce and crafts. By giving alternate sources of income and conserving cultural heritage, this strategy did not only broaden the range of tourism options but also strengthened local communities (Castillo, 2024).

Ecotourism theory emphasizes the integration of tourism with environmental conservation, cultural preservation, and sustainable development. Traditionally, it is characterized as responsible travel to natural regions that protects the environment, promotes local well-being, and includes interpretation and teaching (TIES, 2015). Ecotourism theory focused on reducing environmental effect, promoting respect for local cultures, and giving direct financial advantages to conservation and local populations. It extended beyond recreation to encourage ethical connections between tourists and their natural or cultural surroundings, which are frequently directed by ecological and community ideals.

Recent advances in ecotourism philosophy, such as Field Environmental Philosophy (FEP), broadened this view by including environmental ethics, emotional engagement, and multidisciplinary education into tourism operations. Rather than focusing exclusively on conservation results, this new theoretical paradigm invited tourists and stakeholders to consider their relationship with nature, local traditions, and sustainability. It saw ecotourism as a collaborative process that includes ethical field techniques, shared narratives, and co-managed protected areas. This theoretical progression emphasizes the need of sustainable tourism in not just protecting resources but also changing attitudes, strengthening local identity, and empowering communities (Rozzi et al., 2023).

Sustainable tourism refers to tourism that serves the requirements of current tourists and host communities while safeguarding and expanding prospects for the future. It sought to manage resources in a way that assures long-term economic viability, preserves the socio-cultural authenticity of host communities, and protects the environment. The idea promotes strategies that reduce negative impacts while increasing benefits for all parties engaged, hence supporting inclusive development and ecological preservation.

Precisely, the United Nations Environment Program (UNEP) and defined in the United Nations World Tourism Organization (UNWTO) sustainable tourism as tourism that puts into consideration its present and economic, social, and environmental effects in the future, accommodating the visitors, the industry, the environment, and the host communities (UNEP & UNWTO, 2021).

The city of Baguio is the so-called Summer Capital of the Philippine has embraced the philosophy of sustainable tourism in order to preserve its natural beauty and cultural history as it receives more and more visitors. Sustainable tourism in Baguio prioritized economic development, environmental conservation, and community welfare. Waste segregation, eco-parks, limited tourist numbers in popular areas such as Burnham Park and Mines View Park, and promotion of local products through public markets and trade fairs were among the initiatives launched by the city. In addition, the city has worked with partners to create green transit systems and zoning rules to limit population growth (Alave, 2021).

METHODOLOGY

This chapter presents the research design and methodology utilized by the researchers in conducting the study. It includes the research design, locale and population of the study, data gathering instrument, reliability and validity of the instrument, data gathering procedure, treatment of data, and ethical considerations.

Research Design

This study utilized a qualitative research design, specifically the descriptive qualitative approach. Qualitative research is appropriate in understanding the perceptions, experiences, and insights of individuals regarding a particular phenomenon. In this study, the researchers focused on examining the perceptions of stakeholders toward sustainable tourism practices in Baguio City. The descriptive qualitative method allowed the researchers to gather detailed information and deeper understanding regarding environmental awareness, community participation, cultural preservation, and sustainable tourism practices.

The researchers selected this design because it provided an opportunity to explore the thoughts, experiences, and observations of the respondents through direct interaction and open-ended responses. Through qualitative inquiry, the study was able to identify common issues, concerns, and suggestions related to sustainable tourism practices in Baguio City.

Locale and Population of Study

The study was conducted in Burnham Park located along Jose Abad Santos Drive, Baguio City. Burnham Park was chosen as the research locale because it is one of the most visited tourist attractions in the city and serves as a gathering place for tourists, residents, and government representatives involved in tourism-related activities. The area provided the researchers with accessible and diverse respondents who possess knowledge and experiences regarding sustainable tourism practices in Baguio City.

The study involved eleven (11) respondents selected through purposive sampling. The respondents were composed of four (4) local residents, four (4) tourists, and three (3) government representatives or tourism-related personnel. The researchers selected participants based on specific inclusion criteria to ensure that the respondents possessed adequate knowledge and experience related to the study.

The local residents were required to have lived in Baguio City for at least one year to ensure familiarity with the city's tourism practices and environmental conditions. Tourist respondents were required to have stayed in Baguio City for at least two days to allow sufficient exposure to tourism activities and services. Government representatives were selected based on their involvement in tourism management, environmental programs, or policy implementation related to sustainable tourism.

The selected respondents were considered capable of providing reliable, relevant, and experience-based information that contributed to the credibility and trustworthiness of the study findings.

Data Gathering Procedure

Before conducting the study, the researchers first prepared a letter requesting permission to conduct interviews in the selected research locale. After approval was secured, the researchers identified qualified respondents based on the inclusion criteria of the study.

The researchers personally approached the respondents and explained the purpose, objectives, and significance of the study. The participants were informed that their participation was voluntary and that they had the right to refuse or withdraw from the study at any time. Once the respondents agreed to participate, informed consent was obtained prior to the interview.

The researchers conducted face-to-face semi-structured interviews with the respondents. During the interviews, the researchers asked prepared guide questions while also allowing follow-up questions to further explore relevant responses. Each interview lasted approximately 30 to 45 minutes. The interviews were audio-recorded with permission from the respondents, and field notes were written to support the collected data.

After the data gathering process, the researchers transcribed all recorded interviews verbatim. The collected data were then organized, reviewed, and prepared for thematic analysis.

Data Gathering Instrument

The researchers used a semi-structured interview guide as the primary data gathering instrument of the study. The interview guide consisted of open-ended questions designed to gather detailed responses regarding the respondents' perceptions, experiences, and awareness of sustainable tourism practices in Baguio City. The questions focused on environmental conservation, community participation, cultural preservation, tourism management, waste management, and sustainable tourism initiatives in the city.

The semi-structured interview allowed flexibility during the interview process. The researchers were able to ask follow-up questions whenever clarification or deeper explanations were needed. This method encouraged the respondents to freely express their opinions and experiences, resulting in richer and more comprehensive qualitative data.

The interviews were conducted face-to-face at Burnham Park and nearby areas convenient for the respondents. Each interview lasted approximately 30 to 45 minutes depending on the availability and willingness of the participants to share their experiences. With the consent of the respondents, the interviews were audio-recorded to ensure accuracy of responses. Field notes were also taken to document non-verbal cues, observations, and important details during the interview process.

Reliability and Validity of the Instrument

To ensure the validity of the research instrument, the researchers carefully constructed the interview questions based on the objectives of the study and relevant literature on sustainable tourism. The interview guide was reviewed by the research adviser and selected experts to ensure that the questions were clear, appropriate, and relevant to the study.

The researchers also conducted revisions to improve the clarity and organization of the questions before the actual data gathering. The use of open-ended questions allowed the respondents to provide honest and detailed responses, which strengthened the content validity of the instrument.

To ensure reliability and consistency of data, the researchers used the same interview guide for all respondents. Audio recordings, field notes, and interview transcripts were carefully reviewed and compared to avoid misinterpretation of responses. The researchers also maintained accuracy during transcription and data analysis to preserve the original meaning of the participants' statements.

Treatment of Data

The collected qualitative data were analyzed through thematic analysis. The researchers carefully read and reviewed the interview transcripts multiple times to familiarize themselves with the responses of the participants. Significant statements and recurring ideas were identified and grouped into categories.

Thematic coding was conducted manually by grouping recurring responses into categories and identifying emerging themes. Codes were assigned to similar responses, and related codes were combined to form broader themes that reflected the perceptions and experiences of the respondents regarding sustainable tourism practices in Baguio City.

The researchers analyzed the themes by examining patterns, similarities, and differences among the responses of tourists, local residents, and government representatives. The themes generated from the analysis were interpreted and discussed in relation to the objectives of the study. This process allowed the researchers to develop a comprehensive understanding of the respondents' perceptions, concerns, and recommendations regarding sustainable tourism practices.

Ethical Considerations

The researchers highly valued the rights, dignity, safety, and well-being of all respondents throughout the conduct of the study. Ethical principles were strictly observed to ensure fairness, respect, and protection of the participants.

Before the interviews, the researchers clearly explained the purpose, objectives, and procedures of the study to the respondents. The participants were informed that their participation was voluntary and that they had the right to refuse participation or withdraw from the study at any time without penalty. Informed consent was secured from all respondents before the interviews were conducted.

Confidentiality and privacy were strictly maintained throughout the study. The names and personal information of the respondents were not disclosed in any part of the research. All collected data, interview recordings, and transcripts were stored securely and were used solely for academic purposes. The study also complied with the provisions of Republic Act No. 10173 or the Data Privacy Act of 2012 to ensure the proper handling and protection of personal information.

Furthermore, the researchers ensured that the study did not cause harm, discomfort, or misrepresentation to any participant or community involved in the research. Respect, integrity, honesty, and accountability were observed throughout the data gathering and analysis process.

The researchers also utilized artificial intelligence (AI) tools to assist in organizing information, improving grammar, and enhancing the clarity of the manuscript. However, all interpretations, analyses, conclusions, and final decisions remained under the full responsibility of the researchers. The use of AI was limited only to language refinement and organization to maintain academic integrity, human judgment, and ethical research standards.

FINDINGS

This chapter presents the findings, analysis, and interpretation of the data gathered regarding the perceptions of stakeholders toward sustainable tourism practices in Baguio City. The study aimed to determine the barriers and enablers influencing sustainable tourism practices and identify the strategies recommended by stakeholders to improve sustainability efforts in the city. The respondents of the study included tourists, local residents, and government representatives who shared their experiences and observations regarding environmental conservation, community participation, cultural preservation, and responsible tourism behavior in Baguio City.

Barriers and enablers to the adoption of sustainable tourism practices from the perspectives of stakeholders

The table below presents the perceptions of stakeholders regarding sustainable tourism practices in Baguio City based on their experiences and observations. The table presents the most common responses expressed by the respondents according to frequency. The table provides a clearer understanding of the sustainable practices currently observed in Baguio City and the areas that still require improvement.

Table 1. Barriers and enablers to the adoption of sustainable tourism practices from the perspectives of stakeholders

KEY THEMES	COMMON ANSWERS	RANKING
Perceived High Cost of Goods	Eco-friendly activities, products, and food are expensive, making them less affordable for some stakeholders.	6 out of 11
Awareness of Ordinances and Policies	Waste segregation, proper waste disposal, and clean-up drives help maintain environmental sustainability.	6 out of 11
Need for Financial Support	Financial and technical support from the government, businesses, and community are necessary to implement sustainable practices.	9 out of 11

Key Theme 1: Perceived High Cost of Goods

Perception that environment-friendly practices and products are very costly economically has remained one of the most obstinate issues in the development of sustainable tourism. Although the sustainability concept is based on the creation of the balance between environmental protection, cultural preservation, and community welfare, its application frequently involves substantial financial investments. Investments in conservation programs and low-impact infrastructure, to environmentally friendly goods and services, such initiatives have the effect of increasing the costs of operation, which are eventually transferred to consumers. Therefore, locals and tourists often perceive sustainable tourism products as more costly than traditional ones. Such an image of being expensive not only affects the behavior of purchase and availability, but also the attitude of the stakeholders towards adopting and supporting sustainable practices. Stakeholders tend to view sustainable tourism from an economic perspective.

“Everything is expensive because the prices are really high.”

Another respondent mentioned:

“Eco-friendly activities and products are perceived as costly, limiting affordability for many stakeholders.”

These attitudes are consistent with those of Butowski (2021) and Fennell (2020), who pointed out that ethically and environmentally responsible tourism activities including conservation and low-impact tourism demand financial resources that raise the cost of services. This can also be discussed in terms of Adenidji et al. (2021), who elaborated that the systems that are environmentally friendly and community programs usually increase the price of the local goods and tourism products, and thus they become unavailable to all stakeholders.

Interestingly, economic advantages of sustainable tourism are also raised by some stakeholders that point out that the tourism introduces new jobs and helps local enterprises:

“Some stakeholders might focus on economic benefits like how tourism created jobs and others.”

Such an attitude coincides with Stakeholder Theory that highlights the fact that tourism projects become successful when the interests of all stakeholders such as the local communities, businesses and the tourists received into account and balanced (Freeman, 2010). Given that the stakeholders prioritize an economic advantage in the form of job creation, the long-term welfare of the community is maintained and guarantees social equity and sustainable development in the tourism industry of the Baguio City. By doing so, the high cost of eco-friendly practices that are perceived and the possible economic benefits are addressed, therefore with the aim of establishing a less biased and more efficient model of sustainable tourism.

Key Theme 2: Awareness of Ordinances and Policies

The awareness and adherence to ordinances and policies is one of the most important issues in maintaining tourism practices. Although sustainable tourism focuses on environmental conservation, cultural conservation, and involvement of the community, its success will rely on the level at which the stakeholders know and adhere to the local guidelines. The waste segregation ordinances, traffic control and environmentally friendly measures are aimed at preserving the natural resources and keeping the environment clean, yet their power depends on the level of awareness and implementation. Consequently, apparent policies like plastic, smoke-free, and carrying capacities bans are commonly perceived as important in determining responsible tourism practices by locals and tourists. This understanding does not only determine compliance but also enhances stakeholder realization of sustainable undertakings. Participants said that

“Maybe the ordinances about proper waste disposal and segregation are effective, and the clean-up drives also help”.

Others noted that

“This includes limiting the number of tourists in certain areas, promoting eco-friendly transportation, and supporting local businesses that practice sustainability.”

These perceptions are in line with the results of Neshat et al. (2021), who have mentioned that sustainability policies are characterized by misunderstandings or lack of awareness among stakeholders.

Similarly, Insch (2020) underscored that policy formulation and its implementation on a regular basis should ensure that tourism growth remains sustainable. These views were supported by participants who mentioned programs such as Smoke-Free Baguio, waste segregation, rerouting policies, and community-based eco-tourism initiatives.

“I think the seminars about recycling and proper waste disposal, as well as the use of reusable bags in the market.”

The environmental responsibilities were felt by the stakeholders as they stressed the need of seminars about recycling, proper disposal of waste, and use of reusable bags. This is in line with the Ecotourism Theory that emphasizes that tourism must educate the visitors on conservation, foster environmental safety, and teach positive eco-friendly behavior (TIES, 2015). Through these initiatives, the tourists and the locals themselves help in mitigating ecological effects and promote sustainable practice in the Baguio City, which shows how one can turn policy awareness into responsible tourism behavior and long-term sustainability.

Key Theme 3: Need for Financial Support

The need to have sufficient funding is one of the most intractable dilemmas in ensuring the development of sustainable tourism. Although sustainability is meant to reconcile the environment, the cultural and community, it can be quite costly to undertake. These projects need resources, and local governments and communities might be unable to deliver them due to conservation programs and environmentally friendly infrastructure, as well as community-based projects. Consequently, the locals and the tourists have come to understand that sustainable tourism operations could not be achieved wholly without the financial support of either the government agencies, the individual investors, or even foreign donors.

The participants stated that,

“Financial support for businesses to implement eco-friendly practices”.

Others emphasized that,

“Financial support, training, education, and better communication are needed”.

These conclusions are consistent with Romagosa (2020), who wrote that areas that rely on tourism require substantial financial support to maintain and resume operations. On the same note, Adenidji et al. (2021) emphasized that the development of ecological-friendly systems and community initiatives is very expensive, which supports the call by stakeholders to unify funding, technical education, and communication between governmental divisions and non-governmental organizations and schools.

“Waste management, tree-planting activities, clean-up drives, and green projects are important sustainable practices in Baguio City.”

Stakeholders observed that waste disposal, planting of trees, clean-up activities and other green activities are some of the sustainable practices in Baguio City. This is in line with the Community-Based Tourism (CBT) Theory that focuses on the active participation of the local communities in tourism management and protection and the promotion of the local environment (Maldonado, 2024). Through such initiatives, the communities are retaining the natural resources as well as improving the tourism experience this demonstrates how local engagement contributes to environmental sustainability and socio-economic development.

Recommended strategies employed by stakeholders in response to sustainable tourism practices

The table summarizes the key factors that influence stakeholders’ perceptions of sustainable tourism practices in Baguio City. Some of the crucial factors are the nature of the environment, the cleanliness, visible security protection, and the behavior of the community, which affected the perception of safety and satisfaction of the visitors. The ranking of these perceptions by placing them in a tabular form identifies the strengths already in place that have contributed to sustainability and the areas that require improvement, which forms a clear foundation to the strategies available to improve safety and sustainable tourism in the city. Also, these lessons help stakeholders in developing specific initiatives These include improving waste disposal facilities, enhancing tourist destinations, strengthening traffic and crowd control

during peak seasons, and expanding information campaigns promoting responsible tourism behavior. Encouraging green tourism, enhancing community relationship and investment in green infrastructure.

Table 2. Recommended strategies employed by stakeholders in response to sustainable tourism practices

KEY THEMES	COMMON ANSWERS	RANKING
Support for Eco-friendly Initiatives	Stakeholders practice sustainability by using reusable bottles, eco bags, maintaining cleanliness, and supporting local businesses.	9 out of 11
Key theme 2: Orientation and Guidelines for visitors	Tourists should be oriented about local customs, environmental practices, and responsible tourism behavior before tours.	8 out of 11

The table 2 indicates that the stakeholders consider the eco-friendly activities and visitor orientation the most significant ones in defining sustainable tourism in Baguio City. Most stakeholders practice sustainable habits such as carrying reusable bottles and eco bags. These results underscore the fact that individual responsibility and systematic mentoring are the major factors of enhancing sustainable tourism behaviors.

Key Theme 1: Support for eco- friendly initiatives

The use of environmentally friendly activities by locals and tourists is one of the imperative factors of maintaining the tourism practices. Sustainable tourism focuses on environmental conservation, with cultural conservation and community involvement, but its success will be determined by the degree to which these individuals will incorporate eco-friendly practices into their lives. The habits of lessening the consumption of plastics, helping local enterprises, and ensuring neatness will aim at defending natural resources and making communities resistant. Such apparent activities can reduce the destruction of the environment, but they also promote responsible tourism practices that are beneficial to the residents and visitors. The respondents stated that,

“I always bring my own reusable water bottle and eco bag every time I go out or when I know I’ll be buying something.”

Others emphasized,

“The simplest thing that we can do is to maintain cleanliness, we avoid littering and as much as possible we act friendly and harmonious towards each other.”

Such local observations are in line with Adenidji et al. (2021), who noted that ecological degradation should be reduced to the bare minimum in maintaining tourism operations. Equally, Butowski (2021) noted that ecotourism fosters environmental responsibility in the tourists by enhancing basic and daily conservation activities. These views were further supported by the participants with their personal habits of responsible use of resources, their support of local businesses, and their promotion of cleanliness showing how grassroots efforts are going to support formal sustainability initiatives in Baguio City.

“As a tourist, learning about tourism and finances can help the government make sustainable tourism programs work better.”

Tourist awareness regarding tourism and financial responsibility can help the government implement sustainable tourism programs more effectively. Learning what tourism and finances involve as a tourist will make the government achieve sustainable tourism programs in a better position.

Another way through which tourists can help in sustainable tourism is by being more educated in tourism practices and financial management. Tourists will play an indirect role in achieving sustainable tourism programs by realizing that their expenditures, preferences and actions are making a difference in the lives of the local economies as well as green initiatives. This is in line with the Sustainable Tourism Theory, which asserts that tourism must fulfil the needs of the present tourists at the same time guaranteeing long-term sustainability to the host communities and ecosystems (UNEP & UNWTO, 2021). Learning about sustainable practices and financial consequences, tourists will be able to make responsible such

decisions as patronizing local businesses, using environmentally friendly services, and engaging in community programs that will in turn enable the government and its stakeholders to develop more effective and industry-sensitive sustainable tourism projects.

Key Theme 2: Orientation and Guidelines for Visitors

This highlights the importance of clear visitor orientation and guidelines in promoting sustainable tourism in Baguio City. It is an opinion of the stakeholders that the tourists need to be informed about the local practices, environmental practices and community norms during arrival or before tours. This guarantees adherence to standards, cultural sensitivity, and the enhancement of responsible actions, and thus orientation is an essential instrument towards enhancing sustainability and improving the experiences of the visitors.

Another factor that was stressed by the participants is visitor orientation and guidelines as the means of fostering the sustainability of tourism activities in Baguio City. One noted that

“There should probably be an orientation for tourists about local customs and environmental practices as soon as they arrive or before they start their tour. Environmental regulations should also be strictly implemented.”

Another shared,

“For someone like me who is a tourist, it’s important to research first before exploring a place.”

These perceptions go hand in hand with the UNESCO (2021), which emphasized that clear orientation programs minimize the ecological effects and empower cultural values. Similarly, UNWTO (2021) has highlighted that teaching visitors about local traditions and practices that are sustainable can also strike balance in terms of socio-cultural aspects of tourism. These suggestions are reflected in the suggestions given by the participants that will give guidelines, offer conservation-oriented tours, and encourage sustainable disposal of waste materials, which support the idea that education is a pillar of sustainable tourism.

“I think, encourage them to participate in community activities and implement regulations to protect the environment.”

The invitation to tourists to engage in local community activities and adhere to environmental regulations indicates the principles of Community-Based Tourism (CBT) Theory that focuses on the involvement of local communities in the development of tourism in a sustainable way (Maldonado, 2024). Tourists can also contribute to the community participation, their contribution to livelihoods and conserving the environment by participating actively in tree-planting, clean-up drives, or cultural events. These measures do not only conserve the natural resources but also enhance significant relationships between visitors and residents, and in the process, tourism gains are distributed in a responsible and sustainable manner. By so doing, the community and tourists work together to enhance ethical and locally significant tourism activities according to the industry requirements.

In general, the stakeholders of Baguio City understand sustainable tourism as relying on a mix of individual responsibility, community involvement, implementation, and funding. Although environmentally friendly products and activities have been perceived to be expensive, tourists and locals are engaged in sustainable lifestyle practices like carrying reusable bottles and bags, patronizing the local economy, keeping it clean and using eco-friendly accommodations. Sensitivity to ordinances on waste management, traffic and environmental protection is known to be vital and community driven projects such as tree planting and eco-tourism in a barangay are appreciated. Educational programs on local customs, environmental practices, and cultural heritage in the form of visitor orientation programs are also essential in creating responsible behavior and cultural appreciation among the visitors. Altogether, the combination of grassroots green activities and tourism, formal guidance, education and financial support contribute to the enhancement of sustainable tourism, conservation of the environment and culture of Baguio City, and increase the well-being of the visitors.

CONCLUSIONS

This chapter presents the conclusions drawn from the findings of the study regarding stakeholders' perceptions of sustainable tourism practices in Baguio City.

Based on the findings, the study concluded that stakeholders recognize sustainable tourism as essential in promoting environmental protection, responsible tourism behavior, and community participation in Baguio City. Although eco-friendly products and practices are perceived as costly, stakeholders still support initiatives such as waste management programs, tourist orientations, environmental campaigns, and community-based activities that contribute to sustainability.

The study further revealed that awareness of local ordinances, implementation of environmental policies, financial support, and active stakeholder participation are important factors in strengthening sustainable tourism practices. These findings highlight the importance of collaborative governance and community-centered tourism strategies in ensuring the long-term sustainability of Baguio City as an eco-cultural destination in the Cordillera Administrative Region.

Moreover, the study emphasizes the need for continuous sustainability planning, stronger policy implementation, and educational initiatives to preserve the environmental and cultural resources of Baguio City for future generations.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are proposed:

1. Local government units and tourism authorities may strengthen the implementation of sustainable tourism policies through stricter waste management systems, visitor carrying capacity measures, and continuous environmental monitoring in major tourist destinations in Baguio City.
2. Financial incentives, grants, and technical training programs may be provided to tourism businesses and community-based organizations that adopt eco-friendly practices and sustainable tourism initiatives.
3. Tourism stakeholders may conduct sustainability orientation programs for tourists, educational campaigns in schools and communities, and social media awareness activities to promote responsible tourism behavior and environmental awareness.
4. Tourism establishments may be encouraged to adopt green certification programs and sustainable business practices such as waste segregation, energy conservation, and the reduction of single-use plastics.
5. Future researchers may conduct similar studies using a larger sample size and include additional tourism stakeholders to further explore sustainable tourism practices and long-term sustainability planning in the Cordillera region.

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TEACHERS' INSTRUCTIONAL CAPACITY AND SCHOOL-BASED READING ECOSYSTEM AS DETERMINANTS OF ARAL-READING PROGRAM SUCCESS IN SURALLAH CENTRAL DISTRICT

Jie P. Alamon, Ernie C. Cerado, PhD
Sultan Kudarat State University

ABSTRACT

This study examined the influence of teachers' instructional capacity and the school-based reading ecosystem on the success of the ARAL-Reading Program among Grades 1–3 learners in Surallah Central District. Specifically, it determined the levels of teachers' instructional capacity, school-based reading ecosystem, and ARAL-Reading Program success in terms of reading fluency, reading comprehension, and Grade Point Average (GPA). It also investigated the relationships between the independent variables and program success. The study employed a quantitative descriptive-correlational research design involving 82 respondents composed of district supervisors, school heads, reading coordinators, and ARAL-Reading tutors from 12 public elementary schools. Data were gathered through adapted survey questionnaires and documentary analysis of learners' Comprehensive Rapid Literacy Assessment (CRLA) results and GPA records. Mean, standard deviation, Spearman's rank-order correlation, and regression were used in the statistical analysis. Findings revealed that teachers demonstrated a high level of instructional capacity, particularly in differentiated reading instruction, remedial planning, and classroom management. The school-based reading ecosystem was assessed at a moderate level, indicating that literacy support systems were present but still required improvement, especially in family and community involvement. The ARAL-Reading Program showed developing levels of reading fluency and comprehension and satisfactory academic performance among learners. Subsequently, significant positive relationships were found between teachers' instructional capacity and program success, as well as between the school-based reading ecosystem and learners' literacy and academic performance. Furthermore, both factors significantly predict the ARAL-Reading Program success. The study concluded that effective instructional practices and supportive literacy environments are essential determinants of successful reading intervention programs among elementary learners.

INTRODUCTION

Reading is a foundational skill that significantly influences learners' academic achievement and overall educational development. However, many Filipino learners continue to experience difficulties in reading acquisition, as reflected in national and international assessments (Department of Education, 2023; UNESCO, 2021).

As teachers play a critical role in improving learners' reading performance, research shows that teachers' instructional capacity directly influences learners' literacy development and academic achievement (Parrila et al., 2024). Likewise, the school-based reading ecosystem or the literacy environment contributes significantly to the effectiveness of reading interventions and learner outcomes (Plata et al., 2024).

In response to learning recovery needs, Republic Act No. 12028 institutionalized the Academic Recovery and Accessible Learning (ARAL) Program to support struggling learners in reading, mathematics, and science. The ARAL-Reading Program provides targeted and evidence-based

interventions designed to improve reading fluency, comprehension, and overall literacy skills among elementary learners.

Although several studies focused on reading interventions, few studies explored how teachers' instructional capacity and the school-based reading ecosystem work together in influencing the success of the ARAL-Reading Program in district-level implementation. In Surallah Central District, variations in instructional practices, literacy resources, and school support systems may affect the effectiveness of the program among Grades 1–3 learners.

Thus, this study examined the relationship between teachers' instructional capacity, the school-based reading ecosystem, and the success of the ARAL-Reading Program in Surallah Central District. Specifically, it aimed to determine how these factors contribute to learners' reading fluency, reading comprehension, and academic performance.

STATEMENT OF THE PROBLEM

This study determined the influence of teachers' instructional capacity and the school-based reading ecosystem on the success of the ARAL-Reading program among recipients in Grades 1–3 in Surallah Central District. It answered the following questions:

1. What is the level of teachers' instructional capacity in implementing the ARAL-Reading Program with regards to instructional delivery, reading assessment, remedial planning, classroom management, and differentiated reading instruction?
2. What is the level of school-based reading ecosystem in the ARAL-implementing schools with regards to reading leadership and governance, reading policies and programs, instructional support and capacity building, learning environment and teacher collaboration, monitoring, evaluation and use of data, family and community involvement, and reading resources and materials?
3. What is the level of ARAL-Reading Program success among Grades 1–3 recipients with regards to reading fluency, reading comprehension, and grade point average (GPA)?
4. Is there a significant relationship between teachers' instructional capacity and the success of the ARAL-Reading Program?
5. Is there a significant relationship between the school-based reading ecosystem and the ARAL-Reading Program success?
6. Do teachers' instructional capacity and school-based reading ecosystem jointly predict ARAL-Reading Program success among Grades 1–3 recipients in Surallah Central District?

REVIEW OF LITERATURE

Teachers' Instructional Capacity

Teachers' instructional capacity plays a vital role in improving learners' reading achievement and overall academic performance. Instructional capacity refers to teachers' knowledge, skills, and competencies in delivering effective literacy instruction, assessing learner progress, managing classrooms, planning remediation, and implementing differentiated instruction. Research shows that teachers with strong pedagogical competence are more capable of improving learners' decoding, fluency, and comprehension skills through evidence-based instructional practices (Parrila et al., 2024; Hattie, 2023).

Effective literacy instruction involves explicit teaching, structured reading activities, guided practice, and scaffolded learning experiences that support learners with varying reading abilities (Archer & Hughes, 2022). Teachers who utilize formative and diagnostic assessments are also better able to identify struggling readers and provide targeted interventions based on learners' specific needs (Karst et al., 2022). In addition, differentiated instruction allows teachers to adapt learning activities, instructional materials, and teaching strategies according to learners' readiness levels and learning profiles, thereby improving learner engagement and comprehension (Achmad et al., 2024).

Remedial planning and classroom management are likewise important dimensions of instructional capacity. Structured remediation programs help learners strengthen foundational reading skills, while positive classroom environments encourage learner participation and motivation in reading activities (Filiz et al., 2024). These instructional practices collectively contribute to more effective literacy intervention programs and improved learner outcomes.

School-Based Reading Ecosystem

The school-based reading ecosystem refers to the policies, resources, relationships, and support systems within schools that promote literacy development. Studies emphasize that successful reading programs require not only effective classroom instruction but also strong institutional support and collaborative learning environments (UNESCO, 2021). Components of a strong reading ecosystem include instructional leadership, literacy programs, teacher collaboration, instructional support, monitoring systems, family involvement, and access to reading materials (Plata et al., 2024).

Instructional leadership plays a significant role in ensuring the successful implementation of reading programs. School leaders contribute to literacy development by supporting teachers, monitoring instructional practices, and aligning school policies with literacy goals (Karakose et al., 2024). Professional development activities, coaching, and collaborative learning communities also enhance teachers' instructional practices and strengthen intervention programs for struggling readers (Rice et al., 2024).

Reading resources and literacy-rich environments further support learner engagement and comprehension. Access to books, reading materials, and interactive literacy activities encourages independent reading and improves learners' motivation to read (Allington & McGill-Franzen, 2024). Moreover, family and community involvement positively influence learners' literacy development, as parental support and home reading activities contribute to improved reading performance and academic achievement (Çalışkan & Ulaş, 2022).

ARAL-Reading Program Success

The success of reading intervention programs is often measured through learners' reading fluency, reading comprehension, and academic achievement. Reading fluency refers to the ability to read accurately, quickly, and expressively, while reading comprehension involves learners' ability to construct meaning from texts (Duke & Cartwright, 2021). These literacy skills are essential for academic success because they enable learners to understand and apply information across different subject areas.

Studies indicate that reading interventions that provide guided oral reading, repeated reading activities, and explicit comprehension instruction significantly improve learners' literacy skills (Li et al., 2024). Learners who develop stronger reading fluency are more likely to achieve better comprehension and higher academic performance. Likewise, supportive instructional practices and literacy environments contribute to improved learner outcomes and increased academic achievement (OECD, 2022).

The ARAL-Reading Program was developed to address learning gaps among struggling learners by providing targeted and evidence-based literacy interventions. Through additional instructional support, continuous assessment, and remediation, the program aims to improve learners' reading proficiency and academic performance. However, the effectiveness of the program may vary depending on teachers' instructional competence and the quality of the school-based reading ecosystem. Thus, examining these factors is essential in understanding the determinants of ARAL-Reading Program success among elementary learners.

METHODOLOGY

This study employed a quantitative descriptive-correlational research design to examine the relationship between teachers' instructional capacity, the school-based reading ecosystem, and the success of the ARAL-Reading Program among Grades 1–3 recipients in twelve (12) public elementary schools in the Surallah Central District, Schools Division of South Cotabato. The study aimed to determine the levels of teachers' instructional capacity, school-based reading ecosystem, program success, and challenges encountered by ARAL-Reading tutors, as well as the relationships among these variables (Creswell & Creswell, 2018; Fraenkel et al., 2019).

The respondents consisted of one (1) district supervisor, one (1) district reading coordinator, twelve (12) school heads, twelve (12) school reading coordinators, and fifty-six (56) ARAL-Reading tutors, for a total of eighty-two (82) respondents. Census sampling was utilized to include all accessible participants directly involved in the implementation of the ARAL-Reading Program. The study was conducted in twelve public elementary schools in the Surallah Central District, Schools Division of South Cotabato.

Data were gathered using adapted survey questionnaires and documentary records. The questionnaire measured teachers' instructional capacity, the school-based reading ecosystem, and challenges encountered during program implementation using instruments adapted from the PIRLS Teacher and School Questionnaires (IEA, 2016) and Pimentel (2019). The instrument underwent expert validation and pilot testing to ensure validity and reliability. It obtained a Cronbach's Alpha of 0.89, indicating high reliability. Secondary data, including the End-of-School-Year (EOSY) Comprehensive Rapid Literacy Assessment (CRLA) results and learners' Grade Point Averages (GPA), were collected to assess program success.

Prior to data collection, approval was secured from Sultan Kudarat State University and the Schools Division Office of South Cotabato. The researcher administered the questionnaires, collected documentary data, and organized the responses for statistical analysis. Mean and standard deviation were used to describe the variables. At the same time, Spearman's rank-order correlation and regression analysis were employed to determine the relationships and predictive influence among variables at the 0.05 level of significance.

FINDINGS

Table 1. Teachers' Instructional Capacity in ARAL-Reading Program Implementation

Domains	Mean	SD	Verbal Description
1. Instructional Delivery	3.47	0.53	High
2. Reading Assessment	3.40	0.55	High
3. Remedial Planning	3.49	0.51	High
4. Classroom Management	3.48	0.50	High
5. Differentiated Reading Instruction	3.62	0.49	High
Overall Mean	3.49	0.52	High

Table 1 shows that teachers demonstrated a high level of instructional capacity in implementing the ARAL-Reading Program, with an overall mean of 3.49 (SD = 0.52). All indicators were rated high, indicating that teachers possess the competencies necessary to effectively support learners' literacy development. Among the indicators, differentiated reading instruction obtained the highest mean. This suggests that teachers are becoming more responsive to the diverse reading needs of learners, which may contribute to improved learner engagement and participation. The reading assessment obtained the lowest mean, although it was still interpreted as high. Overall, the findings imply that teachers have strong pedagogical competence and instructional practices that contribute to the successful implementation of the ARAL-Reading Program. This finding supports the study of Parrila et al. (2024), which emphasized that

teachers' instructional competence significantly influences learners' literacy development and reading achievement.

Table 2. School-Based Reading Ecosystem in ARAL-Reading Implementing Schools

Domains	Mean	SD	Verbal Description
1. Reading Leadership and Governance	3.24	0.50	Moderate
2. Reading Policies and Programs	3.17	0.49	Moderate
3. Instructional Support and Capacity Building	3.21	0.55	Moderate
4. Learning Environment and Teacher Collaboration	3.17	0.47	Moderate
5. Monitoring, Evaluation and Use of Data	3.15	0.47	Moderate
6. Family and Community Involvement	3.13	0.49	Moderate
7. Reading Resources and Materials	3.24	0.50	Moderate
Overall Mean	3.19	0.50	Moderate

Table 2 presents the level of the school-based reading ecosystem in ARAL-Reading implementing schools across seven domains, namely reading leadership and governance, reading policies and programs, instructional support and capacity building, learning environment and teacher collaboration, monitoring, evaluation and use of data, family and community involvement, and reading resources and materials. The findings revealed an overall mean of 3.19 (SD = 0.50), interpreted as moderate, which indicates that schools have established literacy support systems but still require further enhancement to maximize the effectiveness of the ARAL-Reading Program. The reading leadership and governance and reading resources and materials obtained the highest mean scores ($M = 3.24$), suggesting that schools provide administrative support and literacy resources that help sustain reading instruction. Meanwhile, family and community involvement received the lowest mean score ($M = 3.13$), indicating the need to strengthen parental participation and community partnerships in supporting learners' literacy development. The remaining domains were all rated moderate, signifying that these literacy mechanisms are functioning but still need improvement for more effective implementation. These findings support the study of Hallinger et al. (2025), which emphasized that collaborative school cultures, instructional support, and effective leadership contribute significantly to improved instructional practices and stronger literacy outcomes among learners.

Table 3. The Level of ARAL-Reading Program Success in terms of Pupils' Fluency

School	Mean	SD	Verbal Description
Elem1	65	19.43	Beginning
Elem2	92	17.23	Advanced/Independent
Elem3	72	25.28	Developing
Elem4	78	24.11	Developing
Elem5	60	17.34	Beginning
Elem6	70	22.37	Developing
Elem7	90	18.48	Advanced/Independent
Elem8	68	19.95	Beginning
Elem9	85	23.86	Proficient
Elem10	80	22.83	Proficient
Elem11	83	16.24	Proficient
Overall Mean	77	20.65	Developing

Table 3 indicates the level of ARAL-Reading Program success in terms of pupils' reading fluency across participating schools. The findings revealed an overall mean score of 77 (SD = 20.65), interpreted

as developing, indicating that learners are gradually improving in reading speed, accuracy, and expression but still require continuous instructional support to achieve higher fluency levels. Among the schools, Elem2 ($M = 92$, $SD = 17.23$) and Elem7 ($M = 90$, $SD = 18.48$) achieved the Advanced/Independent level, suggesting that pupils in these schools demonstrated stronger fluency skills. Elem9 ($M = 85$), Elem10 ($M = 80$), and Elem11 ($M = 83$) were categorized as Proficient, indicating satisfactory fluency development among learners. In contrast, Elem1 ($M = 65$), Elem5 ($M = 60$), and Elem8 ($M = 68$) remained at the Beginning level, while Elem3 ($M = 72$), Elem4 ($M = 78$), and Elem6 ($M = 70$) were classified as Developing. These variations imply differences in instructional support, learner readiness, and access to literacy interventions across schools. Li et al. (2024) emphasized that guided oral reading, repeated reading practice, and teacher modeling significantly improve reading fluency among beginning readers.

**Table 4. The Level of ARAL-Reading Program Success
in terms of Pupils' Reading Comprehension**

School	Mean	SD	Verbal Description
Elem1	70	19.61	Beginning
Elem2	88	17.79	Proficient
Elem3	70	23.11	Developing
Elem4	75	19.49	Developing
Elem5	62	20.34	Beginning
Elem6	68	22.69	Beginning
Elem7	86	18.21	Proficient
Elem8	71	17.64	Developing
Elem9	83	20.33	Proficient
Elem10	77	24.93	Developing
Elem11	81	13.77	Proficient
Overall Mean	75	19.81	Developing

Table 4 illustrates the level of ARAL-Reading Program success in terms of pupils' reading comprehension across participating schools. The results revealed an overall mean score of 75 ($SD = 19.81$), interpreted as developing, indicating that learners are beginning to understand and interpret texts but still require further instructional support to strengthen higher-order comprehension skills. Dugasa et al. (2022) cite that explicit reading programs and guided strategies can substantially enhance students' comprehension, especially when guided reading tasks are used, and specific comprehension strategies are taught.

**Table 5. The Level of ARAL-Reading Program
Success in terms of Pupils' GPA**

Mean	SD	Verbal Description
81	3.24	Satisfactory
88	3.15	Very Satisfactory
82	3.01	Satisfactory
83	3.21	Satisfactory
80	3.31	Satisfactory
84	2.89	Satisfactory
88	3.25	Very Satisfactory
80	2.72	Satisfactory
85	2.77	Very Satisfactory
82	2.58	Satisfactory
86	3.12	Very Satisfactory
84	3.02	Satisfactory

Table 5 displays the level of ARAL-Reading Program success in terms of pupils' Grade Point Average (GPA) across participating schools. The findings revealed an overall mean GPA of 84 (SD = 3.02), interpreted as satisfactory, indicating that learners generally demonstrated acceptable academic performance across subject areas. The relatively close GPA scores across schools imply that learners benefited from the instructional and literacy support provided through the ARAL-Reading Program. However, differences in academic performance may still be influenced by variations in reading skills, instructional practices, and school support systems. The findings support the study of Hattie (2023), which emphasized that effective instructional practices and supportive learning environments significantly contribute to improved student achievement and overall academic performance. The effective instructional practices and supportive learning environments significantly contribute to improved student achievement and overall academic performance.

Table 6. Correlation between the Teachers' Instructional Capacity and the Success of the ARAL-Reading Program

Variable		1	2	3	4
1. Teachers' Instructional Capacity	Spearman's rho	—			
	p-value	—			
2. Reading Fluency	Spearman's rho	0.550	—		
	p-value	< .001	—		
3. Reading Comprehension	Spearman's rho	0.570	0.918	—	
	p-value	< .001	< .001	—	
4. GPA	Spearman's rho	0.540	.905	.728	—
	p-value	< .001	< .001	< .001	—

Note: n=82. Spearman's rho correlation used. $p < .05$, $df = 80$.

Table 6 outlines the correlation between teachers' instructional capacity and the success of the ARAL-Reading Program in terms of reading fluency, reading comprehension, and GPA. The findings revealed statistically significant positive relationships between teachers' instructional capacity and reading fluency ($\rho = .550$, $p < .001$), reading comprehension ($\rho = .570$, $p < .001$), and GPA ($\rho = .540$, $p < .001$). These results indicate that higher levels of teachers' instructional competence are associated with better literacy performance and academic achievement among learners across the participating schools. The variations in reading fluency, comprehension, and GPA observed among schools in the previous tables may therefore be influenced by differences in teachers' instructional practices, assessment strategies, remedial instruction, and differentiated teaching approaches. The findings support the study of Parrila et al. (2024), which emphasized that teachers' instructional competence plays a significant role in improving learners' reading development and academic achievement through effective and evidence-based literacy instruction.

Table 7. Correlation between the School-Based Reading Ecosystem and the Success of the ARAL-Reading Program

Variable		1	2	3	4
1. School-Based Reading Ecosystem	Spearman's rho	—			
	p-value	—			
2. Reading Fluency	Spearman's rho	0.645	—		
	p-value	< .001	—		
3. Reading Comprehension	Spearman's rho	0.581	0.918	—	
	p-value	< .001	< .001	—	
4. GPA	Spearman's rho	0.653	.905	.728	—
	p-value	< .001	< .001	< .001	—

Note. n=82. Spearman's rho correlation used. $p < .05$, $df = 80$.

Table 7 highlights the correlation between the school-based reading ecosystem and the success of the ARAL-Reading Program in terms of reading fluency, reading comprehension, and GPA. The findings revealed statistically significant positive relationships between the school-based reading ecosystem and reading fluency, reading comprehension, and GPA. These results indicate that schools with stronger literacy environments, including effective leadership, reading programs, instructional support, teacher collaboration, monitoring systems, family involvement, and adequate reading resources, tend to demonstrate better learner performance across the participating schools. International assessments further highlighted that rich school literacy environments contribute significantly to students' reading comprehension and overall reading performance (OECD, 2021).

Table 8. Regression Analysis between the Teachers' Instructional Capacity, School-Based Reading Ecosystem, and Reading Fluency

Predictor	Estimate (B)	SE	95% Confidence Interval		t	p
			Lower	Upper		
Intercept	-46.406	11.423	-69.144	-23.669	-4.062	<.001
Teachers' Instructional Capacity	23.658	4.927	13.852	33.464	4.802	<.001
School-Based Reading Ecosystem	12.302	3.807	4.725	19.879	3.232	.002

Note. $R^2=.618$, $Adj R^2=.608$, $F(2,79)=63.921$, $p=<.001$.

Table 8 presents the findings of the multiple regression analysis examining the extent to which teachers' instructional capacity and the school-based reading ecosystem predict students' reading fluency in the ARAL-Reading Program. Technically, the regression model was statistically significant, $F(2, 79) = 63.921$, $p < .001$, indicating that the predictor variables significantly contributed to the variance in students' reading fluency. The model generated an Adjusted R^2 of .608, indicating that teachers' instructional capacity and the school-based reading ecosystem together explained approximately 60.8 percent of the variation in students' reading fluency. This finding, therefore, suggests that both teacher-related instructional factors and school literacy environments play significant roles in facilitating the development of fluent reading skills among students.

National Literacy Trust (2022) suggests that learners develop stronger reading skills when they are exposed to environments that actively promote reading culture and motivation. These environments increase students' reading time, which contributes to improved fluency through repeated exposure to texts.

Although both predictors are statistically significant, the findings indicate that teachers' instructional capacity was a stronger predictor of reading fluency than the school-based reading ecosystem. While school environments provide opportunities for reading practice, teachers' instructional strategies have a more direct influence on students' reading development.

Pressley's (2023) research on effective literacy instruction supports the view that successful reading instruction relies on teachers' ability to scaffold reading activities and guide students toward higher levels of reading competence. These findings help explain why teachers' instructional capacity emerged as the stronger predictor in the present study.

Table 9. Regression Analysis Between the Teachers' Instructional, School-Based Reading Ecosystem, and Reading Comprehension

Predictor	Estimate (B)	SE	95% Confidence Interval		t	p
			Lower	Upper		
Intercept	-31.401	9.578	-50.465	-12.336	-3.278	.002
Teachers' Instructional Capacity	28.323	4.131	20.101	36.545	6.857	<.001
School-Based Reading Ecosystem	2.677	3.192	-3.676	9.03	0.839	.404

Note. $R^2=.618$, Adj. $R^2=.608$, $F(2,79)=63.921$, $p<.001$.

Table 9 presents the findings of the multiple regression analysis, examining how the teachers' instructional capacity and the school-based reading ecosystem predict students' reading comprehension. The regression model was statistically significant, $F(2,79) = 63.513$, $p < .001$, suggesting that the predictor variables jointly explain a significant portion of the variance in students' reading comprehension. The model produced an Adjusted R^2 of .607, suggesting that approximately 60.7 percent of the variance in students' reading comprehension is explained by the combined influence of teachers' instructional capacity and the school-based reading ecosystem. This explanatory power indicates that instructional and contextual factors within schools contribute significantly to learners' comprehension outcomes.

Parrila et al. (2024) emphasize that teachers' pedagogical knowledge and instructional expertise are critical determinants of student success because teachers directly influence how instruction is delivered and how students engage with learning resources.

However, the school-based reading ecosystem did not emerge as a statistically significant predictor of reading comprehension. Although the coefficient was positive, it was statistically insignificant. This finding implies that the school literacy ecosystem may influence comprehension outcomes indirectly, through teachers' instructional practices, rather than directly. Hallinger et al. (2025) explain that school improvement efforts influence student achievement primarily by strengthening teaching practices and creating collaborative learning environments.

Table 10. Regression Analysis between the Teachers' Instructional Capacity, School-Based Reading Ecosystem and Pupils' GPA

Predictor	Estimate (B)	SE	95% Confidence Interval		t	p
			Lower	Upper		
Intercept	48.038	3.498	41.076	55	13.734	<.001
Teachers' Instructional Capacity	5.789	1.509	2.786	8.792	3.838	<.001
School-Based Reading Ecosystem	4.519	1.166	2.198	6.839	3.877	<.001

Note. $R^2=.597$, Adj. $R^2=.587$, $F(2,79)=58.611$, $p<.001$.

Table 10 shows the findings of the multiple regression analysis examining the extent to which teachers' instructional capacity and the school-based reading ecosystem predict students' Grade Point Average (GPA) in the ARAL-Reading Program. The regression model is statistically significant, $F(2,79) = 58.611$, $p < .001$, indicating that the predictor variables jointly explain a significant proportion of the variance in students' academic performance. The model produced an Adjusted R^2 of .587, suggesting that

approximately 58.7 percent of the variance in students' GPA can be explained by teachers' instructional capacity and the school-based reading ecosystem.

Teachers' instructional capacity is a significant predictor of students' GPA ($B = 5.789$, $p < .001$). The higher levels of teacher instructional competence are associated with improved academic performance among students. Alexander and Murphy (2022) emphasize that teachers with strong pedagogical knowledge and instructional skills are better able to support students' understanding of academic content, which ultimately leads to improved academic performance.

The school-based reading ecosystem is also a significant predictor of students' GPA. OECD (2021) and UNESCO (2021) affirm that educational institutions that provide supportive learning environments and adequate academic resources help students achieve higher performance across subjects. The literacy-supportive school environments played a critical role in improving students' academic achievement.

CONCLUSION

The findings of the study revealed that teachers in the Surallah Central District demonstrated a high level of instructional capacity in implementing the ARAL-Reading Program, particularly in differentiated reading instruction, remedial planning, classroom management, instructional delivery, and reading assessment. This indicates that teachers possess the necessary pedagogical competencies and literacy instruction skills to support the reading development of Grades 1–3 learners. Meanwhile, the school-based reading ecosystem was assessed at a moderate level, suggesting that while schools have established literacy support mechanisms such as leadership, reading programs, instructional support, collaboration, monitoring systems, and reading resources, there remains a need to strengthen these systems further, especially in the area of family and community involvement.

The study also established that the ARAL-Reading Program contributed to developing learners' reading fluency, reading comprehension, and academic performance, although the overall levels remained within the developing and satisfactory categories. Variations across participating schools imply that differences in instructional practices, learner support systems, and literacy environments influence program outcomes. Furthermore, the findings confirmed significant positive relationships between teachers' instructional capacity and ARAL-Reading Program success, as well as between the school-based reading ecosystem and learners' literacy and academic performance. Both were also predictors of such an intervention program. This indicates that effective teaching practices and supportive literacy environments are essential determinants of successful reading intervention programs.

RECOMMENDATION

Based on the findings of the study, it is recommended that schools strengthen their school-based reading ecosystem by improving instructional support, monitoring systems, reading resources, and family and community involvement to enhance the implementation of the ARAL-Reading Program. Teachers may continue participating in professional development activities focused on reading assessment, differentiated instruction, and remedial strategies to further improve literacy instruction. Schools may also intensify data-driven reading interventions and regular learner monitoring, particularly for pupils at the Beginning and Developing levels of reading proficiency. Furthermore, stronger collaboration among teachers, school leaders, parents, and community stakeholders may be encouraged to create a more supportive literacy environment. Finally, future studies may explore additional factors influencing reading program success and replicate the study in other districts to strengthen the generalizability of the findings.

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ACADEMIC PERFORMANCE AND READINESS AS PREDICTORS OF DIAGNOSTIC TEST OUTCOMES AMONG PRE-SERVICE TEACHERS

Kristine Jean G. Salvia, PhD
College of Teacher Education
University of La Salette Inc.
Dubinan East, Santiago City

ABSTRACT

This study examined academic performance and readiness as predictors of General and Professional Education diagnostic test performance among pre-service teachers, providing empirical support for targeted Licensure Examination for Teachers (LET) review programs. A descriptive-correlational design was employed, with 46 respondents representing 88% of the target population. Readiness was assessed across four domains: academic preparedness, study habits and strategies, psychological readiness, and test-taking skills. Results indicated low readiness in academic preparedness ($M = 2.44$), high readiness in study habits and strategies ($M = 3.18$), and in psychological readiness ($M = 2.92$) and very high readiness test-taking skills ($M = 3.35$). The mean general weighted average (GWA) was 88.61, while mean diagnostic test scores were 76.58 in General Education and 74.76 in Professional Education. Significant relationships were found between GWA and both diagnostic test scores, as well as between readiness variables and test performance. Hierarchical multiple regression analysis revealed that GWA significantly predicted General Education performance, accounting for 42% of the variance, with readiness variables contributing an additional 14%. Academic preparedness emerged as the only significant predictor ($\beta = .361$). Similarly, GWA predicted Professional Education performance (14% variance explained), while readiness variables accounted for an additional 33%, with academic preparedness as the sole significant predictor ($\beta = .64$). Findings highlight the critical role of academic preparedness in enhancing diagnostic test performance and underscore the need for data-driven, targeted LET review interventions.

Keywords: *academic performance, readiness, pre-service teachers, diagnostic test, LET review, hierarchical multiple regression*

INTRODUCTION

The quality of education within any nation is linked to the competence and preparedness of its teachers. As the primary agents of curriculum implementation and student development, teachers bear the responsibility of shaping future generations. Consequently, the initial preparation of pre-service teachers is a critical phase that demands academic training, practical skill development, and readiness for the complexities of the classroom (Darling-Hammond & Hyler, 2020).

In the Philippines, the Licensure Examination for Teachers (LET) serves as the mandatory assessment that certifies that an individual possesses the minimum competency required to teach. The performance on this examination is not merely a reflection of an individual's knowledge but a direct indicator of the efficacy of teacher education institutions (TEIs) and the broader national effort to produce quality educators (Cabahug & Cuizon, 2023).

A persistent challenge facing TEIs is the fluctuating and often subpar performance of their graduates on the LET. This issue has prompted a significant body of research aimed at identifying the

antecedents of success on this critical examination. Among the most consistently cited predictors is the academic performance of pre-service teachers during their undergraduate studies. Prior research has established a positive and significant correlation between a student's academic performance and their scores on licensure examinations, suggesting that consistent academic achievement serves as a strong foundation for the comprehensive knowledge required for licensure (Mercado & De Vera, 2024; Oducado & Sotelo, 2021). A student's mastery of content courses, such as general education and professional education subjects, theoretically forms the cognitive bedrock upon which LET success is built.

However, academic performance alone does not fully encapsulate an individual's potential to succeed. The concept of readiness has emerged as an equally crucial factor. Readiness extends beyond the accumulation of knowledge to include the psychological state of being prepared, motivated, and equipped with the necessary study skills, self-efficacy, and critical thinking abilities to undertake a challenging endeavor like the LET (Conley, 2021). Studies have shown that students who demonstrate higher levels of college and career readiness, characterized by strong self-regulation, a positive academic mindset, and effective learning strategies, are more likely to perform well on standardized professional examinations (Llego & Villanueva, 2022; Garcia, 2023).

While numerous studies have explored the individual relationships between academic performance, readiness, and licensure examination outcomes, there remains a critical gap in the literature. Most research focuses on either the predictive power of academic indicators or the influence of non-cognitive factors like self-efficacy and motivation in isolation. However, the synergistic effect of these two domains is less understood. Understanding which factors most strongly predict performance on this diagnostic phase is vital. It could allow TEIs to move beyond a one-size-fits-all review approach to a more targeted, data-driven intervention (Andrade & Dela Cruz, 2025).

Therefore, this study aims to address this gap by investigating the combined predictive power of academic performance and readiness on the diagnostic test outcomes of pre-service teachers. By identifying which specific facets of academic background and holistic readiness are the most potent predictors of diagnostic performance, this research seeks to provide an evidence-based foundation for the development of targeted LET review programs. Such programs would be designed not just to review content, but to strategically address the specific deficits and leverage the strengths of individual pre-service teachers, thereby maximizing their potential for success on the LET and, ultimately, ensuring a more robust and qualified teaching workforce.

STATEMENT OF THE PROBLEM

This study aimed to examine the combined influence of academic performance and readiness on the diagnostic test performance of pre-service teachers. It sought to determine how General Weighted Average (GWA) and various dimensions of readiness contribute to outcomes in General Education and Professional Education diagnostic assessments. Specifically,

1. What is the level of readiness of pre-service teachers in terms of:
 - 1.1 Academic preparedness
 - 1.2 Study habits and strategies
 - 1.3 Psychological readiness
 - 1.4 Test-taking skills?
2. What is the GWA of the pre-service teachers?
3. What is the level of performance of pre-service teachers in
 - 3.1 General Education diagnostic test
 - 3.2 Professional Education diagnostic test
4. Is there a significant relationship between GWA and General Education diagnostic performance and Professional Education diagnostic performance?
5. Is there a significant relationship between the level of readiness of pre-service teachers and General Education diagnostic performance and Professional Education diagnostic performance?

6. Do GWA and readiness variables significantly predict:
 - 6.1 General Education diagnostic performance?
 - 6.2 Professional Education diagnostic performance?

REVIEW OF LITERATURE

Academic Performance as a Predictor of Diagnostic and Licensure Outcomes

Academic performance is widely recognized as a strong indicator of students' potential success in licensure examinations. In teacher education programs, the General Weighted Average (GWA) is commonly used as a measure of academic achievement and mastery of content knowledge. It reflects students' sustained performance across courses and is often associated with cognitive ability and academic discipline.

Studies have shown that academic performance significantly predicts performance in the Licensure Examination for Teachers (LET). For instance, GWA has been found to be positively and significantly related to LET outcomes, indicating that students with higher academic achievement tend to perform better in licensure examinations (Dionio et al., 2024). Similarly, regression analyses confirm that academic performance is a significant predictor of LET success among teacher education graduates (Mendez, 2025). The study of Ferrer (2025) showed that a relationship existed between academic performance in general and professional education courses and LET results. The higher the academic grades the better chance of passing the licensure examination. These findings suggest that academic achievement plays a crucial role in preparing pre-service teachers for professional certification exams.

Readiness and Its Role in Academic and Professional Performance

Readiness is an essential non-cognitive factor that influences academic and professional success. It includes study habits, psychological preparedness, motivation, test-taking skills, and content mastery. In teacher education, readiness reflects the extent to which pre-service teachers are prepared to face academic demands and licensure examinations.

Research indicates that readiness is multidimensional and strongly linked to professional competence. Pre-service teachers who demonstrate higher levels of pedagogical knowledge, content mastery, and learning skills tend to exhibit stronger readiness for professional practice (Jaca, 2024). The study conducted by Gabor and Montillano (2025) revealed that significant differences in readiness were observed across academic programs, highlighting the need for targeted interventions. In terms of study habits, Del Rosario et al. (2024) showed that respondents exhibited readiness, coupled with a consistent inclination to seek Divine guidance. Attitude-wise, the majority expressed a strong determination to succeed in the exam, albeit with varied responses regarding remaining calm in challenging situations.

Diagnostic Tests as Predictors of Performance

Diagnostic assessments are commonly used in teacher education institutions to evaluate students' preparedness for licensure examinations. These tests identify strengths and weaknesses in both General Education and Professional Education content areas. They also serve as early predictors of LET performance.

Evidence suggests that diagnostic test results are influenced by both academic and readiness factors. When aligned with licensure competencies, diagnostic assessments help identify learning gaps and guide targeted interventions to improve student outcomes (Gonzales et al., 2025). Thus, diagnostic performance serves as an important basis for designing review programs and instructional interventions. Furthermore, the study conducted by Dayag-Tungpalan et al. (2025) showed that a significant positive correlation was observed among scores in General Education, Professional Education, and Major Subjects in both the simulated and actual LET.

Synthesis

The reviewed literature consistently highlights that both academic performance (GWA) and readiness are significant predictors of success in diagnostic and licensure examinations. While GWA reflects long-term academic achievement and content mastery, readiness captures behavioral and psychological preparedness for examinations.

However, limited studies have examined the combined predictive influence of both variables on diagnostic performance in General and Professional Education. This study addresses this gap by investigating how GWA and readiness jointly influence diagnostic test outcomes among pre-service teachers, serving as a basis for targeted Licensure Examination for Teachers (LET) review programs.

METHODOLOGY

The study employed a descriptive–correlational research design to examine the relationship between readiness variables and licensure examination performance. This design was deemed appropriate as it allows for the description of participants’ levels of readiness and academic performance, as well as the determination of significant relationships among the variables.

The respondents of the study consisted of 46 pre-service teachers, representing approximately 88% of the total population. A Readiness Questionnaire was utilized to assess four key domains: academic preparedness, study habits, psychological readiness, and test-taking skills. In addition, the participants’ General Weighted Average (GWA) was obtained to measure their academic performance. Scores from diagnostic tests in General Education and Professional Education were also collected to serve as indicators of licensure examination readiness.

The data were analyzed using appropriate statistical tools. The mean and standard deviation were used to describe the levels of readiness and academic performance. Pearson’s r was employed to determine the significant relationships between variables. Furthermore, hierarchical multiple regression analysis was conducted to identify the extent to which readiness variables predict test performance beyond GWA.

FINDINGS

This section presents the results on how GWA and readiness influence the diagnostic performance of pre-service teachers in General and Professional Education.

1. Level of Readiness of Pre-Service Teachers

Table 1 presents the level of readiness of pre-service teachers in terms of academic preparedness.

1.1 Academic Preparedness

Table 1. Academic Preparedness

	Indicator	Mean	SD	Interpretation
1	I feel confident about my mastery of the major subjects covered in the licensure exam.	2.50	.84	High Readiness
2	I understand the core concepts that are likely to appear on the licensure exam.	2.43	.93	Low Readiness
3	I have studied the most important topics thoroughly.	2.41	.96	Low Readiness
4	I feel prepared for the academic content of the licensure examination.	2.39	.83	Low Readiness
5	I am able to explain key concepts to others clearly.	2.46	.89	Low Readiness
	Overall Academic Preparedness	2.44	.82	Low Readiness

The results indicate that respondents generally demonstrate low academic preparedness for the licensure examination, with an overall mean of 2.44 (SD = 0.82). This suggests that pre-service teachers perceive themselves as not yet sufficiently prepared in terms of content mastery and conceptual understanding required for the exam.

Only the item on confidence in mastery of major subjects ($M = 2.50$, $SD = 0.84$) reached the high readiness level. This implies that while respondents have a moderate level of confidence in their subject-area knowledge, this confidence may not be fully supported by deeper understanding or comprehensive preparation.

The findings imply that although students exhibit some level of confidence, there is a clear need for targeted academic support, particularly in strengthening conceptual understanding, content coverage, and higher-order thinking skills essential for success in the licensure examination.

1.2 Study Habits and Strategies

Table 2. Study Habits and Strategies

	Indicator	Mean	SD	Interpretation
1	I set specific goals when I study for the licensure exam.	3.26	.53	Very High Readiness
2	I use a study schedule to manage my preparation time.	3.24	.64	High Readiness
3	I review my notes regularly to retain important information.	3.00	.70	High Readiness
4	I summarize material in my own words to understand it better.	3.22	.63	High Readiness
5	I use practice tests or mock exams to improve my performance.	3.17	.57	High Readiness
	Overall Study Habits and Strategies	3.18	.53	High Readiness

As shown in Table 2, the results indicate that respondents demonstrate generally strong study habits and strategies, with an overall mean of 3.18 ($SD = 0.53$) interpreted as high readiness. This suggests that pre-service teachers are engaging in effective and organized approaches to their licensure examination preparation.

Among the indicators, setting specific study goals obtained the highest mean ($M = 3.26$, $SD = 0.53$), interpreted as very high readiness. This implies that respondents are highly intentional and goal-oriented in their preparation.

Overall, the results reveal that while students may exhibit low academic preparedness, they possess strong study habits and strategies. This implies that the issue may not lie in how they study, but rather in what and how deeply they study. Hence, interventions may focus on aligning these effective study strategies with targeted content reinforcement and deeper conceptual understanding to improve overall licensure examination readiness.

1.3 Psychological Readiness

Table 3. Psychological Readiness

	Indicator	Mean	SD	Interpretation
1	I feel confident about my ability to perform well on the licensure exam.	3.13	.62	High Readiness
2	I remain calm when I think about taking the licensure exam.	2.98	.65	High Readiness

3	I am able to manage stress related to exam preparation effectively.	3.11	.64	High Readiness
4	I feel anxious when I think about answering exam questions.	1.96	.67	Low Readiness
5	I believe I can succeed in the licensure exam even if it is challenging.	3.43	.58	Very High Readiness
	Overall Psychological Readiness	2.92	.40	High Readiness

The results indicate that respondents generally exhibit high psychological readiness for the licensure examination with an overall mean of 2.92 (SD = 0.40). This suggests that pre-service teachers possess a relatively strong level of confidence, emotional control, and resilience in relation to exam-taking. Furthermore, the findings reveal that respondents are psychologically equipped for the licensure examination. They demonstrate confidence, resilience, and the ability to manage stress, with minimal levels of anxiety. This strong psychological foundation can serve as an advantage; however, it should be complemented with improvements in academic preparedness to ensure overall readiness and optimal performance in the licensure examination.

1.4 Test-taking Skills

Table 4. Test-taking Skills

	Indicator	Mean	SD	Interpretation
1	I carefully read the directions before I begin answering questions.	3.43	.54	Very High Readiness
2	I pace myself well during practice tests so I can finish on time.	3.30	.59	Very High Readiness
3	I answer easier questions first and then return to harder ones.	3.33	.60	Very High Readiness
4	I check my answers when time permits.	3.35	.57	Very High Readiness
5	I use elimination strategies when I am unsure of an answer.	3.35	.57	Very High Readiness
	Overall Test-taking skills	3.35	.48	Very High Readiness

The results show that respondents demonstrate very high readiness in test-taking skills, with an overall mean of 3.35 (SD = 0.48). This indicates that pre-service teachers possess strong procedural and strategic competencies when approaching examinations. The respondents are highly equipped with effective test-taking techniques, which can significantly enhance their performance in the licensure examination. When viewed alongside previous results, this suggests that while there may be gaps in academic preparedness, students are well-prepared in terms of how to take the test. Therefore, strengthening content mastery while sustaining these strong test-taking skills could lead to improved overall outcomes in the licensure examination.

2. Level of Academic Performance of Pre-Service Teachers

Table 5. Level of Academic Performance of Pre-Service Teachers

GWA	Frequency	Percentage
92-94	8	17
89-91	18	39
86-88	11	24
83-85	9	20
Mean		88.61

Table 5 presents the distribution of the respondents' General Weighted Average (GWA). The results show that the largest proportion of pre-service teachers (39%) obtained a GWA within the range of 89–91, followed by 24% in the 86–88 bracket. Meanwhile, 20% of the respondents had a GWA of 83–85, and only 17% achieved a higher GWA range of 92–94. These findings indicate that the pre-service teachers possess a solid academic background which may positively influence their readiness and performance in diagnostic assessments in both general and professional education.

3. Level of Performance of Pre-Service Teachers in their Diagnostic Tests

3.1 General Education Diagnostic Test

Table 6. Level of Performance of Pre-Service Teachers in their General Education Diagnostic Test

General Education Diagnostic Test Score	Frequency	Percentage
85-89	1	2
80-84	15	33
75-79	15	33
70-74	10	22
65-69	5	11
Mean		76.6

Table 6 shows the distribution of pre-service teachers' scores in the General Education diagnostic test. The results reveal that the largest proportion of respondents falls within the 80–84 and 75–79 score ranges, each comprising 33% of the sample. This indicates that the majority of the respondents performed at an average to slightly above-average level.

The computed mean score of 76.6 further supports that the overall performance of the pre-service teachers in General Education is at a moderate or average level. This suggests that while the respondents have a basic understanding of general education concepts, there are evident gaps in mastery that may require reinforcement.

3.2 Professional Education Diagnostic Test

Table 7. Level of Performance of Pre-Service Teachers in their Professional Education Diagnostic Test

Professional Education Diagnostic Test Score	Frequency	Percentage
80-84	9	20
75-79	17	37
70-74	13	28
65-69	6	13
60-64	1	2
Mean		74.76

Table 7 presents the distribution of pre-service teachers' scores in the Professional Education diagnostic test. The results indicate that the largest proportion of respondents (37%) obtained scores within the 75–79 range, followed by 28% in the 70–74 bracket. Additionally, 20% achieved scores within 80–84, while 13% and 2% fell in the lower ranges of 65–69 and 60–64, respectively.

The computed mean score of 74.76 suggests that the overall performance of the pre-service teachers in Professional Education is at a moderate level which implies a need for enhanced instructional support and targeted interventions.

4. Relationship between GWA and Diagnostic Performance in General and Professional Education

Table 8. Correlation between GWA and Diagnostic Performance in General and Professional Education

	p-value	r	Interpretation
General Education Diagnostic Performance	.000	.651	High positive correlation
Professional Education Diagnostic Performance	.012	.368	Low positive correlation

The results indicate that there is a statistically significant moderate positive relationship between the level of readiness of pre-service teachers and their General Education diagnostic test performance. This implies that students who are more prepared across dimensions such as academic, psychological, study habits, and test-taking skills are more likely to achieve higher scores.

The results further indicate that there is also a statistically significant but weak positive relationship between GWA and Professional Education diagnostic test performance. This finding suggests that GWA is still a significant predictor of Professional Education diagnostic performance, but its influence is weaker compared to General Education.

5. Relationship between Level of Readiness and Diagnostic Performance in General and Professional Education

Table 9. Correlation between Level of Readiness and Diagnostic Performance in General and Professional Education

	p-value	r	Interpretation
General Education Diagnostic Performance	.004	.420	Moderate positive correlation
Professional Education Diagnostic Performance	.001	.456	Moderate positive correlation

The results indicate that there is a statistically significant moderate positive relationship between the level of readiness of pre-service teachers and their General Education and Professional Education diagnostic test performance. This finding suggests that readiness is an important factor influencing performance in the General Education and Professional Education component of the licensure examination.

Overall, the findings highlight that enhancing the level of readiness of pre-service teachers can positively impact their performance

6. Predictive Influence of GWA and Readiness Variables on Diagnostic Performance

6.1. General Education Diagnostic Test

Table 10. Hierarchical Multiple Regression Analysis of GWA and Readiness Variables Predicting General Education Diagnostic Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.651 ^a	.424	.411	3.85112	.424	32.415	1	44	.000
2	.753 ^b	.568	.514	3.50003	.143	3.318	4	40	.019

A hierarchical multiple regression was conducted to examine whether readiness variables predict General Education Score beyond GWA. In Step 1, GWA significantly predicted General Education Score, explaining 42% of the variance ($R^2 = .42$, $p < .01$). In Step 2, the addition of readiness variables explained an additional 14% of the variance ($\Delta R^2 = .14$, $p = .019$). Among the predictors, only Academic Preparedness was found to be significant ($\beta = .36$, $p = .005$).

Overall, the findings suggest that GWA is a strong baseline predictor of General Education performance. Furthermore, readiness variables significantly enhance the model but their effect is largely driven by Academic Preparedness. This underscores the importance of strengthening academic preparedness.

6.2. Professional Education Diagnostic Test

Table 11. Hierarchical Multiple Regression Analysis of GWA and Readiness Variables Predicting Professional Education Diagnostic Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.368 ^a	.135	.116	4.49758	.135	6.881	1	44	.012
2	.681 ^b	.463	.396	3.71680	.328	6.107	4	40	.001

For the Professional Education, In Step 1, GWA significantly predicted Professional Education Score, explaining 14% of the variance ($R^2 = .14$, $p = .012$). This shows that prior academic performance has a modest but significant effect on Professional Education outcomes. In Step 2, the addition of readiness variables explained an additional 33% of the variance ($\Delta R^2 = .33$, $p < .001$). This demonstrates that readiness factors contribute substantial additional predictive power beyond GWA. Moreover, only Academic Preparedness was found to be significant ($\beta = .64$, $p < .001$).

CONCLUSION

This study concludes that both GWA and readiness play important roles in shaping the diagnostic performance of pre-service teachers in General and Professional Education. The findings highlight the value of strengthening academic foundations and enhancing readiness to improve overall competency of pre-service teachers.

1. While pre-service teachers demonstrate strong readiness in study habits, psychological aspects, and test-taking skills, their low academic preparedness highlights a critical area that needs improvement, particularly in strengthening content knowledge for better examination performance.
2. The respondents GWA suggests a strong academic background, which supports their preparation for licensure-related assessments.
3. The mean scores in General Education and Professional Education indicate acceptable but improvable levels of competence prior to formal LET review.
4. GWA is a significant predictor of diagnostic test performance.
5. Readiness variables are significantly related to diagnostic performance.
6. GWA and readiness jointly predict General Education performance and Professional Education performance
7. Academic preparedness is the most critical determinant of success.

RECOMMENDATION

In light of the findings, this study proposes several recommendations to enhance the academic preparedness and diagnostic performance of pre-service teachers.

1. Individualized or Small Group Interventions. Since academic preparedness emerged as the strongest predictor of performance, targeted support should be provided to students with lower confidence in content mastery. This may include peer tutoring, mentoring programs, or focused academic workshops designed to address specific learning gaps.
2. Provide Structured Support. Review programs should be systematically designed to maximize students' existing strengths in study habits and test-taking skills. These should be aligned with content-focused strategies to improve retention, understanding, and application of key concepts.
3. Monitor Progress and Adjust Review. Regular diagnostic and formative assessments should be conducted to track students' progress in both content mastery and readiness. Results should be used to refine review strategies and ensure that interventions remain responsive and aligned with licensure examination requirements.

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INCLUSIVE SUPERVISION FRAMEWORK: THE PRINCIPAL'S PEN ON TEACHERS' INSTRUCTIONAL PRACTICES, PROFESSIONAL CONDUCT, AND CULTURAL RESPONSIVENESS IN INDIGENOUS SCHOOLS

Mark Anthony B. Sumatra, Mildred F. Accad, PhD

Dexter V. Alberto, MAEd

Sultan Kudarat State University – Access Campus

Tacurong City, Philippines

ABSTRACT

Instructional supervision plays an important role in improving teaching practices, especially in Indigenous Peoples Education schools where instruction must be culturally responsive and context based. This study examined the Principal's Pen, referring to written supervision tools such as observation notes, feedback forms, and coaching logs, in relation to teachers' instructional practices, professional conduct, and cultural responsiveness in selected IPed-implementing schools in Sultan Kudarat and North Cotabato. Using a mixed-methods design with a framework development component, data were gathered from 82 teacher-respondents, five school principals, and seven selected teachers. Mean, standard deviation, Pearson Product-Moment Correlation Coefficient, and thematic analysis were used to analyze the data. Findings revealed that the Principal's Pen reflected a high level of support for teachers' instructional practices, professional conduct, and cultural responsiveness. Significant relationships were also found among the three variables, indicating that they are interconnected aspects of teacher development. Qualitative findings showed that written supervision supported instructional improvement, professional growth, and culturally responsive practice, although challenges such as generic forms, limited cultural indicators, time constraints, and insufficient follow-up were identified. Based on the findings, the Principal's Pen Inclusive Supervision Framework was developed and rated highly acceptable in terms of content, clarity, cultural responsiveness, and practicality. The study concludes that written supervision becomes more meaningful when it is developmental, reflective, culturally grounded, and responsive to the realities of Indigenous school settings.

Keywords: *Inclusive Supervision Framework, Principal's Pen, written supervision, Indigenous People's Education, cultural responsiveness, instructional supervision*

INTRODUCTION

Instructional supervision is a core responsibility of school leadership because it guides teachers in improving lesson delivery, professional behavior, and learner support. In Indigenous Peoples Education (IPed) schools, however, supervision has a wider responsibility. It must help teachers meet curriculum standards while respecting the language, values, knowledge systems, and lived experiences of Indigenous learners. For this reason, supervision in IPed contexts should be developmental, culturally sensitive, and responsive to the realities of the school community.

This paper focuses on the Principal's Pen, a coined term referring to written supervisory tools such as observation notes, feedback forms, and coaching logs. These tools are used by school heads to record classroom observations, communicate feedback, and monitor teacher improvement. When written feedback is specific and followed by mentoring, it can encourage reflection, strengthen teacher accountability, and support instructional growth Zepeda (2025). When used only for compliance, however, it may fail to capture

the culturally responsive work expected of teachers in Indigenous school settings, where school leadership must recognize learners' culture, identity, language, and community realities Khalifa et al. (2016).

Culturally responsive school leadership emphasizes that school leaders must recognize learner identity, language, culture, and community background in school processes Khalifa et al. (2016). Similarly, culturally responsive teaching affirms learners' heritage and connects instruction to their experiences Gay (2018). These perspectives are relevant to the Philippine IPed context, where national policies such as the Indigenous Peoples Rights Act, the Enhanced Basic Education Act, and DepEd Order No. 62, s. 2011 support culturally appropriate, localized, and inclusive education.

Despite these mandates, many supervision tools remain general and performance-based. They may recognize lesson planning, classroom management, and professional conduct, but they may not fully document teachers' efforts to use local examples, consult culture bearers, improve IP Corners, involve community stakeholders, or strengthen respect for Indigenous values. This study addressed this concern by examining how the Principal's Pen supports instructional practices, professional conduct, and cultural responsiveness, and by developing an Inclusive Supervision Framework grounded in actual school experiences.

STATEMENT OF OBJECTIVES

The main objective of this study was to develop an Inclusive Supervision Framework grounded on the role of the Principal's Pen in supporting teachers' instructional practices, professional conduct, and cultural responsiveness in Indigenous Peoples Education schools.

Specifically, the study sought to:

1. determine the level of teachers' instructional practices as reflected in the Principal's Pen;
2. determine the level of teachers' professional conduct as reflected in the Principal's Pen;
3. determine the level of teachers' cultural responsiveness as reflected in the Principal's Pen;
4. test the significant relationship among instructional practices, professional conduct, and cultural responsiveness;
5. describe the experiences of school heads and teachers with the Principal's Pen;
6. develop an Inclusive Supervision Framework based on the findings of the study; and
7. determine the level of acceptability of the developed framework in terms of content, clarity, cultural responsiveness, and practicality.

The null hypothesis tested at the 0.05 level of significance stated that there is no significant relationship among teachers' instructional practices, professional conduct, and cultural responsiveness as reflected in the Principal's Pen.

METHODOLOGY

This chapter presents the methodology used in the study titled "Inclusive Supervision Framework: The Principal's Pen on Teachers' Instructional Practices, Professional Conduct, and Cultural Responsiveness in Indigenous Schools." It explains the research design, research locale, participants, sampling procedures, instruments for data collection, methods of data analysis, and the ethical considerations observed to ensure the validity, reliability, and trustworthiness of the study.

Research Design

The study used a mixed-methods design with a framework development component. This design was appropriate because mixed-methods research allows the researcher to combine quantitative and qualitative data to provide a more complete understanding of the research problem Creswell and Creswell (2018) and Creswell and Plano Clark (2018). The quantitative strand described the level of instructional

practices, professional conduct, and cultural responsiveness and tested the relationships among these variables. The qualitative strand explained the quantitative results by exploring the experiences of school heads and selected teachers with written supervision, consistent with the purpose of mixed-methods inquiry to use one strand of data to support, explain, or expand the other strand Creswell & Plano Clark (2018). The integrated findings served as basis for the development of the Inclusive Supervision Framework, following the logic of research and development in producing an output grounded in empirical findings Borg & Gall (1989).

Research Locale and Participants

The study was conducted in five IPed-implementing schools in Sultan Kudarat and North Cotabato: Benepol Elementary School, Blanga Elementary School, Lebak Elementary School, Datu Manggong Elementary School, and Bacong Elementary School in Tulunan, North Cotabato. The schools were selected because they represented school contexts where written supervision was practiced alongside Indigenous education implementation.

Complete enumeration was used for the quantitative phase because the population of 82 teachers was manageable. Purposive sampling was used for the qualitative and framework validation phases because the study required participants with direct experience in written supervision and IPed implementation. Table 1 presents the respondents and participants of the study.

Table 1. Respondents and Participants of the Study

School	Teacher Population	Quantitative Teacher Respondents	Principal Participants	Teacher Participants	Total Qualitative Participants
Benepol Elementary School	21	21	1	1	2
Blanga Elementary School	16	16	1	2	3
Lebak Elementary School	16	16	1	1	2
Datu Manggong Elementary School	16	16	1	0	1
Bacong Elementary School	13	13	1	3	4
Total	82	82	5	7	12

Research Instruments

The main instruments were a structured survey questionnaire, a semi-structured interview guide, and a researcher-made acceptability questionnaire. The survey was adapted from selected RPMS-PPST indicators and contextualized for the Principal's Pen in IPed school settings; this was appropriate because the PPST emphasizes learner-centered, inclusive, and reflective teaching expectations for teachers Department of Education (2017). It measured instructional practices, professional conduct, and cultural responsiveness using a five-point scale. The interview guide explored instructional guidance, professional growth, culturally responsive practices, and challenges in written supervision. The acceptability tool assessed the developed framework in terms of content, clarity, cultural responsiveness, and practicality.

The instruments were validated by two Master Teachers and one IPed focal person to ensure that the items were clear, relevant, and aligned with the context of Indigenous school supervision. Reliability of the structured questionnaire was established through pilot testing, which obtained a Cronbach's alpha of 0.88, interpreted as highly acceptable. Cronbach's alpha is commonly used to examine the internal consistency of survey items, especially when a questionnaire measures related constructs through scaled responses Taber (2018) and Pallant (2020).

Data Gathering Procedure

The researcher secured permission from concerned school authorities before administering the survey and conducting the interviews. The teacher-respondents answered the survey, while school principals and selected teachers participated in the qualitative phase. The responses were encoded, checked, and treated confidentially, consistent with the ethical handling of personal information under the Data Privacy Act of 2012 (Republic Act No. 10173, 2012).

Treatment of Data and Framework Development

Quantitative data were analyzed using mean, standard deviation, and Pearson product-moment correlation coefficient. Mean and standard deviation summarized the level of each domain, while Pearson r tested the strength and direction of the relationships among instructional practices, professional conduct, and cultural responsiveness Field (2018) and Pallant (2020). Qualitative data were analyzed thematically through familiarization, coding, category formation, and theme development following Braun and Clarke (2006). The quantitative and qualitative results were then integrated to develop the Inclusive Supervision Framework, consistent with mixed-methods integration procedures that connect numerical trends with qualitative explanations Creswell & Plano Clark (2018).

FINDINGS

The findings are presented according to the objectives of the study. The quantitative findings show the level of teachers' instructional practices, professional conduct, and cultural responsiveness as reflected in the Principal's Pen. The qualitative findings explain the numerical results through the experiences of school heads and teachers with written supervision. The findings also include the significant relationship among the three domains and the acceptability of the developed Inclusive Supervision Framework.

Table 2. Level of Teachers' Instructional Practices, Professional Conduct, and Cultural Responsiveness

Domain	Statement/Indicator	WM	SD	Interpretation
Instructional Practices	Written supervision helps me improve lesson planning.	4.05	0.41	High
	Observation notes guide me in adjusting teaching strategies.	4.02	0.44	High
	Supervision encourages me to use local examples.	4.05	0.52	High
	Coaching helps me adapt instruction to student needs.	4.04	0.46	High
	Written feedback makes my lessons more inclusive.	3.98	0.54	High
Section Mean		4.03	0.29	High
Professional Conduct	Written supervision motivates me to participate in SLAC.	4.13	0.44	High
	I reflect on my work after receiving written supervision.	4.12	0.48	High
	I demonstrate professionalism because of supervision.	4.13	0.49	High
	Supervision encourages collaboration with peers.	4.10	0.49	High
	Written feedback encourages me to attend or request in-service training.	4.21	0.51	Very High
Section Mean		4.14	0.28	High

Cultural Responsiveness	Written supervision helps me align lessons with IPed program implementation.	3.96	0.53	High
	I am improving classroom cultural displays such as IP Corner because of feedback.	4.05	0.41	High
	I am encouraged to consult culture bearers/elders through written supervision.	3.98	0.42	High
	Written supervision motivates me to involve the School Governing Council and IPMR.	4.01	0.51	High
	Written supervision strengthens respect for Indigenous values in my class.	3.96	0.46	High
Section Mean		3.99	0.27	High

As shown in Table 2, the Principal's Pen was generally rated high across the three domains of instructional practices, professional conduct, and cultural responsiveness. This indicates that written supervision tools such as observation notes, feedback forms, and coaching logs were perceived by teachers as useful mechanisms for guiding their classroom work, professional responsibilities, and culturally responsive practices in IPed school settings. The high ratings further suggest that the Principal's Pen was not viewed merely as a documentation requirement, but as a form of support that helped teachers reflect on their performance and improve their practice.

In terms of instructional practices, the section mean of 4.03, interpreted as High, shows that written supervision helped teachers improve lesson planning, adjust teaching strategies, use local examples, adapt instruction to learners' needs, and make lessons more inclusive. The highest indicators were lesson planning and the use of local examples, both with a weighted mean of 4.05. This implies that teachers found written feedback helpful in making their lessons more organized and more connected to learners' immediate environment and cultural context. In IPed schools, this result is important because effective instruction should not only follow curriculum standards but should also reflect the language, culture, and lived experiences of Indigenous learners. However, the indicator on making lessons more inclusive obtained the lowest mean of 3.98. Although still interpreted as High, this suggests that written feedback may still be strengthened by giving more specific comments on learner participation, differentiated instruction, cultural inclusion, and strategies that respond to diverse learning needs.

Professional conduct obtained the highest section mean of 4.14, interpreted as High. This result indicates that the Principal's Pen strongly supported teachers' professional behavior, reflection, collaboration, and participation in school-based professional development activities. The highest-rated indicator was written feedback encouraging teachers to attend or request in-service training, with a weighted mean of 4.21, interpreted as Very High. This suggests that written supervision motivated teachers to seek further learning opportunities and become more active in improving their professional competence. The result also shows that written supervision can encourage teachers to take responsibility for their own growth. Meanwhile, collaboration with peers received the lowest mean of 4.10, though still interpreted as High. This implies that while teachers generally value collaboration, written supervision may still provide clearer prompts for peer mentoring, sharing of teaching strategies, and participation in collaborative activities such as SLAC sessions.

Cultural responsiveness obtained a section mean of 3.99, interpreted as High. This indicates that the Principal's Pen helped teachers become more aware of Indigenous values, IPed implementation, cultural displays, elder consultation, SGC/IPMR involvement, and the use of culturally grounded classroom practices. The highest-rated indicator was the improvement of classroom cultural displays such as the IP Corner, with a weighted mean of 4.05. This suggests that written supervision encouraged visible cultural representation in the classroom. However, the indicators on aligning lessons with IPed program implementation and strengthening respect for Indigenous values both obtained the lowest mean of 3.96. Although these ratings remain High, they reveal that cultural responsiveness needs to go beyond classroom displays. Written supervision should include clearer and more specific cultural indicators, such as

integration of Indigenous knowledge, use of local language when appropriate, consultation with culture bearers, and respect for community practices.

Overall, the findings show that the Principal's Pen contributed positively to teacher development in IPEd schools. Among the three domains, professional conduct received the highest rating, suggesting that written supervision was most evident in guiding teachers' reflection, responsibility, and professional growth. Instructional practices also received a high rating, showing that supervision helped improve planning and classroom delivery. Cultural responsiveness, while also rated high, obtained the lowest section mean among the three domains, suggesting the need to further strengthen the cultural dimension of written supervision. These results imply that the Principal's Pen becomes more meaningful when it links instructional improvement, professional conduct, and cultural responsiveness in one continuous supervision process.

Table 3. Test of Significant Relationship Among the Three Domains

Variable Pair	r-value	p-value	Interpretation
Instructional Practices and Professional Conduct	0.382	0.0004	Reject Ho
Instructional Practices and Cultural Responsiveness	0.358	0.0010	Reject Ho
Professional Conduct and Cultural Responsiveness	0.373	0.0006	Reject Ho

Table 3 shows that all p-values were lower than the 0.05 level of significance; therefore, the null hypothesis was rejected. This means that there were significant relationships among instructional practices, professional conduct, and cultural responsiveness as reflected in the Principal's Pen. The r-values of 0.382, 0.358, and 0.373 indicate positive but weak relationships. Although the relationships were not strong, the positive direction shows that improvement in one domain tends to be associated with improvement in the other domains.

The relationship between instructional practices and professional conduct suggests that teachers who are guided in lesson planning, classroom strategies, and learner responsiveness may also become more reflective, professional, and open to professional development. This implies that instructional supervision does not only affect classroom teaching but can also influence teachers' professional attitudes and behavior. The relationship between instructional practices and cultural responsiveness further suggests that when teachers receive guidance on lesson planning and teaching strategies, they are also more likely to consider local examples, Indigenous values, and learner background in their instruction. Meanwhile, the relationship between professional conduct and cultural responsiveness indicates that reflective, collaborative, and professionally responsible teachers are also more likely to value culturally responsive practices.

These findings imply that the three domains should not be supervised separately. In IPEd school settings, lesson improvement, professional growth, and cultural grounding are connected aspects of teacher development. Therefore, written supervision should be designed as an integrated process that helps teachers improve instruction, strengthen professional conduct, and respond respectfully to the cultural realities of Indigenous learners.

Table 4. Qualitative Themes on Experiences with the Principal's Pen

Issue Probed	Participants' Narration / Verbatim Response	Core Idea	Category	Essential Theme
Instructional practice	Participant 1 shared, "Written supervision helps me become more intentional in lesson planning and in the use of examples that connect with Blaán and Manobo learners. When the notes are specific, I adjust pacing, language, and activities to make the lesson more responsive." Participant 2 stated, "Observation notes and coaching logs help me reflect on whether my lesson is inclusive, especially when I am reminded to use local stories, familiar situations, and learner participation. The written record also helps me monitor my progress over time."	Written feedback helped improve lesson planning, teaching strategies, use of local examples, and responsiveness to learners' needs.	Instructional support	Tool for instructional improvement
Professional practice	Participant 3 shared, "Coaching logs helped me the most because they allowed follow-up and reflection, not only one-time evaluation." Participant 4 expressed, "What works best is specific written feedback followed by a short coaching conversation."	Written supervision encouraged reflection, professionalism, collaboration, SLAC participation, and training.	Professional growth	Support for professional growth
Indigenous learners and context	Participant 5 shared, "The tools improve practice because they make feedback concrete. Instead of general comments, I can revisit written suggestions on classroom management, contextualization, and respect for Indigenous values in instruction." Participant 6 stated, "During a class observation, the school head wrote that I should invite learners to connect the topic to local practices. I tried this in the next lesson and the discussion became more active and meaningful."	Teachers valued supervision that recognized Indigenous values, local language, and contextualized teaching.	Cultural relevance	Support for culturally responsive practice
Difficulties in implementation	Participant 7 shared, "A challenge is that some forms are still too general and do not always capture culturally responsive teaching. An opportunity is that written supervision can create a consistent mentoring process if the indicators are contextualized." Participant 8 stated, "Current tools focus more on generic teaching indicators than on culture-based practices." Participant 9 expressed, "Time is a major challenge because both teachers and school heads are handling many tasks. Still, written supervision is useful because it documents progress and helps prioritize support areas."	Generic forms, limited cultural indicators, time constraints, and limited follow-up reduced usefulness.	Implementation challenges	Challenges in the use of the Principal's Pen

Table 4 presents four qualitative themes that explain the quantitative findings. The participants' narrations show that the Principal's Pen was experienced as a tool for instructional improvement, a support for professional growth, a mechanism for culturally responsive practice, and a process that still faces implementation challenges. These themes reveal that written supervision becomes meaningful when it is specific, respectful, reflective, and connected to the actual conditions of Indigenous school settings.

The first theme, Tool for Instructional Improvement, shows that written feedback helped teachers improve lesson planning, adjust teaching strategies, use local examples, and respond to learners' needs. The participants emphasized that observation notes and coaching logs helped them reflect on the inclusiveness and contextualization of their lessons. This supports the quantitative finding that instructional practices were rated high. It further implies that the Principal's Pen becomes more useful when comments are not general but are directed toward concrete classroom improvements.

The second theme, Support for Professional Growth, shows that written supervision encouraged teachers to reflect on their work, participate in professional learning, and become more open to coaching. Participants valued feedback forms and coaching logs when these were detailed, respectful, and followed by conversation. This explains why professional conduct obtained the highest section mean in the quantitative results. It suggests that teachers respond positively to supervision when it is developmental rather than punitive.

The third theme, Support for Culturally Responsive Practice, shows that teachers valued supervision that recognized Indigenous values, local language, community practices, and contextualized teaching. Participants explained that written comments became more useful when they guided them to connect lessons with local practices and Indigenous learners' experiences. This supports the high rating for cultural responsiveness, but it also points to the need for supervision tools to include more explicit cultural indicators. The findings imply that written supervision in IPed schools should not only assess technical teaching skills but should also document how teachers affirm learner identity, culture, and community realities.

The fourth theme, Challenges in the Use of the Principal's Pen, reveals that the effectiveness of written supervision was affected by generic forms, limited cultural indicators, time constraints, and insufficient follow-up. Although the quantitative findings were generally high, the qualitative responses show that the Principal's Pen still needs improvement in design and implementation. The findings suggest that the supervision tools should be localized, checklist-based where appropriate, and supported by short coaching conversations so that they remain practical for school heads while still addressing the cultural needs of Indigenous learners.

Table 5. Acceptability of the Developed Inclusive Supervision Framework

Criteria	Mean	SD	Verbal Description
Content	4.32	0.48	Highly Acceptable
Clarity	4.28	0.50	Highly Acceptable
Cultural Responsiveness	4.41	0.46	Highly Acceptable
Practicality	4.25	0.52	Highly Acceptable
Overall Mean	4.32	0.49	Highly Acceptable

Table 5 shows that the developed Inclusive Supervision Framework was rated highly acceptable in all criteria, with an overall mean of 4.32. Cultural responsiveness obtained the highest rating ($M = 4.41$), indicating that the framework was seen as strongly aligned with the needs of IPed school settings. Practicality obtained the lowest rating ($M = 4.25$), although still highly acceptable, suggesting that the framework is usable but should remain simple enough for school heads who already manage many administrative tasks.

Developed Principal's Pen Inclusive Supervision Framework. Based on the integrated quantitative and qualitative findings, the study developed the Principal's Pen Inclusive Supervision Framework as a contextualized written supervision model for IPed-implementing schools. The model shows how

observation notes, feedback forms, and coaching logs may be used through four connected processes: contextualized classroom observation, reflective written feedback, collaborative coaching and follow-up, and cultural validation and community referencing. The resulting model is shown in Figure 1.

PRINCIPAL'S PEN INCLUSIVE SUPERVISION FRAMEWORK
A Contextualized Written Supervision Model for IPed-Implementing Schools

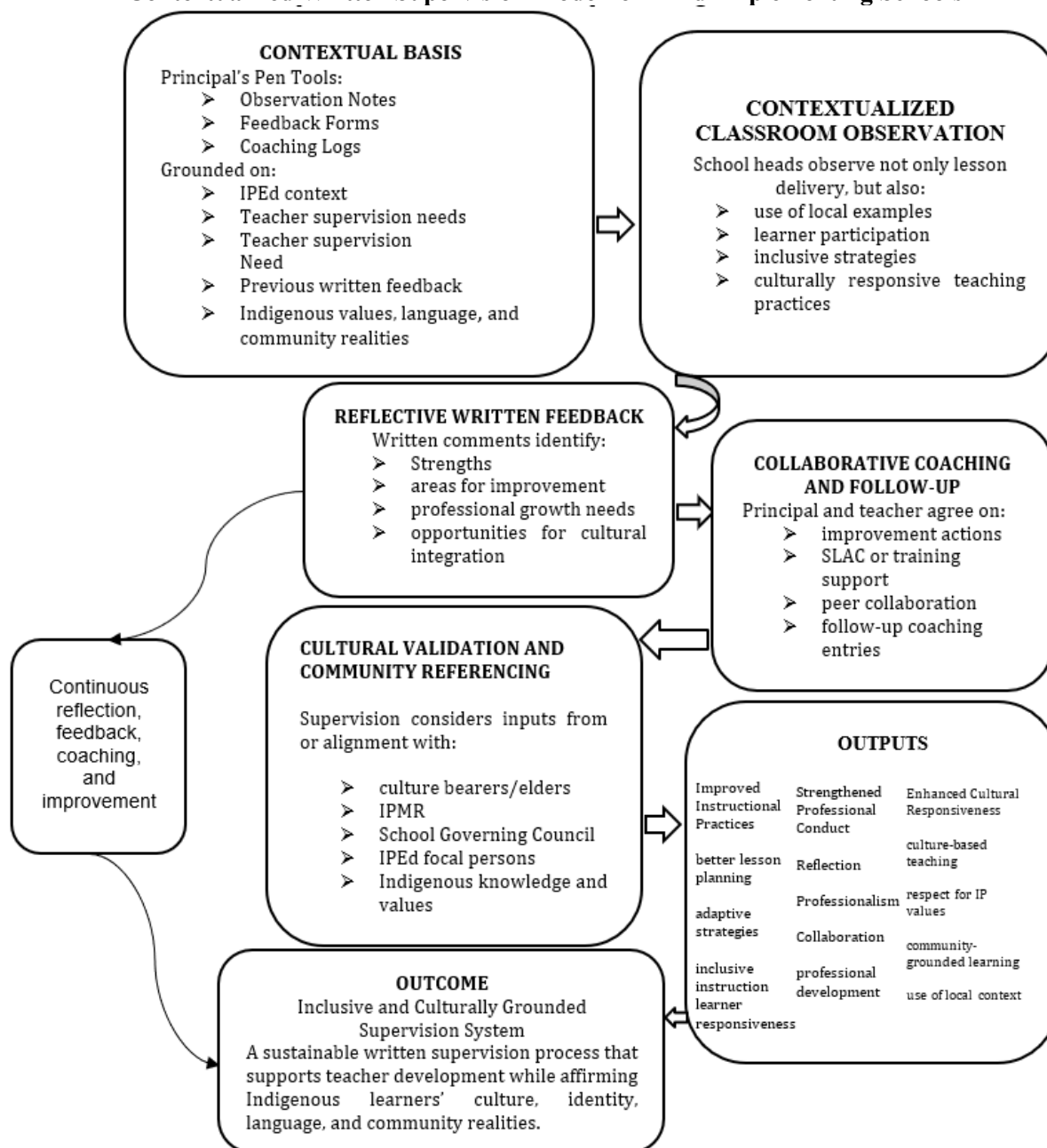


Figure 1. Principal's Pen Inclusive Supervision Framework

Figure 1 presents the Principal's Pen Inclusive Supervision Framework as a contextualized written supervision model for IPed-implementing schools. The framework explains how written supervision tools may be used not only for documentation or compliance, but also for teacher development, professional

reflection, and culturally responsive practice. It is composed of the contextual basis, four supervision processes, three expected outputs, and one overall outcome.

The first part of the framework is the contextual basis. This includes the Principal's Pen tools, namely observation notes, feedback forms, and coaching logs. These tools are grounded on the IPed context, teacher supervision needs, previous written feedback, and the Indigenous values, language, and community realities of the school. This part is important because written supervision should begin with an understanding of the actual situation of teachers and learners. In IPed schools, supervision cannot be limited to general classroom indicators because teachers also need guidance on contextualization, cultural sensitivity, learner participation, and respect for Indigenous knowledge and values.

The second part is contextualized classroom observation. In this process, the school head observes not only lesson delivery but also the teacher's use of local examples, inclusive strategies, learner participation, language sensitivity, and culturally responsive teaching practices. This means that classroom observation should look beyond technical teaching performance. It should also examine how the teacher connects the lesson to the learners' culture, experiences, and community background. Through this process, the Principal's Pen becomes a tool for identifying how instruction can become more meaningful and responsive to Indigenous learners.

The third part is reflective written feedback. After classroom observation, the school head provides written comments that identify the teacher's strengths, areas for improvement, professional growth needs, and opportunities for cultural integration. This part emphasizes that feedback should be specific, respectful, and developmental. It should not merely point out weaknesses but should guide teachers on how to improve lesson planning, instructional delivery, classroom inclusiveness, professional conduct, and culturally responsive practice. In this way, written feedback becomes a reflective tool that helps teachers understand their performance and plan concrete steps for improvement.

The fourth part is collaborative coaching and follow-up. This process ensures that written feedback does not end with the completion of the observation form. Instead, the principal and teacher discuss the written feedback, agree on improvement actions, identify possible SLAC or training support, encourage peer collaboration, and record follow-up coaching entries. This part addresses the need for continuous mentoring. It also makes supervision more supportive because teachers are guided after receiving feedback and are given opportunities to improve through coaching, collaboration, and professional learning.

The fifth part is cultural validation and community referencing. This process ensures that supervision considers inputs from culture bearers or elders, IPMR, the School Governing Council, IPed focal persons, and Indigenous knowledge and values. This is a distinct feature of the framework because it recognizes that culturally responsive supervision should not be based only on the school head's observation. It should also be informed by the cultural realities of the learners and the community. Through this part, written supervision becomes more respectful, fair, and relevant to Indigenous school settings.

The four supervision processes lead to three expected outputs. The first output is improved instructional practices, which include better lesson planning, adaptive teaching strategies, inclusive instruction, and learner responsiveness. The second output is strengthened professional conduct, which includes reflection, professionalism, collaboration, and participation in professional development. The third output is enhanced cultural responsiveness, which includes culture-based teaching, respect for Indigenous values, community-grounded learning, and the use of local context in instruction. These outputs show that the framework aims to develop teachers not only as classroom instructors but also as reflective professionals and culturally responsive educators.

The overall outcome of the framework is an inclusive and culturally grounded supervision system. This means that written supervision becomes a sustainable process that supports teacher development while affirming Indigenous learners' culture, identity, language, and community realities. The framework therefore transforms the Principal's Pen from a compliance-based documentation tool into a developmental, reflective, collaborative, and culturally responsive supervision process. Through continuous reflection, feedback, coaching, and improvement, the framework may help school heads make supervision more meaningful and responsive to the needs of IPed schools.

CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn:

1. The Principal's Pen generally supports teachers' instructional practices in IPed schools. Written supervision helps teachers improve lesson planning, adjust teaching strategies, use local examples, and respond to learners' needs.
2. The Principal's Pen strengthens professional conduct by encouraging reflection, training participation, SLAC involvement, professionalism, and collaboration among teachers.
3. The Principal's Pen supports cultural responsiveness, but the findings also show the need for clearer written indicators on IPed alignment, Indigenous values, elder consultation, and community participation.
4. There are significant positive relationships among instructional practices, professional conduct, and cultural responsiveness. This means that these domains are connected and should be addressed together in supervision.
5. The experiences of school heads and teachers show that written supervision is helpful when it is specific, respectful, developmental, and followed by coaching. Its usefulness is reduced when forms are generic, culturally limited, time-consuming, or not followed up.
6. The developed Inclusive Supervision Framework is highly acceptable and may serve as a practical guide for making written supervision more reflective, culturally grounded, and responsive to Indigenous school contexts.

RECOMMENDATIONS

In view of the conclusions, the following recommendations are offered:

1. School heads may strengthen the use of observation notes, feedback forms, and coaching logs by writing specific comments that guide teachers in lesson planning, inclusive instruction, and contextualization.
2. Written supervision tools may include simple cultural indicators such as use of local examples, respect for Indigenous values, consultation with elders or culture bearers, IP Corner improvement, and involvement of SGC/IPMR where appropriate.
3. Post-observation coaching may be conducted after written feedback so that teachers can clarify comments, identify improvement actions, and receive mentoring instead of merely submitting documents for compliance.
4. Schools may simplify the framework into checklist-based or pre-filled forms to reduce the burden on principals while still allowing space for narrative feedback on important observations.
5. DepEd supervisors and IPed focal persons may use the findings as input for localized supervision tools, school-based mentoring, and capacity-building activities for teachers assigned to Indigenous school settings.
6. Future researchers may test the Inclusive Supervision Framework in other IPed schools or compare its usefulness across different Indigenous communities and school governance contexts.

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SEASONAL TOURISM TRENDS IN BAGUIO CITY: ANALYZING VISITOR PREFERENCES AND BEHAVIOR ACROSS OFF PEAK SEASONS

Mikyla Grace A. Francisco
Deberlyn B. Notarte
Baguio Central University
Baguio City, Philippines

ABSTRACT

This particular research investigated the tourism in Baguio City during the off peak seasons through the opinions of the tourists who visited the city. Through the qualitative phenomenological method of carrying out in-depth interviews with the tourists in places like Mines View Park, Botanical Garden, and Burnham Park in the city of Baguio, the research established the fact that the major factor that attracted the visiting crowd to the city during the off-peak times was the peace and quiet of the city, ease of access to the city, the cool weather of the city, and the fact that the city was affordable for the visiting crowd. Additionally, the instability of the weather in the city of Baguio and the loss of the business for the vendors of the city were some of the other factors. The study ends with a statement that the willingness of the visitors to recommend off peak travel depends on the experiences they desire, the weather, and how easily they can travel. The results stress the necessity of the strategic tourist planning, better mobility systems, and specific marketing campaigns to not only make the most of the potential of the off peak tourism but also to support the sustainable management of the destinations.

Keywords: *Seasonal Tourism, Off-peak Travel, Visitor Behavior, Baguio City, Tourist Perceptions, Destination Management*

INTRODUCTION

As one of the world's most dynamic and fastest-growing industries, tourism faces the critical challenge in seasonality defined operationally as the systematic, temporary fluctuation of visitor flows that significantly impacts economic performance, job continuity, and environmental sustainability (Zvaigzne et al., 2022). In the tourism and hospitality sectors, the off-peak season represents specific periods characterized by lower arrivals and reduced demand, which often result in lower prices and a more tranquil atmosphere (Vasilenko & Zaharov, 2022). To counter these predictable dips, businesses frequently implement promotional packages and discounts to stimulate travel. These strategies increasingly cater to a growing segment of niche travelers who consciously prioritize quieter, less congested environments over peak-season crowds, directly influencing their visitor behavior and decision-making patterns.

Global travel trends indicate a rising international interest in “shoulder” and off-season travel, driven by climate change concerns, overtourism, and a shift in consumer preferences toward value and sustainability. Data shows that travelers are opting for milder weather and authentic experiences, with significant booking increases noted in Europe during traditionally quieter months (News.com.au, 2024; European Travel Commission, 2025). Furthermore, off-peak tourism enhances economic resilience by allowing businesses to maintain year-round employment—as observed in Central America and the Canary Islands—while simultaneously alleviating physical strain on local infrastructure (Conde Nast Traveler, 2024; Balanced Tourism, 2024).

This global shift toward year-round travel mirrors emerging realities within the Southeast Asian context, particularly in the Philippines. Recent domestic research underscores high levels of destination seasonality, where January typically yields peak arrivals while September marks the lowest demand period (Agosto et al., 2024). To mitigate these severe fluctuations, the Philippine government launched the “Love the Philippines” campaign to redirect market attention to less-crowded destinations, while simultaneously utilizing fiscal reforms like the VAT Refund Law to boost off-peak spending. This national push for destination dispersion is particularly evident in the Cordillera Administrative Region (CAR), which recently recorded a notable 17.71 percent growth in tourist numbers, driven vastly by domestic travelers (Philippine Information Agency, 2025). Regional strategies, such as promoting experiential agritourism like strawberry picking in Benguet, have been instrumental in encouraging visitation during traditionally unpopular months (Department of Tourism-Cordillera, 2024).

As the premier highland resort and urban center of CAR, Baguio City maintains a steady stream of visitors throughout the year, yet it is witnessing a specific transition toward wellness tourism and nature-based activities during its rainy and cold seasons. While occupancy rates naturally peak in December, the Baguio City Tourism Office has noted increased interest in months like June and October, supported by localized campaigns such as “Breathe Baguio.” Off-peak visitors in Baguio—often repeat domestic tourists—tend to stay longer and participate more deeply in cultural and health-related activities (Dulnuan et al., 2023). This segment provides a vital opportunity for sustainable growth that avoids the urban deterioration associated with peak-season overcrowding.

Despite these promising institutional efforts and shifting regional trends, a significant gap remains in empirical local literature regarding empirical data on off-peak visitor psychology. While existing studies broadly document Baguio’s overtourism and peak-season traffic congestion, there is a lack of comprehensive post-pandemic behavioral data assessing why certain demographics deliberately choose Baguio during its monsoon season, how they perceive the city under sub-optimal weather conditions, and what specific challenges they encounter. Understanding these distinct behavioral nuances is critical, as off-peak tourists operate under entirely different motivational and risk-assessment frameworks than peak-season travelers.

Consequently, this study investigates tourism trends in Baguio City during off-peak seasons to explore tourist behaviors and identify the underlying factors affecting those behaviors. By analyzing these explicit patterns, this research intends to contribute to the development of inclusive, resilient tourism strategies that ensure Baguio City remains a viable and sustainable destination year-round. Ultimately, these findings will serve as a valuable resource for tourism and social science students, educational institutions, and future researchers looking to build upon post-pandemic behavioral data.

STATEMENT OF THE PROBLEM

1. What are impressions of tourists regarding Baguio City during off peak seasons?
2. What challenges observed by visitors during off-peak seasons and determine possible waysto address these challenges?
3. What are the factors influencing tourists’ decisions to recommend or not recommend visiting Baguio City during off-peak seasons?

REVIEW OF LITERATURE

This section presents the relevant theories, concepts, and empirical descriptions that ground and support this study. To comprehensively analyze visitor preferences and behaviors across off-peak seasons, this research is guided by three primary theoretical frameworks: Destination Image Theory, Avoidance and Regulatory Focus Theory, and Individual Choice Theory. These frameworks are synthesized alongside the core concepts of Climate-Driven Seasonality and Motivation-Driven Choices.

Destination Image Theory posits that a visitor's impression of a location is constructed through three interconnected components: cognitive, affective, and conative. The cognitive component encompasses the specific beliefs and information a traveler holds regarding practical destination features like climate, infrastructure, and attractions, while the affective component reflects emotional responses such as excitement or relaxation (Pek et al., 2020). These elements operate in a hierarchical interaction where cognitive perceptions shape affective attitudes, which ultimately drive conative intentions—the behavioral decision to visit or recommend a destination (Yang et al., 2022). This model remains a vital tool for understanding visitor loyalty and analyzing modern digital content, such as user-generated reviews, as it highlights how a strong mental image directly influences a tourist's ultimate actions (Amoah et al., 2023; Al-Jabri & Al-Qeed, 2024).

In the context of Baguio City, the cognitive recognition of its cool climate, picturesque landscapes, and vibrant cultural events reinforces its reputation as the country's "Summer Capital," creating an enduring mental image that attracts tourists even during off-peak periods (Pek et al., 2020). These physical and cultural attributes cultivate positive affective reactions, such as feelings of comfort and relaxation, which encourage year-round visitation despite seasonal shifts. By understanding how these cognitive and emotional factors interact to influence visitor preferences, tourism planners and marketers can better customize strategies to enhance satisfaction. Specifically, leveraging these perceptions during less crowded periods allows for more targeted marketing that promotes return visits and ensures the city's sustained appeal throughout the seasonal cycle (Amoah et al., 2023).

According to Regulatory Focus Theory, human goal pursuit is driven by two distinct motivational systems: a promotion focus, which centers on aspirations, advancements, and gains, and a prevention focus, which prioritizes safety, responsibilities, and the avoidance of losses (Senbeto et al., 2019; Park et al., 2021). These orientations significantly influence how travelers assess risks, react to marketing, and make decisions, particularly when combined with approach-avoidance frameworks to explain seasonal trends (Mao et al., 2024).

During off-peak seasons, prevention-focused motivations often align with avoidance behaviors, leading travelers to seek out less crowded periods or milder weather to minimize perceived travel hazards, financial waste, and urban uncertainty. In destinations like Baguio City, which experience distinct seasonal environmental fluctuations (such as heavy rainfall and fog), understanding these motivational differences allows tourism planners to develop more effective management strategies. By tailoring marketing and services to address both the promotion-seeking desires for unique experiences and the prevention-focused needs for safety, predictability, and relaxation, stakeholders can better stabilize seasonal demand.

Individual Choice Theory dictates that potential visitors evaluate a diverse array of factors before finalizing their travel plans, balancing personal preferences, travel expenses, specific destination attributes, and temporal constraints (Zhang et al., 2023). While traditional choice models emphasized purely logical and economic reasoning, contemporary tourism literature acknowledges that travel decision-making is a highly complex process influenced by a blend of rational assessments, contextual variables, and emotional reactions. Modern choice models integrate both cognitive and affective dimensions to more accurately capture the nuances of tourist motivation, moving beyond a simple cost-benefit analysis to account for the holistic human experience (Zhu & Deng, 2023).

Applied to Baguio City, Individual Choice Theory explains why a distinct segment of visitors deliberately opts for off-peak travel to seek out comfort, novelty, or a more serene atmosphere. This decision-making process involves a combination of pragmatic factors, such as lower accommodation costs and reduced traffic congestion, alongside sentimental drivers like the desire for peace and authentic local interaction. Furthermore, recent research suggests that travelers frequently employ heuristics and adaptive decision-making techniques to navigate changing seasonal risks (Srivastava & Singh, 2022). For tourism planners in Baguio, adopting this integrated viewpoint is essential for developing focused marketing and management tactics. By understanding these diverse reasoning patterns, stakeholders can improve visitor satisfaction and foster sustainable tourism practices across the city's entire seasonal cycle.

The concept of climate-driven seasonality is central to understanding the fluctuations in visitor preferences and behavior in Baguio City across different times of the year. Off-peak seasons are heavily

characterized by sub-optimal weather conditions—which, in the mountain resort context of Baguio, manifest as high precipitation, dense fog, and increased risks of typhoons—resulting in a statistically significant reduction in tourist arrivals. This cyclical weather pattern exerts a heavy toll on the operational viability of local business entities, hospitality establishments, and tour operators who rely on outdoor activities.

In Baguio City, the sharp variability of the climate directly dictates the nature of the activities that tourists are willing to undertake. During months with low tourist volume, local operators must pivot away from weather-dependent outdoor sight-seeing and actively diversify indoor or rain-resilient tourist services to keep visitors engaged. Anticipating and planning for these shifts ensures that local tourism offerings are strategically aligned with prevailing climatic realities, thereby maintaining a steady, resilient stream of tourism even during inclement months (Becken & Conroy, 2020).

Finally, the concept of motivation-driven choice underscores the weight that individual psychological needs carry in travel decisions, particularly for specialized destinations like Baguio City. Visitors choose destinations based on distinct push and pull factors, ranging from the desire for psychological relaxation and cultural immersion to the pursuit of adventure or social bonding.

Crucially, motivation-driven decisions dictate not only the timing of travel but also the specific activities tourists choose to patronize while at the destination. During the off-peak seasons, these underlying motivations vary significantly from peak-season drivers; off-peak travelers are often motivated by a desire to spend less, experience tranquility, avoid crowds, and gain deeper, unhurried insights into the local culture (Pestana et al., 2020). Identifying these distinct off-peak motivations allows destination managers to design activities that match the specific desires of the rainy-season traveler.

METHODOLOGY

This chapter details the research design, locale of the study, participant selection, research instruments, data collection procedures, pilot testing, data analysis, and ethical considerations used to investigate visitor preferences and behaviors during Baguio City's off-peak seasons.

The study utilized a qualitative research design, specifically employing a phenomenological approach. This method is designed to explore and analyze the “lived experiences” of individuals, providing profound insights into the subjective motivations and behavioral patterns of tourists within different seasonal settings (De Guzman et al., 2020). By focusing on descriptive qualitative data, the researchers sought to capture a comprehensive understanding of how off-peak seasonal patterns impact visitor behavior in Baguio City, ultimately aiding in the development of future sustainable tourism management plans (Todyog & Alvarado, 2021).

The study was conducted in Baguio City, Philippines, focusing on primary public tourist hubs where seasonal fluctuations are most visible, namely Burnham Park, Mines View Park, and the Botanical Garden. These locations were strategically chosen due to their high significance in the city's tourism landscape and their capacity to attract diverse demographics of travelers.

The study utilized a purposive sampling method to select the participants. To establish a rigorous qualitative framework, potential respondents were screened on-site using specific inclusion criteria:

- Must be domestic or international visitors aged 18 and above;
- Must be non-residents of the Metro Baguio area; and
- Must have firsthand experience traveling around Baguio City during identified off-peak months (such as the rainy season months of June to October).

To recruit participants, the researchers walked through the designated tourist hubs and systematically approached visitors who appeared to be at leisure. The researchers introduced themselves, presented their institutional credentials, and asked a preliminary screening question regarding the visitor's residency and arrival history to verify eligibility.

A total sample size of 11 respondents was selected, with the participants distributed across the locales: four participants from the Botanical Garden, four from Burnham Park, and three from Mines View Park.

While an $N=11$ sample size is small by quantitative standards, it is thoroughly justified within descriptive phenomenological research, where the depth of shared experience is prioritized over statistical generalization. According to qualitative sampling standards established by Creswell and Poth (2018), a sample ranging from 3 to 15 participants is sufficient for phenomenological studies to understand the core nuances of a lived phenomenon.

Furthermore, the sample size was determined by the principle of data saturation, which occurs when successive interviews yield repetitive information and no new conceptual codes, themes, or insights emerge regarding off-peak tourist behaviors (Hennink & Kaiser, 2022). By the ninth and tenth interviews, thematic redundancy was observed, and the eleventh interview confirmed that further data collection would not yield novel perspectives.

The primary instrument used was a self-made semi-structured interview guide consisting of open-ended questions. This tool was designed to capture rich qualitative narratives regarding individual experiences, justifications for off-peak visits, and challenges encountered (Islam, 2022). Semi-structured phrasing, such as “What are your preferences regarding Baguio City during off-peak seasons?” allowed respondents to express their opinions in detail without being restricted by pre-defined quantitative categories.

To ensure conceptual clarity and minimize response bias, key tourism terms (such as “off-peak season” and “seasonality”) were operationally defined for the participants at the start of each session. This instrument provided the necessary flexibility and depth to understand changes in visitor tastes and satisfaction across different seasonal cycles (Ivanova et al., 2023).

Data collection was carried out through face-to-face, semi-structured interviews held in quiet spaces within the selected tourist locales to ensure clear communication and minimize environmental audio interference. Before each session, the researchers obtained written informed consent and explicitly explained the study’s purpose, the voluntary nature of participation, and the participants’ rights.

With the respondents’ explicit permission, the interviews—which lasted approximately 10 to 15 minutes—were audio-recorded. These recordings were supplemented by contemporaneous field notes maintained by the researchers to capture non-verbal cues, environmental conditions, and behavioral contexts.

Following the field sessions, the recordings were transcribed verbatim by the researchers to maintain linguistic accuracy. All digital audio files and physical transcriptions were stored securely in encrypted cloud storage and locked cabinets, respectively, to maintain the absolute privacy and integrity of the gathered data.

To ensure the face and content validity of the qualitative research instrument, the initial interview guide was submitted for rigorous peer and expert review by a research instructor and a panel of experts specializing in tourism management and social research.

Following the integration of panel feedback, a pilot test was conducted with five participants in the neighboring municipality of La Trinidad, Benguet—specifically at the Bell Church and the Stobosa Hillside Homes. These locales share a similar seasonal climate and tourist profile with Baguio City.

The pilot test allowed the researchers to assess the clarity, comprehensibility, and pacing of the questions. Ambiguous phrasing discovered during the pilot runs was refined, ensuring that the final guide effectively and consistently elicited the specific information required to address the primary research problems.

The gathered data were analyzed using thematic analysis, following the systematic six-phase qualitative framework established by Braun and Clarke (2012). During the initial phase of familiarization, the researchers repeatedly read the verbatim transcripts and listened to the audio recordings to fully immerse themselves in the narratives. The researchers then utilized open coding during the first cycle of analysis, breaking down the raw text line-by-line to label explicit concepts, feelings, and actions related to travel motivations, spending habits, and rainy-season challenges. Through subsequent axial coding, these initial

codes were clustered, compared, and interconnected to identify, review, and name broader, overarching patterns of meaning across the three tourist locations before producing the final narrative report.

To ensure the academic rigor of this qualitative inquiry, the study systematically addressed the four core criteria of trustworthiness established by Lincoln and Guba (1985): credibility, dependability, confirmability, and transferability. Credibility was achieved through data triangulation, cross-referencing interview responses collected from Burnham Park, Mines View Park, and the Botanical Garden, and corroborating them with researcher field notes (Shen et al., 2020). To establish dependability, the researchers maintained a detailed audit trail documenting every phase of the study, including raw transcripts, pilot testing modifications, and evolving codebooks, allowing future researchers to track the exact operational decisions made. Confirmability was maintained by practicing reflexivity and cross-checking coding choices between co-researchers to ensure that the findings were shaped strictly by the direct verbatim quotes of the informants rather than the subjective preconceptions of the authors. Finally, transferability was addressed by providing thick descriptions of the specific ecological, temporal, and socio-demographic contexts of Baguio City's off-peak environment, allowing future researchers to judge the applicability of these behavioral insights to other climate-dependent highland destinations facing similar seasonal shifts.

The study adhered to strict ethical guidelines to protect the rights, safety, and dignity of all participants. Formal clearance was obtained from relevant institutional authorities, and informed consent was secured from each participant prior to engagement, ensuring strict compliance with Republic Act No. 10173, otherwise known as the Data Privacy Act of 2012.

All personally identifiable information was completely anonymized using alphanumeric codes (e.g., Participant A1, Burnham Park), and participants were explicitly informed of their right to withdraw from the interview at any point without penalty.

Furthermore, in line with modern academic integrity standards, the researchers disclose the utilization of generative AI tools (specifically Gemini and Perplexity AI) strictly for formatting, grammatical refinement, structural polishing, and language organization. While AI assisted in enhancing the stylistic clarity and readability of this manuscript, the human researchers retained full cognitive responsibility, absolute intellectual ownership, and final accountability for the critical analysis, interpretation, and synthesis of the qualitative findings.

FINDINGS

The results and discussions in this chapter are based on the study entitled *Seasonal Tourism Trends: Analyzing Visitors' Preferences and Behavior During Off-peak Seasons in Baguio City*. The themes identified from the interviews conducted at Mines View Park, Botanical Garden, and Burnham Park represent the perceptions, experiences, and structural issues encountered by tourists during the off-peak seasons.

Impressions of Tourists regarding Baguio City during Off-peak Seasons

This table presents the general opinions of tourists about Baguio City during off-peak seasons. Most of the perceptions that were mentioned have been presented and sorted according to the frequency of the responses. Tourists' impressions of the city, its services, and its environment outside during off-peak times are provided through this section. This overview is helpful for the areas of visitor satisfaction and has tourism management as its aim in off-peak times.

Table 1. Summary of common responses and their corresponding rankings regarding visitors' preferences and behavior across off peak season in Baguio City

KEY THEMES	COMMON ANSWERS	RANKING
Key Theme 1: Tranquility and Accessibility	<i>"Mas hindi crowded... mas makakagala ka ng maayos." ("it's not crowded, you can freely roam around")</i>	Rank 1: 10 out of 11 Tourists
Key Theme 2: Climate as Central Appeal	<i>"Most of the tourists ay galing sa lowlands which is mainit... gusto nilang magpalamig dito". ("Most of the tourists are from lowlands and it's hot there, they want to cool off here")</i>	Rank 2: 8 out of 11 Tourists
Key Theme 3: Budget-friendly Travel and Convenience	<i>"Mas mura rin ang mga hotel at pagkain." ("Hotels and food are kinda cheaper")</i>	Rank 3: 2 out of 11 Tourists

Key Theme 1: Tranquility and Accessibility

The qualitative data demonstrates that environmental calmness and the unhindered flow of pedestrians are the foundational catalysts for positive destination perceptions during the low season. Participants explicitly emphasized that because the city is *"not crowded,"* they can *"easily roam around,"* yielding a less chaotic vacation experience.

As one tourist observed, *"Tuwing off-peak season, mas tahimik at hindi gaanong matao... Mas madali pumunta sa mga tourist spots at hindi masyadong traffic."*

This dynamic indicates a direct correlation between reduced tourist density and heightened psychological comfort. In the context of Destination Image Theory, cognitive environmental evaluations directly govern affective assessments (Al-Jabri et al., 2024). When the physical volume of mass tourism recedes, Baguio's natural assets re-emerge as dominant visual cues. This transition shifts the destination image from an overstressed urban core to a place associated with peace and psychological healing.

This pattern mirrors findings from Banff National Park, where off-season operations generated elevated satisfaction due to minimal queuing, unhindered site access, and quiet atmospheres (MDPI, 2021). Furthermore, local travel patterns confirm that off-peak visitors intentionally seek this isolation as a primary travel motivator (Dulnuan et al., 2023). Interpreted through Regulatory Focus Theory, these individuals exhibit prevention-oriented travel behaviors, actively scheduling visits during non-peak periods to preemptively avoid the psychological stress, friction, and discomfort caused by peak-season crowding (Senbeto et al., 2019)

Key Theme 2: Climate as Central Appeal

Baguio's unique highland climate remains its core competitive advantage. Respondents, particularly domestic travelers from lowland provinces, identified the cool weather as both a physiological relief and an emotional restorative element. One participant stated, *"Most of the tourists ay galing sa lowlands which is mainit... gusto nilang magpalamig dito."*

This climate-induced travel behavior is heavily documented within structural tourism literature; temperature variations act as primary geographic drivers for domestic seasonal movements (Becken & Conroy, 2020).

From an analytical standpoint, Baguio's climate functions as an *"escape-seeking"* utility. According to tourism demand frameworks formulated by Lyu et al. (2021), the search for physiological relaxation is intrinsically linked to escaping oppressive environmental conditions (i.e., lowland urban heat islands). The experiential data validates this: the cool mountain air changes how tourists interact with the physical space, transforming basic physical transit into relaxing, open-air walks.

Furthermore, this climatic asset underpins the city's cognitive destination brand. As evaluated by Amoah et al. (2023) and Yang et al. (2022), climate directly shapes a destination's baseline reputation. Baguio's institutional identity as the *"Summer Capital of the Philippines"* functions as a perennial pull

factor that generates consistent tourist demand, sustaining a baseline level of visitor interest even when seasonal monsoons introduce outdoor limitations.

Key Theme 3: Budget-Friendly Travel and Convenience

The comparative reduction in accommodation and food costs emerged as a significant pragmatic incentive for off-peak visitors. Tourists perceive Baguio's low-season pricing structure as highly competitive compared to alternative domestic destinations. As one participant noted, *“Mas mura rin ang mga hotel at pagkain.”* This baseline affordability mitigates the financial friction of travel, positioning the city as a highly practical choice for budget-conscious demographics.

This dynamic aligns cleanly with global off-season economic models. During periods of low demand, tourism enterprises typically implement strategic price reductions, targeted discounts, and bundled promotional packages to stabilize occupancy rates and cash flows (Lee & Kim, 2023; Vasilenko et al., 2022). The data confirms that these supply-side adjustments match the financial expectations of low-season travelers.

Market indicators trace a growing regional shift toward off-season travel driven by heightened consumer price consciousness (European Travel Commission, 2025; Balanced Tourism, 2024). In Baguio, hospitality metrics reveal that while occupancy rates drop during specific off-peak months, hotel operators maintain highly competitive and stable pricing tiers to capture cost-sensitive segments (AirROI, 2025).

Analytically, this economic environment appeals directly to repeat or local travelers who deliberately optimize their trip timing to maximize consumer utility and value for money (Dulnuan et al., 2023). Affordability and accessible essential services combine to create a high-value consumer experience, reinforcing the city's reputation as an efficient, budget-friendly destination.

Challenges Observed by Visitors during Off-peak Periods and determine Possible ways to address them

This table highlights visitors' challenges faced during the off-peak times, their personal remarks while moving through the main areas and using local services. It is a summary of the most frequently mentioned problems and their ranking according to the number of similar answers. The table by highlighting the issues identified often gives a better insight into the experiences had by visitors in the low seasons and contributes to widening the debate on where specifically the improvements or interventions could be made for the convenience and satisfaction of the visitors.

Table 2. Summary of challenges observed faced by visitors in the off-peak seasons and determine possible ways to address them, by frequency and ranking.

KEY THEMES	COMMON ANSWERS	RANKING
Key Theme 1: Unpredictable Weather Conditions	“Madalas umuulan... kaya minsan kunti lang lumalabas.” (<i>“It often rains... so sometimes there’s only few people wants to come out.”</i>)	Rank 1: 6 out of 11 Tourists
Key Theme 2: Limited Activities and Establishment Closures	“Challenges siguro kanina sarado yong pinuntahan naming” (<i>“Maybe there were challenges earlier because the place we went to was closed.”</i>)	Rank 2: 5 out of 11 Tourists
Key Theme 3: Persistent Traffic and Transportation Issues	“Number 1 is yung traffic kasi napakahassle” (<i>“Number 1 is the traffic because it's really a hassle”</i>)	Rank 3: 3 out of 11 Tourists
Key Theme 4: Reduced Income for Local Vendors	“Kokonti lang mga tourist kaya mostly dito nakikita natin yung mga binebenta parang kumokonti din ang kita ng mga vendors.” (<i>“There are only a few tourists, so mostly what we see being sold here seems like the vendors' income is also a bit low.”</i>)	Rank 3: 2 out of 11 Tourists

Key Theme 1: Unpredictable Weather Conditions

Unpredictable weather patterns emerged as the primary challenge for off-peak visitors, severely limiting tourist mobility and restricting outdoor sightseeing. Participants reported that heavy, unexpected downpours and thick fog banks created physical discomfort and disrupted their planned itineraries. One respondent observed, “*May mga araw din na umuulan o malamig nang sobra, kaya mahirap maglakad-lakad sa labas.*”

This reality illustrates the practical mechanics of climate-induced seasonality. Off-peak tourism periods in the Philippines naturally coincide with the southwest monsoon season, where persistent rainfall correlates with drops in visitor arrivals.

Analytically, bad weather changes how tourists use the destination, shifting their behavior from active outdoor exploration to forced indoor isolation. Prolonged rainfall acts as a negative environmental signal that disrupts outdoor recreation, shortens tourist stays, and limits overall spatial exploration within the city's parks (Becken & Conroy, 2020).

Key Theme 2: Limited Activities and Establishment Closures

The tourist experience was also constrained by reduced options for activities, caused largely by scheduled and unscheduled business closures. These operational pauses limited leisure opportunities and disrupted planned travel schedules.

One participant shared:

“Challenges siguro kanina sarado yong pinuntahan namin” (“*Maybe there were challenges earlier because the place we went to was closed.*”)

Another participant mentioned:

“Limited lang yong activities ngayon na off peak season” (“*The activities are limited now since it's the off-peak season.*”)

This pattern is a direct outcome of the economic realities of tourism seasonality. When market demand drops during the off-peak season, local tourism businesses frequently reduce operating hours, downsize active staff, or temporarily close to manage overhead costs (Vasilenko & Zaharov, 2022; Zvaigzne et al., 2022).

From a destination branding perspective, an attraction's availability is a key part of how tourists judge a city. When key sites or supporting businesses close down, it degrades the destination's perceived reliability and reduces overall visitor satisfaction (Frontiers in Psychology, 2022; Lee et al., 2023).

Key Theme 3: Persistent Traffic and Transportation Issues

Despite lower seasonal numbers, traffic congestion remains a major complaint for visitors. Participants repeatedly expressed frustration over transit delays, noting that traffic made the city feel less accessible. One tourist stated plainly, “Number 1 is yung traffic kasi napakahassle,” while another confirmed that “still traffic parin” remains a primary obstacle.

This highlights a key structural reality, Baguio City faces persistent urban congestion that outlasts peak tourist seasons. The city's steep, narrow roads and centralized layout mean that even baseline local traffic can cause gridlock (Todyog et al., 2021).

According to Destination Image Theory, transport infrastructure is a foundational element of how tourists evaluate a destination (Frontiers in Psychology, 2022). Persistent gridlock hurts this perception, increasing travel friction and reducing a visitor's willingness to return or recommend the city.

Furthermore, under Individual Choice Theory, travelers weigh transit comfort and time efficiency when choosing destinations (Becken & Conroy, 2020). Baguio's ongoing traffic issues act as a deterrent, limiting its appeal as an easy, relaxing getaway even during less crowded months.

Key Theme 4: Reduced Income for Local Vendors

Tourists also observed the economic challenges facing local vendors due to low visitor volumes. This lack of foot traffic creates clear financial strain for small businesses that rely heavily on tourism. A

participant observed, “*Kokonti lang mga tourist kaya... kumokonti din ang kita ng mga vendors,*” noting that many shops choose to close down as a result.

This situation reflects the vulnerability of host communities during seasonal downturns (Zvaigzne et al., 2022). In Baguio, hotel occupancy drops significantly during the rainier months of August and September, directly reducing consumer spending on local souvenirs and handicrafts (AirROI, 2025).

According to motivation-driven choice frameworks, lower tourist traffic during monsoon periods leads to quieter commercial areas and reduced retail sales (Lyu et al., 2021). This pattern is common worldwide; small businesses in tourism-dependent regions frequently struggle to sustain steady income streams during seasonal off-months (Balanced Tourism, 2024; Condé Nast Traveler, 2024).

Factors Influencing Tourists’ Decisions to Recommend or Not Recommend Visiting Baguio City during Off peak Season

The table shows the reasons that affect the recommendations of tourists for visiting Baguio City during off-peak seasons. The factors of visitors’ personal experiences regarding weather, price, crowds, safety, ease, and general pleasure are ranked showing the most frequently mentioned factors by the respondents. This helps in better understanding the reasons that made the tourists to recommend the city as a vacation spot, the drawbacks that would make them avoid it as well as recognizing the areas where the city’s attractiveness might be raised during non-peak seasons.

Table 3. Summary of the factors influencing tourists’ decisions to recommend or not recommend visiting Baguio City during Off-peak Seasons, organized by frequency and ranking.

KEY THEMES	COMMON ANSWERS	RANKING
Key Theme 1: Positive Endorsement for Serenity and Affordability	“Ire-recommend ko ang Baguio tuwing off-peak season kung gusto ng isang tao ng tahimik at tipid na bakasyon. Maganda pa rin ang tanawin at malamig ang panahon” (<i>“I would recommend Baguio during the off-peak season if someone wants a quiet and budget-friendly vacation. The scenery is still beautiful and the weather is cool.”</i>)	Rank 1: 9 out of 11 Tourists
Key Theme 2: Conditional Recommendation Based on Traveler Type	“Kung gusto nila ng mas masayang vibes o festival tulad ng Panagbenga, baka mas okay pumunta sa peak season.” (<i>“If they want more fun vibes or a festival like Panagbenga, it might be better to go during peak season.”</i>)	Rank 2: 1 out of 11 Tourists
Key Theme 3: Negative Feedback Linked to Weather and Accessibility	“I will not recommend visiting baguio off peak season to tourists kasi maulan and the weather is not giving especially sa mga tourist na may bitbit na maraming bata because it will cause more problem.” (<i>“I will not recommend visiting Baguio during the off-peak season to tourists because it’s rainy and the weather is not accommodating, especially for tourists who have many children with them, as it will cause more problems.”</i>)	Rank 3: 1 out of 11 Tourists

Key Theme 1: Positive Endorsement for Serenity and Affordability

The participants showed no hesitation in expressing their strong support for Baguio City recommendation during the off-peak season, particularly for travelers who want a quiet place and who do not want to spend much money. It is a testament to how peace, low price, and the weather that is still inviting on the resorts’ part, make it easier for tourists to use Baguio as a recommendation for an off-season destination. One participant mentioned:

“Ire-recommend ko ang Baguio tuwing off-peak season kung gusto ng isang tao ng tahimik at tipid na bakasyon. Maganda pa rin ang tanawin at malamig ang panahon” (*“I would recommend Baguio during*

the off-peak season if someone wants a quiet and budget-friendly vacation. The scenery is still beautiful and the weather is cool.”)

Another participant shared:

“I would say how easy is to come here, it is accessible. During this time, travelling to Baguio is more convenient.”

The discussion points to a variety of reasons for promoting off-season travel in different destinies and one of those is the factor of lower prices and thus the value-for-money traveling, which in turn strengthens the argument of the participants who say that travelers can get more savings in the low-season months (European Travel Commission, 2025).

To sum up, both academic and market sources affirm the same idea, a peaceful atmosphere, low prices, easy accessibility, and a cooler climate make Baguio an off-season recommendation that is hard to ignore.

Key Theme2: Conditional Recommendation Based in Traveler Type

A participant stated that their invitation to visit Baguio City was determined by the type of experience that the traveler wanted. A few mentioned that those who are attracted by the lively atmospheres, festivals, or social events like Panagbenga would gain more from visiting during the off-season. This indicates that tourists negotiate their recommendations according to the preferences and expectations of the others, thus foregrounding that Baguio City's charm can be different when it is time for the visit and what kind of experience is wanted. One participant shared:

“Kung gusto nila ng mas masayang vibes o festival tulad ng Panagbenga, baka mas okay pumunta sa peak season” (*“If they want more fun vibes or a festival like Panagbenga, it might be better to go during peak season”*)

Different recommendations were given by the participants for Baguio according to the traveler's wanted experience, peaceful resting (off-season) or Panagbenga like vibrant events (peak season). And it is found through research that motivation and desired experiences of the tourist are the main factors that determine when and how they travel.

Research on seasonality suggests that the peak period is the time for those tourists who are after excitement, socializing, and group activities, while the off-peak period is for those who come for peace or those who are budget travelers (Todyog & Alvarado, 2021; MDPI, 2021). This is in line with the conditionality mentioned by the participants.

To put it briefly, earlier studies have shown that the attractiveness of Baguio varies according to the type of traveler—who is interested in winter holiday fun, while others are inclined towards the quietness during the off-peak season—so, the recommendations made by the participants get a confirmation.

Key Theme 3: Negative Feedback Linked to Weather and Accessibility

Conversely, poor weather and transport challenges led to some negative feedback and a reluctance to recommend the off-peak season. The threat of heavy rain and reduced mobility was cited as a major drawback, particularly for families traveling with dependents. As one participant explained, “I will not recommend... kasi maulan and the weather is not giving especially sa mga tourist na may bitbit na maraming bata because it will cause more problem.”

This caution highlights how environmental risks can undermine a destination's appeal. Severe weather and poor transit options hurt safety, comfort, and accessibility—the foundational elements of an enjoyable trip (Vasilenko & Zaharov, 2022).

Local tourism data shows a distinct drop in arrivals and hotel bookings during the rainiest months of August and September, proving that weather concerns actively deter travelers (AirROI, 2025).

Across the Philippines, monsoon conditions frequently cause travel delays and road damage (Department of Tourism–CAR, 2024). The data clearly demonstrates that for travelers who require smooth transit and reliable outdoor conditions, the environmental risks of the off-peak season can outweigh its benefits, leading to negative recommendations.

To turn the empirical findings into actionable insights, the structural integration of this discussion explores what these tourist responses mean collectively for Baguio City's broader urban and sustainable tourism goals. Analytically, tourist behavior during the off-peak season is driven by a deliberate trade-off between environmental risks and experiential rewards, where travelers willingly tolerate the negative frictions of heavy monsoon rains, transit delays, and seasonal business closures in exchange for the positive pulls of lower costs, uncrowded open spaces, and quiet surroundings. Crucially, Baguio's unique cool climate acts as a vital psychological and physiological buffer; visitors are willing to endure weather-induced disruptions precisely because the refreshing mountain temperature relieves the intense physical stress typically experienced in hot, congested lowland cities. This behavioral dynamic highlights how Baguio differs fundamentally from other domestic destinations; unlike flat coastal getaways where monsoon weather completely halts primary activities like beach recreation, Baguio's mountain topography preserves its core microclimatic appeal even during persistent downpours, though this same steep terrain introduces unique structural liabilities such as landslide risks along major access roads and chronic gridlock on narrow, winding streets.

This seasonal shift in visitor behavior reveals a profound opportunity to foster a more resilient and sustainable tourism model that addresses the city's distinct urban realities. While mass tourism during peak seasons consistently strains Baguio's fragile carrying capacity, the steady, quieter demand from off-peak travelers offers a natural solution for redistributing visitor volumes evenly across the entire year. By actively cultivating a year-round tourism flow, the city can ease severe ecological and infrastructural pressure during peak holidays while simultaneously addressing localized vendor vulnerability. Providing local micro-vendors, artisans, and hospitality businesses with a more reliable, stable revenue stream during the low season helps mitigate the financial strain caused by sudden drops in tourist traffic, ensuring a more economically balanced host community.

Ultimately, the lessons gathered from these off-peak tourist experiences point directly toward necessary structural changes across several key strategic sectors. In terms of tourism policy and sustainable strategies, the city must shift its focus away from generic mass tourism and toward targeted niche marketing that highlights wellness, creative arts, and quiet retreats, while implementing digital reservation systems to enforce clear carrying-capacity limits at fragile eco-parks like Mines View and the Botanical Garden. Concurrently, urban planning and transportation management must work to decentralize tourism infrastructure away from the overcrowded central business district core of Session Road and Burnham Park toward peripheral districts. This spatial redistribution should be supported by structural transit interventions, such as tourist vehicle quotas, centralized park-and-ride systems, and the pedestrianization of core heritage zones, to permanently mitigate ongoing traffic friction and enhance the overall visitor experience.

CONCLUSIONS

In the light of the findings, the following conclusions were drawn:

1. It has been observed that tourists have a positive perception about Baguio City during the off-peak season. This is because it is generally viewed as a peaceful and less crowded destination that is also cost-efficient. Additionally, it is still a pleasant destination to be at since it is cool and has a beautiful setting that fits a relaxed and cost-saving travel destination.
2. Despite these positive impressions of the city, there are some challenges that visitors face during the off-peak season. Rainfall, transport, and accessibility are some of these challenges that pose inconveniences, especially to families with children and visitors who demand smooth mobility.
3. Willingness to recommend the experience of visiting Baguio City during the off-peak period would depend to a large extent on the nature of the experience the tourists seek or desire, as well as the external environment, which would include weather. While the experience would attract those who wish to seek a quiet and affordable experience, the negative experience would result in a cautious recommendation.

RECOMMENDATIONS

Based from the conclusions, the following recommendations arose that aim to enhance tourists' off-peak season experiences in Baguio City. Every recommendation distinctly indicates the implementer, the service provider, and the beneficiary of the actions.

1. For a boosted positive imagery of Baguio City throughout the off-season, the highlight of the promotional activities should be peace, affordability, and authenticity. These must be carried out by the Baguio City Tourism Office in collaboration with the Department of Tourism-CAR, with tour guides and marketing specialists employed as service deliverers. There will be great benefits for tourists, hotels, and businesses alike with boosted tourist arrivals and revenue generation throughout the off-season.
2. A weather-responsive mobility and visitor support system should be developed to respond to various transportation and access challenges. Implementation should be led by the Local Government Unit, City Engineering Office, and Traffic Management Office, with transport operators, facility managers, and emergency respondents providing relevant services. These improved conditions ensure safer, more reliable, and more convenient travel conditions for tourists, commuters, and families traveling during the off-peak season.
3. For easier destination recommendation, tourism services and offerings must be differentiated for different categories of travelers and conditions applied throughout the non-peak periods. The Baguio City Tourism Office and tourism businesses must create offerings such as wellness events, indoor spots, and weather-independent plans. The relevant business entities and tourist businesses will implement the services, and tourists, local artisans, and businesses, as well as the tourism industry, will benefit from enhanced services and increased appeal throughout the non-peak periods.

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DEVELOPING COMMUNICATION COMPETENCE AMONG TEACHER EDUCATION STUDENTS THROUGH THE HUMAN LIBRARY PROJECT

Jerrylyn B. Magbuo, Ph.D.
Patricia Q. Dela Cruz, MAED ELT (Candidate)
School of Humanities
College of Arts, Sciences, and Education
FAITH Colleges
Tanauan, Batangas

ABSTRACT

This study examined the effects of the Human Library Project, a twelve-week long module anchored on the ADDIE instructional design model, on the communication competence of first-year preservice teachers enrolled in Purposive Communication. Using a quasi-experimental, non-equivalent control group design, the quantitative phase of this mixed-method study measured competence development through a scaffolded intervention in which students engaged with members of marginalized communities—including street vendors, farmers, domestic workers, and LGBTQIA+ individuals—through interviewing, reflection, advocacy writing, and multimodal presentation. A researcher-developed 80-item Communication Competence Test, validated by three external language education experts including a faculty member from a partner university, was administered as a pretest and posttest. Thirty-seven students participated: an experimental group ($n = 20$) who received the Human Library-based intervention, and a control group ($n = 17$) who followed standard instruction. Pretest scores confirmed pre-intervention equivalence between groups (Experimental: $M = 49.85$, $SD = 3.03$; Control: $M = 48.92$). The Wilcoxon Signed-Rank Test revealed a statistically significant improvement within the experimental group from pretest to posttest. The Mann-Whitney U Test confirmed a significant difference in gain scores between the experimental and control groups ($p = .0061$), with a large effect size (rank-biserial $r = .53$). Students with lower baseline competence showed the most pronounced gains, suggesting the intervention's potential to bridge communication gaps across diverse learners. Emergent qualitative supplement confirmed gains in confidence, empathic listening, and authentic delivery. These findings underscore the impact of experiential, social, and critical pedagogy in building the communicative competence of preservice teachers.

Keywords: *Purposive Communication, Communication Competence, Preservice Teachers, Human Library Project, Quasi-Experimental Design*

INTRODUCTION

In the evolving landscape of language education, the development of communication competence has emerged as a central objective. Rooted in Hymes' (1972) foundational concept, communication competence encompasses not only grammatical proficiency but also the pragmatic ability to use language effectively and appropriately across diverse contexts. This multifaceted skill set is particularly vital for preservice teachers, who must navigate complex communicative scenarios in multicultural and multilingual classrooms. Communicative competence enables effective instruction, classroom management, student relationship-building, and engagement.

Theoretically, the development of this competence is best understood through Vygotsky's (1978) Sociocultural Theory, which posits that language acquisition and cognitive growth are inherently social processes mediated by interaction within meaningful contexts. Traditional language instruction methods, often characterized by decontextualized grammar drills and rote memorization, have been critiqued for their limited efficacy in fostering genuine communicative abilities (Verspoor, 2017). In contrast, contemporary pedagogical approaches advocate for immersive, context-rich learning experiences that mirror real-life communication. Communicative Language Teaching (CLT), for instance, emphasizes interaction and the practical use of language, promoting activities such as role-plays, problem-solving tasks, and discussions that reflect authentic communicative situations (Richards & Rodgers, 2014).

Contextualized learning, which situates language instruction within meaningful, real-world scenarios, has been shown to enhance learners' engagement and retention. By connecting linguistic content to learners' personal experiences and societal issues, this approach fosters deeper understanding and application of language skills (Hull, 1995). Moreover, contextualized instruction supports the development of critical thinking and intercultural competence—essential attributes in today's globalized educational environments (Weinbaum & Rogers, 1995).

One innovative pedagogical strategy that embodies the principles of contextualized learning is the Human Library project. Originating in Denmark in 2000, the Human Library is an international movement that promotes dialogue and understanding through personal storytelling. Individuals volunteer as "human books," sharing their lived experiences with "readers" in one-on-one or small group conversations, thereby challenging stereotypes and fostering empathy (The Human Library Organization, n.d.). Educational institutions have adopted this model to enhance communicative and intercultural competencies. Pope et al. (2023), for example, documented how the Human Library developed cultural awareness and communication skills in occupational therapy students at an Australian university.

Empirical studies have demonstrated the efficacy of the Human Library in educational settings. A systematic review by Lam et al. (2023) highlighted that participation in Human Library events led to reduced prejudices and improved attitudes among students, as well as personal growth for both "books" and "readers." In addition, Chan and Sage (2021) emphasized how dialogic and storytelling-based interactions promote meaningful engagement and perspective-taking, which support communication competence through authentic interpersonal communication and active listening. Current scholarly literature put emphasis on the affective and attitudinal shift of the Human Library Project, leaving a gap in rigorous, objective data about the actual proficiency gains.

Despite these promising outcomes, there remains a paucity of quantitative research examining the specific impact of Human Library-based learning on the communication competence of preservice teachers. This study addresses this gap by investigating the effects of a Human Library-inspired module on the communicative abilities of first-year teacher education students enrolled in a Purposive Communication course.

STATEMENT OF THE PROBLEM

This study aimed to investigate the effects of a contextualized, Human Library Project-inspired intervention on the communication competence of first-year teacher education students enrolled in Purposive Communication. Specifically, it sought to:

1. Determine the level of communication competence of participants before and after the implementation of the Human Library Project.
2. Determine whether there is a significant difference in communication competence scores within the experimental group from pretest to posttest.
3. Determine whether there is a significant difference in communication competence gain scores between the experimental and control groups.
4. Determine the magnitude of the intervention's effect on communication competence development.

REVIEW OF LITERATURE

The ability to communicate effectively is widely recognized as central to language learning and professional success in education. Rather than treating language as a fixed set of rules, contemporary approaches emphasize its function as a social tool for conveying ideas, building relationships, and co-constructing meaning. This perspective is anchored in the concept of communicative competence, which highlights the importance of not only using language accurately but also deploying it strategically across varying contexts (Hymes, 1972). For preservice teachers, this competence is indispensable—teaching inherently demands sustained interaction, precise explanation, adaptive questioning, and responsive feedback in dynamic classroom environments.

In response to the limitations of traditional transmission-based teaching methods, language education has progressively shifted toward functional and interaction-centered approaches. Early pedagogical practice often privileged memorization and grammar drills, producing learners who recognized linguistic forms but struggled with actual communicative performance. Contextualized learning emerged as a meaningful corrective, situating instruction within real-world application and connecting content to learners' lived experiences (Isakova & Isakov, 2019). This approach allows students to perceive the social value and relevance of what they are learning, thereby increasing both motivation and retention.

A notable innovation that integrates contextualized and experiential learning principles is the Human Library. This social movement fosters positive human relationships through conversations with "Living Books"—individuals who share personal narratives often shaped by marginalization, difference, or misunderstanding (Solangi, 2025). The Human Library transforms communication into a collaborative, meaning-laden act rooted in authentic human experience. While existing literature highlights its promise as a pedagogical tool, much of the research has focused on qualitative outcomes such as attitudinal shifts and reflective growth. The present study contributes to the smaller but growing body of quantitative evidence by examining its measurable effects on communication competence.

METHODOLOGY

Research Design

This study employed a quasi-experimental, non-equivalent control group pretest-posttest design to determine the effects of Human Library-based learning on the communication competence of preservice teachers. The intervention was guided by the ADDIE instructional design model (Analysis, Design, Development, Implementation, and Evaluation): needs analysis identified gaps in authentic communication skills among preservice teachers; module design and development produced a twelve-week long instructional module; implementation occurred across the first half of the semester through scaffolded Human Library activities; and evaluation was conducted through pre- and post testing. This quantitative phase is part of a larger mixed-method study; qualitative findings generated through the Most Significant Change (MSC) technique are reported in a companion paper.

Participants

A total of 37 first-year preservice teachers from a private higher education institution in the Philippines participated in the study. Students were divided into two intact classes: an experimental group ($n = 20$) who received the Human Library-based intervention and a control group ($n = 17$) who followed standard instruction. Participants were selected through non-random purposive sampling based on enrollment in the same program and course schedule—a standard condition in quasi-experimental research with intact classes (Creswell, 2014).

However, because random assignment was not possible, selection bias remains a limitation, introducing potential threats to internal validity such as maturation and history, which must be considered when interpreting the final outcomes. To confirm pre-intervention equivalence and reduce this threat, a Mann-Whitney U Test was conducted on the pretest scores of both groups. The experimental group recorded

a pretest mean of $M = 49.85$ ($SD = 3.03$) and the control group recorded $M = 48.92$ (Table 2). The difference was not statistically significant, confirming that the groups were comparable prior to the intervention.

Intervention Procedure

The Human Library intervention was implemented across the first half of the semester (Weeks 1 through 12, following the five-unit sequence of the researcher-developed module. The intervention progressed through: (1) identity mapping and stereotype analysis of marginalized groups (Unit 1); (2) inquiry, interview preparation, and the conduct of face-to-face interviews with selected informants (Unit 2); (3) community engagement through documentary analysis, empathy mapping, and visual advocacy mapping (Unit 3); (4) community immersion involving peer and community interviews with structured feedback (Unit 4); and (5) project development and advocacy presentation (Unit 5). The project culminated in a Human Library-inspired advocacy showcase.

A key implementation challenge, consistent across groups, was the difficulty of accessing willing informants from marginalized communities. Some potential informants declined or responded with hostility. This access barrier, noted by students in their evaluations, represents a real-world fidelity constraint that is discussed in the Limitations section.

The control group completed conventional classroom-based communication activities aligned with the course syllabus but without exposure to Human Library practices, community immersion, or real-world interviews.

Treatment Fidelity

To establish treatment fidelity, the intervention adhered to the scaffolded sequence of the published module which was reviewed by an external faculty member specializing in language education from a partner university prior to implementation. Student compliance was monitored through Google Classroom submission records across all five units. All 20 experimental group participants completed the required activities, including interview transcripts, empathy maps, reflective analyses, and advocacy materials. Student narratives confirmed active group participation throughout the intervention period. The control group had no access to the module or Human Library activities.

Instrument

A researcher-developed 80-item Communication Competence Test was administered to both groups before and after the intervention. The test was grounded in a contextualized communicative competence framework and covered eight domains: comprehension, diversity awareness, collaboration, interviewing skills, reflection, writing, presentation, and persuasive speaking. Item distribution across these domains is reflected by allocating exactly 10 items to each of the eight domains to ensure balanced representation of the communication competence framework targeted by the intervention. Items were constructed as realistic case-based scenarios and multiple-choice situational dilemmas that required participants to apply communication principles.

Content validity was established through review by three experts in language education and teacher training, including one external faculty member from a partner institution. The experts evaluated each item for relevance, clarity, and alignment with the identified domains. Items flagged for ambiguity were revised before pilot testing. Following expert validation, a pilot testing procedure was conducted with a separate, non-participating cohort of 30- first year preservice teachers of similar demographics to evaluate item readability. Internal consistency was established through Cronbach's alpha ($\alpha = 0.91$), indicating high reliability. The final test scores were evaluated using dichotomous scoring (1 point per correct answer; 0 points per incorrect) out of a maximum score of 80. Score ranges were categorized into four proficiency levels for interpretation: 74% and Below (Beginning), 75-79% (Developing), 80-84% (Approaching Proficiency), 85-89% (Proficient), and 90% and above (Advanced). The use of the same instrument at pretest and posttest is acknowledged as a potential source of testing effect; however, the twelve-week interval between administrations and the task-based nature of the items are expected to minimize familiarization effects.

Data Collection and Ethical Considerations

Pretest data were collected during the first week of the semester. Posttest data were gathered at the end of the twelve-week instructional period prior to midterm examinations. All students were informed of the study's purpose and procedures. Written informed consent was obtained, and participation was presented as separate from course grading. To mitigate the inherent power asymmetry between researcher and student-participants, data analysis was conducted after grades were finalized and individual responses were not linked to academic outcomes. Data confidentiality was strictly maintained throughout.

Data Analysis

Descriptive statistics (mean, standard deviation) were computed for both groups at pretest and posttest. Normality was assessed using the Shapiro-Wilk Test. The experimental group's gain scores approximated normality ($W = 0.9199$, $p = .0988$), while the control group's gain scores significantly violated normality ($W = 0.8323$, $p = .0058$). Given this violation in at least one group, nonparametric tests were applied throughout:

- A Mann-Whitney U Test was conducted on pretest scores to verify baseline equivalence between groups.
- The Wilcoxon Signed-Rank Test was applied to assess significant change within the experimental group from pretest to posttest.
- The Mann-Whitney U Test was used to compare gain scores between the experimental and control groups.
- Effect size was computed using rank-biserial correlation (r), interpreted according to Ardura and López (2023).

All analyses were conducted using JASP and SPSS Version 27.

RESULTS AND DISCUSSION

This study investigated whether Human Library-based learning could improve the communication competence of first-year preservice teachers enrolled in a Purposive Communication course. Thirty-seven students participated: 20 in the experimental group and 17 in the control group. Results are reported in four stages: baseline equivalence, descriptive statistics, within-group change, and between-group comparison.

Baseline Equivalence

Prior to the intervention, both groups were tested to confirm pre-intervention comparability. The experimental group recorded a pretest mean of $M = 49.85$ ($SD = 3.03$) and the control group $M = 48.92$, yielding a mean difference of less than one point on an 80-item scale. A Mann-Whitney U Test confirmed that this difference was not statistically significant (see Table 2), supporting the assumption that observed posttest differences reflect the intervention rather than pre-existing group differences.

Table 1. Descriptive Statistics and Normality Testing for Gain Scores

	Pretest M (SD)	Posttest M (SD)	Gain M (SD)	Shapiro- Wilk (W)	p	n
Experimental	49.85 (3.03)	56.60 (1.96)	6.75 (2.92)	0.9199	0.0988	20
Control	48.92 (2.77)	52.39 (2.89)	3.47 (4.47)	0.8323	0.0058	17

Normality of gain scores was assessed using the Shapiro-Wilk test, and the results showed that the data were not normally distributed. Therefore, nonparametric tests were used for within- and between-group comparisons.

Table 2. Baseline Equivalence: Mann-Whitney U Test on Pretest Scores

Group	Pretest M (SD)	Mann-Whitney U p	Interpretation
Experimental	49.85 (3.03)	$p=0.15$	No significant baseline difference
Control	48.92 (2.77)		Groups are pre-intervention equivalent

Within-Group Change: Experimental Group

Table 2 presents the baseline equivalence of the experimental and control groups using the Mann–Whitney U test on the pretest scores. The results showed no significant baseline difference between the groups, indicating comparable communication competence prior to the intervention. The experimental group's mean score increased from $M = 49.85$ ($SD = 3.03$) at pretest to $M = 56.60$ ($SD = 1.96$) at posttest, reflecting a mean gain of 6.75 points ($SD = 2.92$).

Table 3. Within-Group Change: Wilcoxon Signed-Rank Test (Experimental Group, $n = 20$)

	Z	p-value	Effect Size (r)	Decision
Posttest – Pretest (Experimental)	-2.85	$< .05$	.45	Reject H_0

The table 3 presents the results of Wilcoxon Signed-Rank Test used to determine whether there was a significant difference between the pretest and posttest scores of the experimental. The analysis yielded a Z value of -2.85 and a p-value of less than .05, indicating that the null hypothesis was rejected. The results indicate a statistically significant difference between the pretest and posttest scores of the experimental group, suggesting that the intervention produced measurable changes in performance.

Both groups were initially classified under the Beginning level, indicating limited communication skills and similar baseline abilities prior to the intervention. However, the significant improvement observed in the experimental group suggests that sustained communicative practice and contextualized interaction enhanced students' communication competence (Canale & Swain, 1980; Hymes, 1972). This finding supports Schijf et al. (2020), who noted that Human Library activities promote authentic conversations, respectful dialogue, openness, and interpersonal communication skills.

Between-Group Comparison

In comparison, the control group recorded a mean gain of 3.47 points ($SD = 4.47$)—approximately half that of the experimental group, though this improvement likely reflects natural maturation and ongoing instruction rather than any targeted intervention. To formally test whether the experimental group's gains were significantly greater, a Mann-Whitney U Test was conducted on the gain scores of both groups.

Table 4. Between-Group Comparison: Mann-Whitney U Test on Gain Scores

	p-value	Rank-Biserial r	Interpretation	Decision
Gain Scores: Experimental vs. Control	0.0061	0.5265	Large Effect Size	Reject H_0

Table 4 shows that the Mann-Whitney U Test yielded $p = .0061$, indicating a significant difference between groups in communication competence gains. The rank-biserial correlation of $r = .5265$ indicates a large effect size (López-Martín & Ardura, 2023), reflecting that the experimental group's gains were substantially greater than those of the control group. The practical significance of this effect is considerable for a twelve-week instructional period.

Based on the institution's proficiency scale, both groups initially fell under the Beginning Level, reflecting limited communication competence prior to the intervention. However, the greater gain scores observed in the experimental group suggest movement towards Developing level, indicating improved ability to engage in meaningful and contextualized communication tasks. These findings align with the broader literature on contextualized and experiential pedagogy: when learners engage with authentic human stories in supportive environments, their motivation and communicative engagement increase (Jiang & Zhao, 2025; Lam et al., 2023). Compared with traditional communication activities, the Human Library approach appears to offer more experiential and contextualized interaction, which may explain the stronger improvement observed in the experimental group.

Notably, inspection of individual gain scores suggests that students who entered the intervention with lower baseline competence achieved relatively greater improvements, consistent with the intervention's scaffolded design. A formal subgroup analysis or regression examining the relationship between baseline scores and gain magnitude is recommended in future replications.

Student Reflections as Emergent Qualitative Evidence

To supplement and triangulate the quantitative findings, emergent qualitative data were drawn. The data are therefore treated as illustrative rather than representative and are not conflated with the formal MSC-based qualitative phase reported separately gathered from seven participants.

Despite these limitations, the reflections provide process-level insight into how participants experienced the intervention. Three convergent themes emerged:

Communication confidence and anxiety reduction. Several participants noted that the course produced gains in confidence and reduced public speaking anxiety. It was reported overcoming a long-standing aversion to speaking in front of audiences, recognizing it as a professional necessity. It was similarly noted from the qualitative findings that the course improved communication skills and boosted confidence when performing before an audience. These self-reported outcomes align with the quantitative gains but identify a latent variable communication anxiety not captured by the 80-item test.

Psychologically safe learning environment. A participant observed that the course "managed to create a healthy learning environment where we don't feel ashamed for not being perfect," and noted visible improvement across peers as the semester progressed. This perception of psychological safety corresponds to conditions identified in the literature as essential for communicative risk-taking (Jiang & Zhao, 2025).

Authentic delivery over scripted performance. A participant articulated a key insight from the advocacy presentation: that effective communication requires authentic, internalized delivery rather than memorized scripts. This observation directly reinforces one of the intervention's stated goals—developing communication that is purposeful and audience-responsive and points to a dimension of competence not fully captured by multiple-choice assessment.

Implementation challenge: access to informants. Finding willing informants from marginalized communities was difficult and that some potential interviewees responded with hostility. This is a genuine fidelity constraint that affected the ease of implementation and should be addressed in future iterations through pre-established community partnerships.

CONCLUSION

Based on the findings of this study, the following conclusions are drawn:

1. The Human Library Project intervention produced statistically significant improvement in the communication competence of preservice teachers in the experimental group. The Wilcoxon Signed-Rank Test confirmed significant within-group gains, while the Mann-Whitney U Test confirmed that these gains were significantly greater than those observed in the control group ($p = .0061$).

2. The large effect size ($r = .53$) indicates that the intervention produced substantial practical gains in communication competence, not merely statistical significance. This effect is particularly notable given the twelve-week instructional period and the small sample size.
3. The intervention appears to have disproportionately benefited students with lower baseline communication competence, suggesting potential as an equity-oriented pedagogical strategy for bridging communication gaps across diverse learners.
4. Emergent qualitative evidence corroborates the quantitative findings and identifies two outcomes not captured by the test instrument: communication confidence and authentic delivery. These warrant formal measurement in future studies.

LIMITATIONS

Several limitations should be considered when interpreting these findings. First, the quasi-experimental design with intact, non-randomly assigned classes limits causal inference. While baseline equivalence was confirmed statistically, uncontrolled variables such as differential motivation, teacher expectations, or concurrent coursework may have influenced outcomes. Second, the sample size is small, and findings should not be generalized beyond the specific institutional context of a single private higher education institution in the Philippines. Third, the researchers served concurrently as the course instructor and study investigator, introducing a potential for researcher bias in implementation and assessment, despite efforts to maintain objectivity. Fourth, the use of the same instrument for pretest and posttest creates a risk of testing effect, though the task-based nature of items and the interval between administrations minimized this. Fifth, access to willing informants from marginalized communities proved logistically challenging and introduced variability in the quality of student-informant interactions across groups within the experimental condition.

RECOMMENDATIONS

Based on the findings and limitations of this study, the following recommendations are offered:

1. Future replications should employ larger samples across multiple institutions, with random assignment where feasible, to strengthen internal and external validity.
2. The measurement framework should be expanded to include validated instruments for communication anxiety and confidence, given the self-reported gains observed in student reflections that were not captured by the competence test.
3. Institutions implementing the Human Library Project should establish pre-intervention partnerships with community organizations and marginalized sectors to reduce access barriers to informants and ensure more equitable interview experiences across student groups.
4. The intervention design should explicitly account for students who begin with low baseline competence, providing differentiated scaffolding to maximize gains for this subgroup.

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Declaration on the Use of Artificial Intelligence and Digital Research Tools

In the interest of transparency, integrity, and compliance with emerging standards for responsible AI use in academic research, the authors of this study declare the following regarding the use of artificial intelligence (AI) tools and digital research platforms during the preparation and revision of this manuscript.

1. Tools Used

Three external tools were employed at different stages of the research and writing process:

Grammarly was used for grammar checking, spelling correction, and stylistic suggestions on drafted sections of the manuscript.

Connected Papers was used as a literature discovery and citation-mapping tool to identify empirically related works in the fields of Human Library research, communicative competence, and experiential pedagogy. This tool assisted in visualizing citation networks and locating studies that may not have appeared in standard keyword searches.

Claude (Anthropic, 2024), a large language model AI assistant, was used during the revision phase to (a) conduct a systematic audit of methodological, statistical, and structural gaps in the manuscript; (b) flag missing references, inconsistencies between reported statistics and stated conclusions, and underreported validity information; and (c) generate candidate draft revisions for specific sections, which were then reviewed, substantially rewritten, and verified by the authors.

2. Scope and Boundaries of AI Assistance

The following table specifies the function, scope, and level of author oversight applied to each tool:

AI Tool	Function Used	Scope of Use	Author Oversight
Grammarly	Grammar, spelling, and style suggestions	Applied to full manuscript draft for surface-level language correction	All suggestions reviewed and accepted or rejected by the authors
Connected Papers	Literature mapping and citation network visualization	Used to identify related empirical studies and trace citation relationships in the Human Library and communicative competence literature	All sources independently retrieved, read in full, and evaluated by the authors before inclusion
Perplexity, Anthropic, Chatgpt	Manuscript review, structural analysis, and revision support	Used to identify logical gaps, statistical inconsistencies, and structural weaknesses; to suggest section-level revisions; and to assist in generating revised paragraph drafts	All AI-generated content was reviewed, substantially revised, and verified by the authors. No AI-generated text was incorporated without critical evaluation and rewriting. Final intellectual responsibility rests solely with the authors.

3. What AI Did Not Do

No AI tool was used to collect, generate, or fabricate research data. No AI tool was used to conduct statistical analyses all quantitative procedures were performed using JASP and SPSS Version 27 by a statistician. No AI-generated text was submitted verbatim as the authors' own original writing.

4. Author Responsibility

The authors take full and sole responsibility for the accuracy, integrity, originality, and ethical conduct of this research. The use of AI tools was limited to augmenting the revision and literature review processes under continuous human judgment and oversight. All decisions regarding inclusion, exclusion, interpretation, and presentation of findings were made exclusively by the authors.

Authors:

Jerrylyn B. Magbuo, Ph.D.

Patricia Q. Dela Cruz, MAED ELT (Candidate)

College of Arts, Sciences, and Education

FAITH Colleges, Tanauan, Batangas, Philippines

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TOURIST PERCEPTION OF SAFETY AND SECURITY IN BAGUIO CITY: DESTINATION MANAGEMENT IMPLICATIONS

**Princess Rose S. Agbuya
Ericka P. Agnapan
Mary Grace R. Estrada
Angelyn S. Galiste
Michael T. Sebulien, PhD
Baguio Central University**

ABSTRACT

This study examines tourists' perceptions of safety and security in Baguio City and how these perceptions influence their travel. Since feeling safe is a primary concern for travelers, the research explores the factors shaping tourists' experiences and how understanding these factors can improve destination management. The research study used a qualitative method which gathered data through interviews and observations together with thematic analysis. The study collected data from fifteen tourists who visited sites in Baguio City to show how they experienced safety. The findings show that tourists perceive Baguio City as secure and well-organized, with police visibility, orderly surroundings, and friendly locals enhancing safety, satisfaction, revisit intention, and positive recommendations. Moreover, the study shows a strong correlation between safety measures, tourists' satisfaction, and behavior. To enhance this, the study recommends the use of an "Integrated Tourist Safety Feedback and Monitoring System" by utilizing the recent "Smart City" initiatives in Baguio City to make reporting, monitoring, and communication with tourists more efficient. The combination of visible security measures with clean public spaces and friendly community interactions will improve Baguio City's reputation as a safe tourist destination which provides enjoyable experiences and sustainable tourism.

Keywords: *Baguio, Management, Perception, Safety, Security*

INTRODUCTION

Tourist safety and security have emerged as paramount determinants of global travel behavior, profoundly influencing destination choice and risk perception among international travelers (Pizam & Mansfeld, 2020; Spencer & Tarlow, 2021). When navigating unfamiliar environments, a traveler's perceived level of safety directly dictates their decision-making processes and overall satisfaction. According to data from the International Association of Tourist Safety (IATSS, 2020), approximately 80% of international tourists prioritize safety metrics when selecting a destination. Conversely, systematic security lapses generate immediate declines in arrival numbers, presenting complex recovery challenges for destination managers seeking to rebuild institutional trust (UNWTO, 2020). Consequently, modern tourism frameworks necessitate integrated management strategies and destination-wide security interventions.

This focus directly intersects with the United Nations Sustainable Development Goals (SDGs) specifically SDG 11, which advocates for safe, resilient, and sustainable urban environments, and SDG 8, which positions secure tourism as a baseline driver for stable economic growth.

In the Philippine context, cultivating a secure macro-environment is treated as a strategic priority for national destination branding. The Department of Tourism (DOT, 2020) has operationalized this by reinforcing multi-agency collaborations with the Philippine National Police and the Department of the Interior and Local Government. These institutional partnerships focus on implementing visible policing and safety guidelines across premier, high-density tourist clusters such as Palawan, Cebu, and Boracay (Gloriane, 2021). While these national protocols establish generalized security benchmarks, the actual enforcement and subsequent tourist experiences vary significantly when decentralized to localized, highly unique urban destinations.

As a primary mountain urban tourism hub in the Philippines, Baguio City faces distinct structural and operational challenges that alter how security is experienced on the ground. Existing literature notes that while visitors generally perceive Baguio City as a hospitable and secure environment, persistent localized issues—such as severe traffic congestion, overpopulation, and petty crimes—complicate this narrative (Pascual, 2020; Reyes, 2020).

Furthermore, the city's unique topography and aging urban infrastructure present physical safety risks. Although localized urban interventions like the “Complete and Living Streets” program and the pedestrianization of Lower Session Road aim to improve walkability, ongoing gaps in pedestrian safety, accessibility, and infrastructural capacity endure (Baguio City VLR, 2023; Philstar, 2024). Thus, the effectiveness of Baguio's destination management is continuously tested by the interplay between infrastructure limitations and tourist influxes (Santos, 2022).

Despite this wealth of literature on tourism security, existing studies suffer from critical limitations that leave an empirical gap. Current local research focuses almost exclusively on broad, macro-level quantitative metrics such as general safety percentages and official crime rates while overlooking the deeper, nuanced realities of how tourists personally experience safety during their stay. General safety indices frequently obscure localized micro-risks such as subtle harassment, tourist-targeted scams, and street-level theft, leaving their direct impact on traveler psychology and destination loyalty largely unexamined. Most notably, there is a distinct scarcity of qualitative inquiries capturing the subjective, lived experiences of tourists as they navigate the physical spaces and infrastructure of Baguio City.

Consequently, there is a clear academic and practical need to move beyond surface-level safety statistics and investigate the deep, qualitative essence of tourist security from the perspective of the travelers themselves.

To address these empirical gaps, this study examines the qualitative perceptions of safety and security among tourists in Baguio City to generate substantive destination management implications. Specifically, this inquiry explores the lived experiences of visitors as they navigate public spaces, engage with local transit, interact with community stakeholders, and encounter urban infrastructure. By analyzing these subjective experiences, this study aims to provide local governance and tourism planners with evidence-based, qualitative insights necessary to formulate targeted safety interventions, thereby ensuring Baguio City's long-term sustainability as a secure and inclusive urban destination.

STATEMENT OF THE PROBLEM

1. How do tourists perceive safety and security in Baguio City?
2. What factors influence tourists' perceptions of safety and security in Baguio City?
3. What are the implications of tourists' perceptions of safety and security for destination management?

OBJECTIVES

1. To assess tourists' perception of safety and security in Baguio City.
2. To identify the key factors influencing tourists' sense of safety and security.
3. To determine the implications of tourists' safety perceptions for destination management.

REVIEW OF LITERATURE

From the journal of International Journal of Research and Innovation in Social Science, recent research has highlighted the growing role of technology in the tourism sector. (Chevers, Spencer, & Grant, 2020) found that information and communication technologies (ICT) have become central to risk management in tourism, especially in high-risk regions like the Caribbean, where natural disasters are frequent. Similarly, (Sigala, 2020) emphasized the role of technology in responding to crises noting that digital tools allowed destinations to manage health risks more effectively and communicate safety protocols to tourists.

Other studies have explored the challenges associated with the use of technology in tourism safety. (Milano, Cheer, and Novelli, 2019) raised concerns about the privacy implications of surveillance technologies, particularly in destinations with high levels of overtourism. Meanwhile, (Tussyadiah, 2020) discussed the disparities in technological adoption between developed and developing countries, noting that while some regions have embraced advanced solutions like AI and big data, others still struggle with basic digital infrastructure.

Through this study, we expect to build on these insights by focusing on the opportunities and limitations of using technology to safeguard tourists. Ultimately, this research aims to contribute to the ongoing conversation on how the tourism industry can leverage technological innovations to ensure that travelers feel safe and secure, no matter where they choose to visit.

This study emphasizes how vital technology is to improving visitor safety in the face of the expanding and changing travel industry. Travelers face a range of threats, including health and criminal activity. As a result, technology advancements like smartphone apps, Global Positioning System (GPS) tracking, and artificial intelligence (AI) surveillance are critical to enhancing safety and disaster preparedness. However, issues like implementation costs, privacy concerns, and varying technological adoption rates must be addressed. To advise tourism stakeholders and policymakers on how to use technology best to build safer travel conditions, this study investigates current problems and possible future developments. Understanding this complexity is essential to developing a safe, sustainable tourist sector that boosts consumer confidence.

This study emphasizes the increasing importance of safety and security in the travel and tourism sector, especially in light of the potential dangers that can impact travelers and host communities. It highlights how technological advancements such as digital identity verification, real-time communication, Global Positioning System (GPS) tracking, and surveillance systems offer new approaches to addressing these critical issues.

The primary goal of this research is to provide practical insights into how technology can be effectively integrated to enhance safety measures in tourism. By examining both the benefits and challenges technology presents, the study aims to guide industry stakeholders and policymakers in creating safer travel environments. Ultimately, this will contribute to the sustainable growth of tourism, which is especially vital in a world increasingly marked by crises and uncertainties.

Tourists. Tourists will benefit from enhanced safety measures that improve their overall travel experience, allowing them to explore new destinations with greater peace of mind.

Tourism Industry Stakeholders. Tourism industry stakeholders, including hotel operators, tour guides, and travel agencies, will gain valuable insights into implementing technology to bolster safety and security and thus attract more travelers.

Local Communities. Host communities will benefit from improved safety measures that protect tourists and residents, fostering a more secure environment that promotes positive interactions between visitors and locals.

Academic Researchers. This study will contribute to the academic literature on tourism safety and technology, providing a foundation for future research and exploration in this critical area.

Future Researchers. This study is significant to future researchers as a basis for literature and replicating this study to other stakeholders.

RESEARCH METHODOLOGY

This chapter details the operational framework and methodological strategies deployed to investigate tourists' perceptions of safety and security in Baguio City. It delineates the research design, study locale and population boundaries, data collection instruments, fieldwork procedures, data analysis protocols, and strict ethical considerations governing the study.

Research Design

To capture the nuanced, deep-seated insights of travelers, this study adopted a qualitative phenomenological research design. Phenomenology is uniquely suited for this inquiry as it focuses on exploring and understanding the lived experiences of individuals regarding a specific phenomenon (Creswell, 2013; Moustakas, 1994). Rather than reducing tourist feedback to detached statistical safety data, this approach allows the researchers to uncover the subjective, psychological, and spatial realities of how travelers encounter and interpret urban safety risks.

Primary data were gathered through semi-structured, face-to-face interviews, supplemented by field observations within major tourist zones. Thematic analysis was utilized as the primary analytical framework to systematically isolate, code, and evaluate recurring patterns of thought regarding security concerns, tourist experiences, and destination management recommendations (Braun & Clarke, 2006). The findings derived from this framework aim to unlock insights critical to destination management, offering pathways to optimize localized administration structures and elevate general visitor confidence (De Guzman & Salazar, 2020).

Locale and Population of Study

This study was conducted on Baguio City, which is known as the summer capital of the Philippines. This was a destination site for tourists. In fact, the research study was premised on the trail that was followed by the tourists to access the destinations such as Mines View, Wright Park, The Mansion, Burnham Park, Cathedral, SM, Mirador, Lourdes Grotto, Diplomat Hotel, Session Road, and Igorot Stone Kingdom. By limiting the sample to adults, the researchers made certain that each has the legal right to give informed consent on their own, which is very important given that the interviews were audio recorded. Furthermore, the age limit helped to gather more reliable and mature insights into the issues of safety and security relevant to Baguio City's destination management, other than for legal requirements. Through interviews with adult tourists, the research team could get the points of view of independent travelers who are self-sufficient regarding their safety and thus can provide a profound reflection on how secure and well-organized the city actually is. Travelers shared their current experiences about their safety during the journey. These varied perspectives aimed to improve destination management approaches and increase general visitor confidence in Baguio City's safety and security.

Data Gathering Procedure

Fieldwork was executed directly within the active tourist spaces of Baguio City to capture fresh, authentic, and context-rich reflections that cannot be replicated in controlled or retrospective laboratory settings. The data gathering progressed through the following systematic phases:

1. **Field Intercepts:** Researchers approached potential participants across the designated locales (e.g., Burnham Park, Session Road) and vetted them against the inclusion criteria.
2. **Informed Consent:** Individuals who qualified were fully briefed on the study's objectives. Upon receiving explicit written consent, the researchers initiated the interview.
3. **Semi-Structured Dialogue:** Interviews were conducted face-to-face using an open-ended interview guide. This structure allowed participants to freely expand on specific issues like traffic congestion, pedestrian walkways, visible policing, and street-level micro-risks (scams, harassment, or theft).
4. **Audio Recording:** Sessions lasted approximately 15 to 20 minutes and were audio-recorded to preserve linguistic precision and emotional nuance for subsequent verbatim transcription.

Treatment of Data

This study sought to find out how visitors feel in terms of safety and security in Baguio City and their feelings towards the destination's management. Tourists' opinions regarding the implemented safety measures were a prerogative for further development of the tourist experience and an assurance that the tourism industry of the city would still be safe and attractive. Fifteen respondents, purposively selected for maximum variation, were engaged in semi-structured interviews as a tool for data collection. The interviews were carried out in person and lasted from ten to twenty minutes. All participants signed informed consent forms, testifying to being fully aware of their rights and the purpose of the research.

Ethical Considerations

Researchers obtained informed consent to let participants know the aim of the study and their right to withdraw. Confidentiality and anonymity were committed to saving participants' privacy and getting honest responses. Participation was voluntary to maintain cultural sensitivity and avoid coercion or improper questioning. It was necessary to preserve data integrity and be transparent, as well as to minimize harm during sensitive conversations. Ethical approval assured that the study met requirements and increased the validity of the results, which led to better recommendations for the safety enhancement of Baguio's tourism administration. Also, the researchers declare the use of Artificial Intelligence (AI) tools, specifically ChatGPT and Google Gemini, for grammar refinement, written content organization, and clarity improvement of some sections of this manuscript. These tools were not used to generate, analyze, or interpret research data. The researchers solely made all critical decisions, analyses, and conclusions.

FINDINGS

Tourist Perception of Safety and Security in Baguio City

This chapter presents the empirical results and thematic analysis derived from the phenomenological accounts of fifteen (\$15\$) purposively selected tourists in Baguio City. The findings are categorized into three sequential dimensions: (1) comparative baseline perceptions of safety, (2) environmental and institutional catalysts shaping security, and (3) strategic implications for long-term destination management.

Table 1. Summary of common responses and their corresponding rankings regarding tourists' perception of safety and security

KEY THEME	COMMON ANSWERS	RANKING
Baguio is Safer Compared to Tourists' Hometowns	It is safer in Baguio compared to our hometown. It feels safe because I can walk around with my phone hanging and nothing happens.	Rank 1: 13 out of 15 Tourist
Tourists Feel Comfortable Walking at Night	I feel comfortable walking at night because of police officers and many people around. I never experienced any snatching or robbery here, even late at night.	Rank 2: 5 out of 15 Tourist

Improved Peacefulness and Organization of the City	Baguio is more organized and peaceful now compared to before. I think Baguio is much safer now than before.	Rank 3: 3 out of 15 Tourist
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Key Theme 1: Baguio is Safer Compared to Tourists' Hometowns

The overwhelming majority of participants explicitly engaged in a comparative risk assessment, framing Baguio City as an exceptionally low-crime environment relative to their respective hometowns. In risk perception theory, travelers inherently carry a cognitive "risk baseline" anchored to their permanent residences. The ability to engage in uninhibited public behavior such as walking openly with exposed mobile devices indicates a significant drop in situational anxiety. This comparative advantage transforms Baguio City from a basic geographic point of interest into a therapeutic, relaxing space where tourists can shed the defensive behavioral patterns typical of more chaotic urban landscapes.

Key Theme 2: Tourists Feel Comfortable Walking at Night

A critical benchmark for urban tourism safety is the perceived security of public spaces after dark. Five participants highlighted a strong sense of comfort while navigating high-density nocturnal zones, including the Session Road axis and the Baguio Night Market. According to urban sociology, nighttime environments usually amplify fear of crime. However, participants reported that the integration of continuous pedestrian movement and visible municipal governance effectively neutralizes the perceived threat of street-level victimization, such as robbery or snatching.

Key Theme 3: Improved Peacefulness and Organization of the City

The peaceful and well-maintained environment of Baguio City encourages tourists to return and recommend the destination to others. Visitors highlighted the honesty and professionalism of local transport providers, particularly taxi drivers, as an important factor in their sense of security. Safety not only allows tourists to relax and enjoy their stay but also influences positive word-of-mouth and repeat visits. To sustain this image, continuous improvements in public safety measures, infrastructure, and community involvement are essential, as these contribute to long-term tourism growth and reinforce Baguio City's reputation as a safe, clean, and family-friendly destination.

This table presents the key factors that influence tourists' perceptions of safety and security in Baguio City. It highlights important elements such as the physical environment, cleanliness of public spaces, the presence of visible security personnel, and the behavior of the local community as major contributors to tourists' sense of safety. A well maintained and orderly environment helps reduce perceived risks, while cleanliness reinforces impressions of proper management and care within tourist areas. Additionally, positive community behavior, characterized by politeness, helpfulness, and cooperation with visitors, plays a crucial role in creating a welcoming and secure atmosphere. Collectively, these factors demonstrate how both physical conditions and social interactions shape tourists' overall perceptions of safety and security in the city.

Table 2. Summary of the key factors identified by tourists that shape their perception of safety and security, organized by frequency and ranking

KEY THEME	COMMON ANSWERS	RANKING
Feeling of Safety and Relaxation in Baguio City	I want to visit Baguio again because it feels safe and relaxing.	Rank 1: 11 out of 15 Tourist
Safe Environment Due to Orderliness and Cleanliness	I highly recommend Baguio, especially to my family, because it is clean and peaceful.	Rank 2: 10 out of 15 Tourist

Safety in Crowded Areas Through Visible Authorities	Burnham Park is famous and safe because there are many police and people around. Even crowded areas like Session Road feel safe because of visible security personnel. The police officers and staff in Baguio are approachable and easy to ask for help.	Rank 3: 7 out of 15 Tourist
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The findings presented in Table 2 indicate that tourists believe Baguio City to be a safe, peaceful, and relaxing destination since it is a fundamental factor that drives overall tourist satisfaction and revisit intentions. Some of the tourists perceived Baguio to be a physically secure location while others found it to be a source of emotional comfort.

Key Theme 1: Feeling of Safety and Relaxation in Baguio City

Ten participants directly linked the cleanliness and orderliness of Baguio's public spaces to their personal feelings of safety. In environmental psychology, the Broken Windows Theory posits that visible signs of urban decay, litter, and neglect act as structural signals for a lack of social control, which rapidly drives up tourist anxiety. Conversely, Baguio City's high standards of cleanliness send a powerful visual signal of active, effective destination management. For families especially, an uncluttered and orderly space reduces the psychological perception of risk, fostering an environment where visitors feel comfortable letting down their guard

Key Theme 2: Safe Environment Due to Orderliness and Cleanliness

The visible presence of law enforcement at key hubs like Burnham Park, Wright Park, and Session Road was cited by seven participants as a crucial mechanism for crime deterrence and active reassurance. Rather than creating a tense, overly policed atmosphere, the local authorities were characterized as highly approachable and welcoming. This style of community policing serves as a "psychological anchor" for visitors. By reducing situational vulnerability in dense crowds, it allows tourists to move freely and confidently throughout the city's commercial and recreational centers.

Key Theme 3: Safety in Crowded Areas Through Visible Authorities

Tourists feel safe even in crowded areas due to the strong presence of police, security personnel, and approachable local staff. Visible authorities in places like Session Road and Burnham Park act as deterrents to crime and provide immediate assistance when needed. Additionally, the friendliness and hospitality of locals and tourism staff help reduce anxiety and create a welcoming atmosphere. These factors allow tourists to move freely and confidently around the city, enhancing their overall experience. Effective safety measures and positive community interaction ultimately strengthen Baguio City's image as a secure, tourist-friendly destination and support its long-term tourism sustainability.

Implications of Tourist perception of safety and security in Baguio City

This table outlines the important findings of tourists' perceptions of their safety on the implications of tourism destination management and explains how the perceptions affect the return visit, recommendation, and overall tourist destination evaluation. It helps the tourism authority to know the important areas that need to be modified and improve the tourist's satisfaction regarding the positive and safe experience.

Table 3. Implications of Tourists' Perceptions of Safety and Security for Destination Management

KEY THEME	COMMON ANSWERS	RANKING
Feeling of Safety and Comfort in Baguio City	I want to visit Baguio again because it makes me feel safe.	Rank 1: 11 out of 15 Tourist

Clean and Peaceful Environment	I will recommend Baguio to my family and relative because it is peaceful and safe	Rank 2: 8 out of 15 Tourist
Safety as a Motivator for Return Visits	Safe place encourages me to visit Baguio again	Rank 3: 3 out of 15 Tourist

Key Theme 1: Feeling of Safety and Comfort in Baguio City

Eleven participants explicitly stated that their intention to return to Baguio City was directly tied to the destination's safe and therapeutic atmosphere. This connection aligns cleanly with Maslow's Hierarchy of Needs, which establishes physical and psychological safety as a baseline requirement that must be satisfied before higher-level consumer experiences—like leisure, self-actualization, and emotional attachment—can occur. When a destination successfully meets these baseline security expectations, safety evolves from a basic logistical detail into a powerful, strategic asset that drives customer loyalty and repeat visits.

Key Theme 2: Clean and Peaceful Environment

Eight respondents identified perceived safety as the driving force behind their decision to recommend Baguio City to their immediate social networks. In destination marketing, organic, word-of-mouth endorsements from friends and family are considered far more credible and influential than state-sponsored promotional campaigns. Because safety is a top priority for group and family travel, recommending Baguio as a secure destination helps build its reputation as a safe, wholesome haven. This steady stream of organic advocacy is essential for sustaining long-term tourism growth.

Key Theme 3: Safety as a Motivator for Return Visits

Three participants explicitly highlighted a unique social asset within Baguio's tourism ecosystem: the honesty, discipline, and professionalism of local transport providers, particularly taxi drivers. In many urban tourist destinations, transit hubs are notorious for micro-risks like tourist scams, price-gouging, and aggressive behavior, which can severely damage visitor confidence. In Baguio City, however, the cultural norm of integrity among transport operators acts as a vital extension of the city's security infrastructure. This positive social behavior minimizes the anxiety of navigating an unfamiliar city, reinforcing institutional trust and significantly boosting visitor satisfaction right from the start of their journey.

CONCLUSION

This section presents the key findings of the study based on the results gathered, focusing on tourists' perceptions of safety and security in Baguio City. It highlights how these perceptions influence overall satisfaction and destination loyalty, as well as the city's image as a safe and attractive tourist destination.

1. Tourists view Baguio City as a safe and secure destination because their safety is guaranteed by the visible presence of police, clean surroundings, and well-mannered residents and staff.
2. The tourists' sense of protection and confidence is boosted by experiencing easy communication with police and personnel.
3. Positive tourists' perceptions of safety and security encourage repeat visits and recommendations, fostering a loyal tourist base and highlighting the need for effective safety management to sustain the tourism industry.

RECOMMENDATION

This section provides practical suggestions derived from the study's findings to improve tourist safety, enhance visitor experience, and support sustainable tourism development. These recommendations aim to assist destination managers, stakeholders, and local authorities in strengthening Baguio City's reputation as a secure and desirable destination.

1. To improve tourists' perception of safety in Baguio City, maintaining police visibility, improving public cleanliness, and strengthening tourist safety information and assistance services are essential.
2. To maintain tourists' perception of safety and security, local authorities should continue ensuring police visibility in tourist areas, maintain accessible tourist assistance services, and promote clear communication, especially in frequently visited places.
3. To sustain Baguio City's tourism industry, where positive perceptions of safety encourage repeat visits and recommendations, it is recommended to implement an Integrated Tourist Safety Feedback and Monitoring System.

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BRIDGING POLICY AND PRACTICE: NAVIGATING THE LIVED EXPERIENCES OF SPECIAL EDUCATION (SPED) TEACHERS IN DELIVERING INCLUSIVE EDUCATION

Rechiel B. Carbon
Sultan Kudarat State University

ABSTRACT

This study explored the lived experiences, contextual influences, and future-oriented perspectives of teachers in the implementation of inclusive education. Specifically, it examined how teachers interpret and navigate their roles in addressing diverse learner needs, the contexts shaping these experiences, and their professional aspirations. The study employed a qualitative phenomenological research design. The respondents were ten Special Education (SPED) teachers from Isulan Central School SPED Center, purposively selected for their direct involvement in inclusive practices. Data were gathered through focus group discussions using a researcher-developed guide and were analyzed using thematic analysis to identify recurring patterns and themes. The findings revealed that teachers' experiences are shaped by collaborative support from colleagues, school leaders, parents, and the wider school community. Learners served as primary sources of motivation, while strong home-school partnerships enhanced consistency in instruction. Teachers also viewed inclusive education as a pathway for personal and professional growth, requiring continuous reflection, adaptability, and capacity building. Furthermore, participants expressed aspirations to become advocates of inclusive education, strengthen instructional practices, mentor peers, and foster inclusive classroom environments that promote belonging and holistic development. The study concludes that effective implementation of inclusive education relies on strong support systems, sustained professional development, and collaborative partnerships. It is recommended that schools enhance capacity-building programs, strengthen stakeholder collaboration, and refine inclusive policies better to support teachers and learners in diverse educational settings.

INTRODUCTION

Teachers supporting learners with diverse needs have observed both the rewards and challenges of implementing inclusive education in public schools. Addressing learners' varied academic, behavioral, and socio-emotional needs requires constant instructional adjustment and resourcefulness. These experiences underscore the importance of understanding how teachers manage the practical realities of inclusion, forming the basis of this study on their lived experiences, challenges, and strategies.

Inclusive education has emerged as a central pillar of global educational reform, grounded in the principle that all learners, regardless of physical, cognitive, social, emotional, or linguistic differences, should have equitable access to quality learning opportunities within mainstream classrooms (Global Education Monitoring Report Team, 2020). International frameworks such as the Salamanca Statement (UNESCO, 1994) and Sustainable Development Goal 4 underscore the global commitment to inclusive, equitable, and lifelong education for all learners (United Nations, 2015). Despite these strong policy anchors, translating inclusive education principles into classroom practice remains uneven. Teachers, situated at the forefront of implementation, often carry the practical burden of transforming policy aspirations into meaningful, context-driven learning experiences (Cabañero, 2023).

In the Philippines, national policies demonstrated a deliberate shift toward strengthening inclusive education systems. The Enhanced Basic Education Act (Republic Act No. 10533) promotes a learner-centered framework that respects diversity and upholds equitable access for all Filipino students. More recently, the Inclusive Education Act (Republic Act No. 11650) institutionalized the rights of learners with disabilities to be included in regular school environments, supported by appropriate accommodations, learning resources, and qualified teachers (DepEd, 2022). Despite these advancements, persistent gaps remain in teacher preparation, the availability of support services, and the adequacy of school resources, factors that complicate the everyday work of public-school teachers tasked with operationalizing inclusive education (Lazaro & Reaño, 2020).

At the local level, the implementation of inclusive education varies significantly across regions, particularly in geographically isolated or under-resourced communities. Here, teachers often rely on personal resourcefulness, contextual adaptation, and collaborative problem-solving to respond to the unique needs of learners with disabilities and other marginalized groups (Dizon, 2021). While policies outline structural expectations, it is the teachers' lived experiences, professional judgments, and daily decisions that ultimately determine the extent and quality of inclusion realized in classrooms. However, the voices of these frontline implementers remain underrepresented in scholarly literature.

Existing research in the Philippine context tends to focus on policy analyses, program compliance, or student-centered outcomes, leaving a notable gap in qualitative, narrative-based studies that foreground the perspectives of teachers, the very actors who bridge policy and practice (Sapon-Shevin, 2017). Understanding how teachers interpret policy mandates, navigate challenges, and construct strategies in real-world settings is essential to strengthening inclusive education at the systems level.

The significance of this study lies in its potential to illuminate the complexities of inclusion from the viewpoint of those most responsible for its enactment. By documenting the lived experiences, challenges, and strategies of public-school teachers, this research provides a grounded understanding of how inclusive education policies are translated into everyday practice. Insights generated through their narratives can inform teacher education programs, guide policy refinement, and support the development of context-sensitive implementation frameworks.

This study aimed to explore the lived experiences of Special Education (SPED) teachers in implementing inclusive education in elementary school settings using a single-case study design. It examined how teachers perceived their roles and identities, the personal experiences, challenges, motivations, and values that shaped their advocacy, and how inclusive practices were interpreted and enacted amid existing policies. By focusing on the inclusive education practices at Isulan Central School SPED Center, the research bridged policy and practice, generating insights to inform professional development, policy refinement, and classroom implementation.

STATEMENT OF THE PROBLEM

This study sought to explore teachers' lived experiences in implementing inclusive education, with an emphasis on how they described and made meaning of their roles in addressing learners' diverse needs. It aimed to examine the contexts that shaped these experiences, including classroom realities, school environment, and existing educational policies. Furthermore, the study investigated how teachers in inclusive education viewed themselves in the future in terms of their professional identity, commitment, and aspirations.

Specifically, this study sought answers to the following questions:

1. How do teachers describe their lived experiences in delivering inclusive education?
2. What are the contexts of teachers' lived experiences in delivering inclusive education?
3. How do teachers in inclusive education view themselves in the future?

REVIEW OF LITERATURE

Policies on Inclusive Education in the Philippines

Inclusion as an educational practice in the Philippines is guided by various policies set forth by DepEd and national laws, ensuring equity and high-quality education for all, especially those with disabilities. The Enhanced Basic Education Act (R.A. No. 10533) mandates a learner-centered, inclusive, and developmentally appropriate K-12 curriculum (Republic of the Philippines, 2013; DepEd IRR, 2015). Moreover, its policies mandate programs addressing the physical, psychological, cultural, and intellectual needs of children with disabilities (DepEd IRR, 2015). This highlights the significance of inclusive education as a critical component of reforms, underscoring the State's need to provide learners with equal educational opportunities.

As part of the implementation process, DepEd developed several administrative policies. DepEd Order No. 044, s. The 2021 Policy Guidelines on the Implementation of Inclusive Education provide an overview of the legal foundations, responsibilities, capacity-building activities, and monitoring. Furthermore, it emphasizes the importance of collaborating across systems, with DepEd schools including inclusive education in their school improvement plans, teacher professional development, resource distribution, and stakeholder involvement.

The legal mandate highlights marginalized groups in schools. RA 10533 includes clauses for gifted learners, children with disabilities, indigenous communities, madrasa learners, and those facing hardships (displacement caused by disasters, illness, and war) (Republic of the Philippines, 2013). Inclusion programs also offer education that respects cultural diversity among learners with unique educational needs, particularly in the early stages of childhood, when inclusion is common (Zerrudo, 2022). Therefore, inclusion in the Philippines extends to learners other than those with disabilities.

Implementation at the local level ensures compliance with national laws. The DepEd Inclusive Education Policy Framework offers guidance on curriculum context, teaching approaches, material production, and teacher development for learners from diverse backgrounds (Pasumala, 2021). Educational institutions must develop local instructional resources for learners with special needs and modify their teaching practices to accommodate different learning styles and accessibility needs. Teachers' competence is improved through professional development, mentoring programs, and Learning Action Cells (LAC), which encourage teachers to reflect on their skills and enhance their knowledge (Vergara, 2025).

Lately, Republic Act No. 11650 (The Inclusive Education Act) has reinforced the policy requiring the establishment of ILRCs in districts to benefit learners with disabilities. The Act stipulates accommodations, the use of assistive devices, and the implementation of IEPs in public and private institutions. The special education centers should be transformed into ILRCs through collaboration with local governments. RA 11650 provides mechanisms that link inclusion to equality and to learners' needs. Nevertheless, inclusivity efforts still exist. Llego (2022) notes that reforms aim to expand programs and ensure high-quality, equitable, and culturally responsive education for diverse learners, with equal opportunities.

Challenges Faced by Teachers in Inclusive Classrooms

Inclusive classes had many difficulties with the way teachers instructed pupils. A study in the Philippines found that limited funds, large class sizes, and inadequate training hindered instructors' ability to use individualized methods such as peer tutoring, assistive technology, and remedial work. In addition, research on the preparation of differentiated instruction indicated that planning lessons for heterogeneous learners took too much time and was difficult without administrators' support (Cabañero, 2023; Dioso et al., 2022; Beltran et al., 2025; Quinones, 2022). From the above findings, it is clear that although inclusive pedagogy is preferred, its implementation contradicts classroom realities.

Another issue that greatly impacted inclusive learning was classroom management and behavior. Studies conducted in the Philippines revealed that the majority of educators were not prepared to handle various types of behavior due to inadequate knowledge of managing classroom behavior and dealing with individuals with special needs (Patina & Bolongaita, 2024; Macabenta et al., 2023; Culajara & Culajara,

2023). From the phenomenological data, there are indications that general education teachers found classroom management difficult due to the student-to-teacher ratio, a lack of institutional support, and a lack of mentoring (Patina & Bolongaita, 2024; Alido et al., 2023; Francisco et al., 2023). Handling behavioral problems costs a lot of time and requires more energy than teachers receive in their training.

Institutional and systemic factors impeded inclusive education. The literature reviewed indicated inadequate infrastructure, vague policies, resource scarcity, and insufficient funding for implementing an inclusive approach (Beltran et al., 2025; Arcuino et al., 202). The policy at the school level was not consistently implemented due to unclear guidelines, limited stakeholder cooperation, and low parental participation (Beltran et al., 2025; Salcedo & Chua, 2022). Budgetary constraints and inadequate government intervention prevented the establishment of resource centers and the hiring of professionals to address children's special needs (Baog et al., 2022; Arias et al., 2023; Capampangan et al., 2023).

Teachers encountered socio-emotional problems and experienced difficulties on their professional journey, which negatively affected their ability to deliver inclusive education. Despite having positive attitudes towards inclusion, they were highly emotionally exhausted, de-personalized, and stressed without any help (Patina & Bolongaita, 2024; Zerrudo, 2022; Dioso et al., 2022). Teachers' lack of training on behavior management, individualized education plans, and differentiated instruction intensified their anxiety and low self-efficacy (Quinones, 2022; Bongabong et al., 2022; Culajara & Culajara, 2023). Constant time pressure, limited resources, and the need to adapt to diverse learners' needs led to stress. Coping mechanisms include differentiated instruction, emotional intelligence, professional development, and psychosocial support (Arcuino et al., 2022; Macabenta et al., 2023).

Teachers' preparation, professionalism, and attitude significantly influenced inclusive education. The research indicated that factors such as educational background, years of teaching experience, and participation in relevant training significantly affected teachers' preparedness to use inclusive strategies (Capampangan et al., 2023; Alido et al., 2023; Lualhati, 2022). Moreover, encouraging diversity, collaborative teaching, and capacity-building activities through coaching and awareness programs facilitated the development of the skills teachers need to assist students with special needs (Francisco et al., 2023; Bongabong et al., 2022; Salcedo & Chua, 2022). In general, it can be stated that regardless of the various difficulties encountered at different levels of instruction, behavior, system, and socio-emotional aspects, adequate support is important.

Teachers' Strategies and Mechanisms in Addressing Challenges

In inclusive classes, a range of instructional adaptations and differentiation strategies is used to cater to pupils' diverse needs. Research conducted in the Philippines indicates that teachers incorporate peer tutoring, buddy systems, and assistive technologies aligned with UDL principles for special learners (Marchan et al., 2025). The above practices facilitate scaffolding, task adaptation, and readiness, interest, and learning profile-based instruction, ensuring active participation (Marchan et al., 2025; Bagay, 2024; Benemerito et al., 2025). Additionally, collaboration between the teacher and specialists, and co-teaching, are employed to develop an IEP and adaptive materials, which increase engagement for students with diverse abilities (Marchan et al., 2025; Zerrudo, 2022; Quinones, 2022).

Successful classroom management ensures positive learning conditions and facilitates engagement with diverse learners. Phenomenological research conducted in the Philippines illustrates proactive approaches to classroom management through reinforcement, anticipatory planning, and strategic grouping (Aguillon & Eludo, 2025). Visual supports and differentiated behavioral expectations assist learners with diverse abilities (Aguillon & Eludo, 2025; Cortes et al., 2023). Moreover, in virtual classes, several structured engagement techniques and established rules facilitate greater participation among diverse learners (Cortes et al., 2023; Marchan et al., 2025; Abuda et al., 2025).

Peer partnerships, parental involvement, and stakeholder participation will improve inclusive education. Collaboration, co-teaching, and teacher-educators use parent communication to help children (Zapatera et al., 2025; Benemerito et al., 2025). Effective inclusive education is characterized by high levels of collaboration and communication between teachers, parents, students, and leadership (Arcuino et al.,

2022; Culajara & Culajara, 2023). Stakeholders' involvement in instructional decision-making will ensure contextual relevance and sustainability.

Coping mechanisms and continuing professional development are needed to implement inclusive practices effectively despite potential barriers. Philippine research indicates that continued PD will make teachers better prepared, more competent in instruction, and more capable of inclusive teaching (Benemerito et al., 2025; Bagay, 2024). To cope with stress arising from their workload, they resort to differentiated instruction, peer help, and technological innovations. Mentoring, colleague support, and participation in communities of learning will enhance teachers' ability to overcome instructional and behavioral challenges in inclusive settings (Quinones, 2022; Culajara & Culajara, 2023).

Lastly, a lack of teacher preparation and insufficient support is likely to lead to inequality and reduce the efficiency of inclusive education. Researchers have noted teachers' negative attitudes, stereotyping, and inadequate training for effective inclusive education (Cabañero, 2023; Baog et al., 2022; Lualhati, 2022). Recommendations include interventions to improve preparedness and promote equality, such as teacher professional development, capacity-building, coaching, and stakeholder campaigns (Arias et al., 2023; Capampangan et al., 2023; Bongabong et al., 2022). Improved teacher competency may increase effectiveness, ensure compliance with the law, promote fairness, and encourage growth.

Lived Experiences of Teachers in Inclusive Education

Personal factors, including motivations, values, and experiences, shape teachers' relationships with inclusive education. In the Philippines, Casal & Villocino (2025) reported that elementary teachers engaged in diversified learning have been motivated by their values of equity, patience, and service. Personal commitment towards inclusion means finding meaning in each student's little successes, personalized teaching methods, and trust-building (Vergara et al., 2025).

Personal narratives are also connected to the moral and emotional sides, as teachers "celebrate small wins" whenever a particular learner succeeds (Belarda & Belena, 2025). The sources of motivation among Filipino teachers include their values-driven view of life in which inclusion is not only a pedagogical task but also a moral commitment.

An inclusive experience also brings up professional development narratives in inclusive classrooms. According to a phenomenological study conducted by Collado Meril et al. (2025), the phenomenon of inclusion altered professional identities: initial teachers felt insecure due to the lack of appropriate training; however, they eventually began to see themselves as advocates, mentors, and agents of change. It demonstrates the level of teacher resilience in adapting to new circumstances, collaborating with colleagues, and innovating to meet the needs of all students.

Cross-cultural and comparative perspectives provide insights into specific contexts and parallels. For example, Gulle (2025) investigated SPED teachers working in an international school (Thai-Singapore) and identified themes such as career success, coping, support mechanisms, and implications for practice. According to teachers' reflections, they experienced job satisfaction along with some forms of emotional labor in addressing the needs of all learners (Pasumala et al., 2021).

In their work, Sumagang & Balano (2025) investigated the perceptions of general education teachers in Davao, the Philippines, including those who taught children with disabilities. As inclusion became part of their work, the teachers' self-identity also shifted, where many of them started to see themselves as mentors, facilitators, and advocates for the learners to foster connections between schools and communities (Sumagang & Balano, 2025; Culajara & Culajara, 2023; Zapatera et al., 2025). Self-identity change emerged through regular interaction with learners, collaboration with other stakeholders, and reflective practice to internalize inclusion practices (Benemerito et al., 2025; Marchan et al., 2025). According to Sumagang & Balano (2025), the teachers agreed that inclusion was both difficult and fulfilling, encouraging lifelong learning, justice, and professional development (Arias et al., 2023; Lualhati, 2022).

Generally, through reviewing research in teachers' perspectives on inclusive education, one can see the interdependence of personal motivations, professional identity, and social/ institutional aspects. One cannot overlook the significance of values and beliefs that underlie motivation. The experiences and

challenges of inclusive educators also demonstrate how transformative inclusive education is for teachers, just like it is for learners.

METHODOLOGY

The qualitative single-case study, grounded in the transcendental phenomenology paradigm, examined SPED teachers' lived experiences, challenges, and strategies in implementing inclusive education at the Isulan Central School SPED Center in Sultan Kudarat. Based on Husserl & Moustakas (1994), the study emphasized participants' experiences to understand their essence. The respondents were ten (10) SPED teachers, selected using purposive sampling criteria such as being currently working as a SPED teacher or in inclusive education, having a minimum of one year of teaching experience, and willingness to participate in the study.

Data were gathered using a researcher-developed semi-structured interview guide, which was validated with qualitative researchers and inclusive education specialists. The study used semi-structured interviews and focus group discussions after obtaining necessary ethical approvals and participant consent. The interviews were audio-taped and transcribed verbatim, along with field notes. Thematic analysis was employed to analyze the data, following the approach of Javadi & Zarea (2016). Themes were generated with consideration of the objective and related literature. Credibility, dependability, transferability, and confirmability were established using member checking, peer debriefing, audit trails, and reflexive journaling.

The researcher, with experience in both regular and SPED classrooms, practiced reflexivity throughout the study to minimize bias and ensure interpretations were grounded in participants' narratives. Ethical principles, including informed consent, confidentiality, anonymity, voluntary participation, and secure data handling, were strictly observed throughout the research process.

The researcher identified the emerging themes through a systematic qualitative analysis process. First, the researcher thoroughly reviewed all the data from the FGDs, taking detailed notes and highlighting recurring ideas. Then coded the data by labelling significant statements, patterns or concepts. After grouping similar codes together, looked for overarching patterns and relationship that captured the essence of the participants' experiences. These patterns became the emerging themes, which represent consistent insights across the dataset.

FINDINGS

Themes were generated from the lived experiences of SPED teachers engaged in inclusive education. In terms of lived experiences, six themes emerged: (1) SPED Teachers as Facilitators and Advocates of Inclusive Learning; (2) Adaptive and Differentiated Instruction as Core Practice in Inclusive Classrooms; (3) Emotional Fulfillment and Sense of Purpose in Inclusive Education; (4) Values of Empathy, Equality, and Social Responsibility; (5) Personal and Professional Transformation through Inclusive Teaching; and (6) The Challenges and Complexities in Inclusive Education. SPED teachers see inclusion as their professional responsibility and personal dedication as they deliver differentiated instruction and scaffolding amid challenges, including limited resources, problem behavior, poor communication skills, and inadequate training to meet the needs of all learners.

Participant	Narrative	Formulated Theme
Teacher 3	<i>"I make sure every child feels safe, respected, and valued. I adjust my teaching to meet different learning needs and abilities."</i>	Emerging Theme 1.1: SPED Teachers as Facilitators and
Teacher 4	<i>"My role is to make sure that all learners feel welcomed, respected and supported in the classroom."</i>	

Teacher 5	<i>“to ensure that every learners feels valued, respected and supported regardless of their abilities and background.”</i>	Advocates of Inclusive Learning
Teacher 5	<i>“this experience made me realize how meaningful the role of a teacher can be in shaping the learner’s confidence and future. Although inclusive teaching can sometimes be challenging and demanding, the joy of seeing learners grow and succeed gives me a strong sense of fulfillment and purpose.”</i>	Emerging Theme 1.3: Emotional Fulfillment and Sense of Purpose in Inclusive Education
Teacher 6	<i>“seeing their progress from modeling to following routines and showing independence filled me with pride, joy, and a strong sense of purpose. Emotionally, it can be challenging and sometimes exhausting to guide them, but the rewards from those small wins bring me satisfaction and motivation.”</i>	
Teacher 9	<i>“honestly, it’s deepened my appreciation for the value of collaboration and community. It’s shown me that even in a virtual space, connections can be meaningful and impactful.”</i>	

Regarding the context in which the experience took place, five themes emerged. These are (1) Collaborative Support from the School Community; (2) Learners as Inspiration; (3) Partnership with Parents and Family Members; (4) Impact of Inclusion on Personal and Social Relations; and (5) Inclusion as a Continuous Learning Process. Teachers' collaborative work with school community members contributes greatly to increasing their sense of purpose, resilience, effective teaching practices, and dedication. Moreover, engaging in inclusive education positively influences SPED teachers.

Participant	Narrative	Formulated Theme
Teacher 3	<i>“my co-teacher in co-teachers in SNED and especially my principal who has a heart for children with special needs. They support and work together and make me feel included.”</i>	Emerging Theme 2.1: Collaborative Support from School Community
Teacher 4	<i>“my colleagues allow me to share ideas, strategies and encouragement for handling diverse learners.”</i>	
Teacher 5	<i>“the people closely connected with my role included my students, their parents, fellow teachers, school administrators and support staff. Collaboration among those individuals is important to ensure that learners receive the appropriate support they need.”</i>	
Teacher 2	<i>“students, especially those with diverse learning needs... inspire me to become more patient, creative and responsive in my teaching.”</i>	Emerging Theme 2.2: Learners as the Central Source of Inspiration and Motivation
Teacher 4	<i>“my learners inspire me to grow. Their needs motivate me to improve my teaching strategies,”</i>	
Teacher 6	<i>“my learners, their progress and growth inspire me to work hard every day.”</i>	

In terms of teachers' perspectives on the future, the research results showed their developing professional identity, advocacy, continuous improvement, and classroom empowerment. The teachers realized that, in their capacity as teachers, they could be better advocates for inclusion and were always working to improve their competence, caring attitude, and leadership so that each student received an equal opportunity to learn.

Participant	Narrative	Formulated Theme
Teacher 1	<i>“teachers in inclusive education continue to adapt and evolve. I envision myself as a leader and advocate helping shape educational policies and practices that promote inclusivity and accessibility.”</i>	Emerging Theme 3.1: Evolving Professional Identity as Advocates of Inclusive Education
Teacher 2	<i>“I see my professional identity evolving as a teacher who continuously learns, reflects and promotes equal opportunity for all learners.”</i>	
Teacher 3	<i>“I see my professional identity growing as a teacher who supports and speaks for all learners.”</i>	
Teacher 2	<i>“inclusive education taught me to become more patient, flexible and creative in my teaching strategies so that all students can fully participate in the learning process.”</i>	Emerging Theme 3.2: Personal and Professional Growth through Inclusive Teaching Experiences
Teacher 3	<i>“being a teacher in inclusive education has taught me patience, understanding and acceptance of differences,”</i>	
Teacher 4	<i>“it has taught me patience, empathy and the importance of valuing each learner’s uniqueness.”</i>	

The study examined teachers lived experiences, context and future-oriented perspectives in inclusive education, revealing interconnected themes across three sections of analysis. Teachers demonstrated a strong commitment to inclusive practices, employing flexible and adaptive strategies such as differentiated instruction, individualized support, scaffolding, and multisensory approaches to address diverse learner needs. These practices fostered meaningful engagement, skill development, and an inclusive classroom environment.

Teachers’ experiences were further shaped by emotional fulfillment and professional purpose, with progress and achievements of learners reinforcing their motivation, resilience, and dedication. Core values of empathy, equality, compassion, and social responsibility guided their practices, while ongoing personal and professional growth enhanced their confidence, adaptability, and instructional effectiveness.

Teachers’ experiences were also influenced by multiple contexts of support: collaborative engagement with colleagues, school leaders, support staff, families, and partnerships with learners themselves emerged as key sources of guidance, motivation, and inspiration. Inclusive education extended beyond professional roles, positively affecting personal and social relationships and reinforcing the importance of continuous learning and adaptation.

Future-oriented perspectives highlighted teachers’ aspirations to develop professional advocacy, competence, and compassion. Participants envisioned strengthening inclusive practices through improved teaching strategies, professional development, resource allocation, and fostering inclusive values among peers and future educators. They also imagined classrooms that are flexible, innovative, and responsive to diverse needs, promoting belonging, empowerment, and equitable opportunities for all learners.

CONCLUSIONS

This study analyzed teachers' experiences in inclusive education, revealing how their personal and professional activities depend on the challenges, support systems, and values associated with teaching diverse learners. It was evident that teachers were committed to the principles of inclusion and utilized various adaptive techniques to enhance students' engagement, skill acquisition, and equal access. Besides, teachers derived personal satisfaction from working with learners, felt professionally fulfilled, and possessed core values, including empathy, compassion, and social responsibility. The challenges faced by teachers included insufficient educational resources, differences among learners, and communication

issues. However, the use of reflection, collaboration, and adaptation helped teachers to address these issues. The findings revealed the significance of a supportive context, comprising teachers' colleagues, administrators, parents, and learners. Such support is crucial for developing teachers' motivational, growth, and professional potential.

Furthermore, inclusive education affects educators' personal and social lives. In the future, teachers expect to continue advocating for inclusive education by implementing more effective strategies, enhancing professional development, allocating appropriate resources, and encouraging colleagues and future teachers to promote inclusive values.

RECOMMENDATIONS

Teachers' experiences in inclusive education are attributed to personal commitments, flexibility, supportive environments, and professional development. In order to enhance practice, the following recommendations have been suggested by the research:

1. Ongoing professional development in inclusive education, differentiated instruction, and the use of assistive technology using practical workshops, mentoring, and collaboration among peers to increase proficiency and confidence when instructing students with different needs.
2. Effective collaborative environment and sufficient resources through partnerships between teachers, administrators, educators, and parents through co-teaching, collaboration in planning, and constant parent involvement to provide teaching aids, materials adaptation, and use of assistive technology.
3. Promotion of inclusive awareness and teacher advocacy programs focused on fostering empathy, acceptance, and inclusion at schools and within communities; teachers should be encouraged to engage in educational policy, networking, and research activities.
4. Additional studies aimed at examining the impact of inclusive education on teacher wellbeing, instructional practices, and student outcomes, with special attention paid to the efficiency of different interventions and professional development programs.

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LIVED EXPERIENCES OF TECHNOLOGY AND LIVELIHOOD EDUCATION (TLE) TEACHERS IN DEALING WITH STUDENTS' BEHAVIORAL ASPECTS AND THEIR IMPACT ON TEACHING PRACTICES

Rosita B. Surposa, MAEd
Jestoni D. Demon
Jomar Sandato
Sultan Kudarat State University

ABSTRACT

TLE teachers in Bagumbayan, Sultan Kudarat, face behavioral challenges from students, including inattentiveness, excessive talking, and cellphone distractions. These issues stem from digital distractions, low interest in lessons, and fear of failure, which disrupt lesson delivery and cause emotional stress. To cope, teachers employ preventive classroom management techniques such as setting clear expectations, giving concise instructions, assigning group roles, using demonstrations, enforcing gadget restrictions, and providing positive reinforcement. Teachers also use coping mechanisms such as emotional regulation, cognitive reframing, and peer support. These experiences have made them more structured, flexible, patient, and proactive, strengthening their classroom management skills and professional commitment. Some effective strategies for managing classroom behavior include: Creating a Positive Classroom Culture: Establishing a supportive and respectful environment Providing Engaging Activities: Offering varied and interactive lessons Using Non-Verbal Cues: Utilizing gestures and facial expressions to manage behavior Building Relationships: Fostering strong connections with students to promote motivation and engagement By employing these strategies, teachers can promote positive behavior, reduce disruptions, and create a conducive learning environment.

INTRODUCTION

The Philippine education system faces challenges in providing quality education, particularly in Technology and Livelihood Education (TLE). The DepEd Child Protection Policy, while essential for protecting students' rights, has led to increased sensitivity and abuse from students and parents, making it difficult for teachers to discipline students (Mag-atas and Carmona, 2023). This policy has also contributed to a lack of accountability among students, exacerbating behavioral issues in the classroom.

Seemingly, the country's economic and social context plays a significant role in shaping students' behavior. Many students come from disadvantaged backgrounds, facing poverty, family problems, and limited access to resources, which can lead to behavioral problems in the classroom.

In the classroom, TLE teachers face unique challenges due to the hands-on nature of the subject. They must manage students' behavior while ensuring safety, cooperation, and discipline. Common behavioral challenges include excessive talking, dishonesty, foul language, bullying, and aggression (Saleem et al., 2021; Barcelona et al., 2023). These issues can disrupt the learning environment and hinder students' mastery of skills and knowledge.

TLE teachers must also contend with limited resources, large class sizes, and inadequate facilities, which can further exacerbate behavioral problems (Barcelona et al., 2023). Moreover, the emphasis on standardized testing and academic achievement can lead to a lack of focus on vocational skills, making it challenging for TLE teachers to motivate students.

Given these macro and micro challenges, it's essential to explore the lived experiences of TLE teachers and understand how they manage behavioral issues in the classroom. By examining their experiences, we can identify effective classroom management techniques and coping mechanisms that can inform teacher training programs and support services (Batoool et al., 2023; Jumao-as, 2025)

STATEMENT OF THE PROBLEM

The study explored the lived experiences of Technology and Livelihood Education (TLE) teachers in dealing with students' behavioral aspects and their impact on teaching practices.

Specifically, the study aimed to answer the following questions:

1. What behavioral aspects of students do TLE teachers commonly encounter in the classroom setting?
2. What are the classroom management techniques and coping mechanisms of TLE teachers in dealing with students' behavioral aspects?
3. How do students' behavioral aspects affect the professional growth and teaching practices of TLE teachers?

REVIEW OF LITERATURE

Behavioral Aspect of Students in the Classroom Setting. The frequent behavioral challenges faced by some teachers during their classes are excessive talking, dishonesty, foul language, bullying, aggressiveness, stealing, and fighting (Saleem et al., 2021). Sultana and Banu (2016) also concluded that the common behavioral issues observed in classrooms are not paying attention in classes and causing disruptions such as shouting, changing seats, or roaming around, as well as absenteeism, skipping classes, and verbal aggression manifested through teasing or insulting peers. Such behaviors interfere with the flow of teaching and learning, make it difficult for teachers to accomplish lesson objectives, and may lead to low academic achievement and a negative learning environment (Al Harbi, 2019).

According to Oestar & Oestar (2022), verbal bullying constitutes the most prevalent form of violence within schools. It encompasses actions such as making jokes, assigning nicknames, and delivering insults, and it is identified as the most frequent behavioral issue observed in the classroom.

Teachers face challenges in managing classroom disruptions (Simon and Alonso-Tapia, 2016). In fact, numerous challenges and difficulties in the process of instructing students is evident (Subli, 2025). Thus, discipline programs must be appropriately adapted to diverse contexts, while school disciplinary practices should provide innovative insights addressing the enduring inquiry into the underlying causes of student misbehavior (Oestar & Oestar, 2022).

Eventually, students' knowledge of the current Child Protection Policy emerged as the most significant obstacle, as many perceive themselves as untouchable and shielded by legal provisions. It was also cautioned at a national bullying conference that authoritarian behaviors such as yelling, threatening, withdrawing privileges, and physical punishment are fostering a culture of systematic bullying that is likely to be transmitted to future generations (Coulson, 2019). Therefore, the provision of school counseling and guidance services is essential to assist students in resolving challenges, maintaining academic focus, and developing into accountable members of the community (Maganga, 2016). But according to Kudari (2016), parents still have a crucial responsibility in guiding and fostering the effective growth and development of their children.

Teaching Practices. As stated by Asunsion (2023), educators who instruct skill-oriented subjects such as Technology and Livelihood Education (TLE) emphasize the practical abilities of students over the theoretical knowledge they possess. Moreover, in the implementation of differentiated instruction, collaborative and student-centered techniques are the most frequently employed, with technology

integration also widely utilized (Setambah et al., 2025). Theobald et al. (2020) found that the integration of active learning techniques within university courses markedly improves students' learning experiences. In line with this, interactive instructional techniques have led to significant gains in student achievement across a range of academic fields (Omojemite, 2025).

Central to these approaches are the principles of “teaching for the student, of the student, and by the student,” which underscore the importance of inclusivity, foster peer collaboration, and empower learners to assume ownership of their educational journey (Bhardwaj et al., 2025). According to Gillies (2016), when students collaborate in small groups (generally three to five members) on shared tasks or activities, their performance improves, and he also concluded that collaborative learning substantially promotes students' sense of social responsibility, cultivates positive peer relationships, and enhances their communication and leadership abilities.

Student-centered approaches have been associated with higher academic achievement, increased learner engagement, and greater motivation (Bhardwaj et al., 2025). The problem-based learning and inquiry-based activities positively affect students' analytical and evaluative skills (Zhang et al., 2024).

Many teachers need professional training on how to manage group projects effectively and how to incorporate technology into their teaching methods (Garone et al., 2022). At the same time, Al Aamri et al. (2023), indicate that inequalities in students' technological readiness represent a significant challenge. To address this, Jocius et al. (2022), suggest that educational institutions should allocate resources toward procuring learning management systems, analytics software, and communication platforms. This approach helps to customize accessibility and support services to meet the specific, varied needs of all learners (Esfijani & Zamani, 2020). It must ensure that accessibility and support are adapted to diverse learner needs (Esfijani & Zamani, 2020).

Classroom Management Techniques. Teachers employ classroom management techniques to create and maintain a structured learning environment, as well as on how they response to student misbehave (Subli, 2025). The implementation of effective classroom management techniques poses a complex challenge that affects all stakeholders in education (Lopes & Olivera, 2017). Consequently, effective classroom management techniques enable educators to reduce the behaviors that obstruct learning at both the individual and group levels, while promoting actions that facilitate and enhance educational outcomes (Santhanam, 2022). In line with these, Patall et al. (2023) performed a meta-analysis, which confirmed that teachers' provision of clear structure in the classroom is strongly associated with enhanced student academic engagement, confidence in their abilities, and improved achievement outcomes.

Moreover, MacSuga-Gage et al. (2015) studies indicate that increasing teacher-directed opportunities for students to respond (TD-OTR) positively affects both behavioral and academic outcomes by fostering active student engagement through frequent and varied responses during classroom activities. At the same time, Bozkus (2021), conducted a bibliometric and content analysis of classroom management research, showing that it leads in productivity. From an individual teacher perspective, Duan et al. (2024), meta-analyzed correlates of teachers' classroom management self-efficacy, highlighting teacher-level factors (experience, stress, burnout), classroom-level factors (climate, student behavior), and school-level factors (leadership, culture) as significant influences.

Additionally, Augustsson and Boström (2024), found that professional development programs centered on classroom and behavior management significantly enhance teacher competencies and improve student behavior, establishing professional development as a crucial element for effective classroom management. Salama et al. (2025), conducted a systematic review of literature from 2020 to 2025 and identified positive reinforcement, restorative practices, and classroom environment organization as key techniques that effectively enhance student behavior in primary schools.

Coping Mechanisms of Teachers. Aulen (2021), identified three teacher coping profiles: engaged, distressed, and detached and found that the engaged profile, marked by proactive problem-solving and collegial support seeking, correlates strongly with greater teacher well-being and job satisfaction. Building on these coping profiles, Shang and Singh (2024), reported that teachers predominantly utilize problem-

focused coping mechanisms such as comprehensive lesson planning, efficient time management, and curriculum adaptation to alleviate work-related stress. Complementing these findings, Nwoko (2024), introduced the SHIELD model, which outlines six essential coping mechanisms: support networks, healthy work-life balance, Innovation in pedagogy, Emotional regulation, learning from peers, and Digital resources that together bolster teacher resilience and well-being.

At the same time, Dreer (2023), demonstrated that school-based well-being interventions such as mindfulness programs, stress-management workshops, and collaborative reflective sessions substantially bolster teacher resilience, alleviate burnout symptoms, and enhance job satisfaction. Addressing the specific context of alternative learning models, Mendoza et al. (2023), described coping strategies and initiatives designed to address challenges and difficulties arising during the transition to the new normal of alternative learning models. Among these, Subli (2025), found that the most impactful coping strategy involves supplying students with downloaded educational programs, audiovisual materials, and PowerPoint software to capture their attention and boost their motivation.

Teachers' Professional Growth and Teaching Practices. Effective teachers need to embrace innovative instructional designs and adapt their delivery to accommodate each student's unique learning needs, methods, and styles to ensure all learners achieve their competencies (Munna and Kalam, 2021). Matsumoto-Royo's (2021), systematic review further identified five foundational instructional practices: modeling, scaffolding, questioning, collaborative facilitation, and formative assessment that collectively advance teacher development and enhance student learning outcomes. Espiritu (2023) claims that teachers must possess a high degree of professional competence to deliver effective instruction and support student learning.

Furthermore, given the pivotal role of ongoing learning, Darling-Hammond et al. (2017), emphasize that sustained, collaborative, content-focused professional development aligned with teachers' daily work and anchored by coaching and active learning drives measurable gains in teaching quality and student achievement. Complementing this view, Sims (2022), found that integrating goal setting, reflective feedback, active learning, and classroom coaching yields the most effective professional development. More recently, Amemasor et al. (2025), highlighted that blended, context-sensitive professional development with ongoing mentorship, competency progression, and peer collaboration is vital for lasting teacher growth in digital integration.

In the classroom, teachers ought to engage students actively in classroom activities while fostering both independent and self-directed learning (Hussain et al., 2017). Building on this, Gordon (2019), developer of Teacher Effectiveness Training, suggests that the use of affirmative "I" statements humanizes the classroom environment and reinforces positive disciplinary practices.

METHODOLOGY

The study utilized a qualitative phenomenological research design to explore the lived experiences of Technology and Livelihood Education (TLE) teachers dealing with students' behavioral aspects. The research was conducted in selected public secondary schools covering both Junior and Senior High School levels within the lower valley area of Bagumbayan, Sultan Kudarat.

Using purposive sampling, the researchers selected ten (10) TLE major teachers. The inclusion criteria required that participants have at least five years of teaching experience, be currently teaching TLE subjects, and have direct experience dealing with students' behavioral aspects. Conversely, the study excluded teachers from non-TLE disciplines and did not include the perspectives of students or parents to maintain a strict focus on the teachers' professional lived experiences. Data collection relied primarily on a semi-structured interview guide.

FINDINGS

Table 1. Behavioral aspects of students' TLE teachers commonly encountered in the classroom setting

Participant	Narrative	Formulated Theme
Pan	"The most common behavioral aspect of students I encounter when class starts is that some students are inattentive, some even fall asleep while I'm discussing the lesson... Sometimes I notice they're more focused on their cell phones and gossiping with classmates than on listening to me."	Inattentiveness, absenteeism, and gadget use
Grater	"The students don't pay attention and keep talking even when I'm explaining something at the front of the class. Some of them ask, 'Ma'am, how is this useful in real life?' because they don't see why it matters, so they lose interest in the lesson."	Inattentiveness, excessive talking, and lack of interest
Whisk	"Na-encounter ko gid permi nga behavioral challenges during sa klase ko, ummm, ang mga students nga wala ga-participate, especially during sa group activity."	Lack of participation in collaborative activities
Ladle	"Madalas ko ma encounter ang fear of failure may mga estudyante nga wala ga-try kay basi magkamali, sa group work, permi gid may indi naga-cooperate, daw ga salig lang sa mas maayo mag-perform nga classmate."	Fear of failure and lack of cooperation
Tongs	"Excessive talking and gadget use during hands-on activities really cause problems. Instead of smooth demonstrations and practice, I constantly have to remind them to focus and put safety first, which slows down the lesson."	Excessive talking and gadget use
Peeler	"Ang inattentive behavior, daldalan, kag misuse of tools, amo gid ang nagasira sang flow sang klase."	Inattentiveness, excessive talking, and misuse of tools
Strainer	"In my class, the students come from different backgrounds; some have never been in a kitchen, some have experience but lack discipline, so they end up horsing around and talking unnecessarily, and they don't listen carefully to the instructions I give to them."	Horseplay, unnecessary talking, and a lack of discipline
Blender	"From my experience, sir, one factor is how they see the subject. Some think Automotive is only for boys, so they believe they can do it even without paying attention, which makes them overconfident. Others say it's hard, so they just depend on their classmates and don't try to understand."	Overconfidence and reliance on classmates
Apron	"Sa akon pagtan-aw, ang high excitement sang students sa hands-on activities naga-lead man sa loss of focus."	Loss of focus due to high excitement
Colander	Constant talking and distractions force teachers to stop lessons frequently to regain control, which reduces the time available for actual demonstrations and practice.	Disruptions and excessive talking

The findings in Table 1 revealed that TLE teachers routinely face behavioral aspects of students in the classroom, most notably inattentiveness, excessive talking, and cellphone distractions. These issues frequently stem from digital distractions, a lack of interest in the subject matter, and an underlying fear of failure. These localized challenges reflect a broader educational trend regarding classroom disruptions. Recent academic literature corroborates that violating classroom rules, general distractibility, and talking

without permission are highly prevalent challenging behaviors that interfere with a student's social and academic functioning (Smith et al., 2022).

Furthermore, behaviors such as non-participation, operating mobile phones during class hours, and excessive talkativeness are consistently identified as major disruptions that alter classroom dynamics and shift attention away from learning goals (Leonard et al., 2024). Ultimately, these disruptive behaviors interfere with the flow of lesson delivery and create a stressful environment for educators.

**Table 2. Classroom management techniques and coping mechanisms
TLE teachers use in dealing with students' behavioral aspects**

Participant	Narrative	Formulated Theme
Pan	Emphasized that even "somewhat effective" strategies become meaningful when consistently implemented with follow-up interventions.	Consistent implementation of rules and follow-ups
Grater	Participant utilized preventive classroom management techniques and structured routines to maintain learning.	Preventive management techniques
Whisk	Utilized problem-focused coping mechanisms such as lesson adjustments to engage non-participative students.	Lesson adjustments and problem-solving
Ladle	"For me, I prioritize building relationships before enforcing strict rules... I conduct a tools-and-equipment orientation before any hands-on activity... Afterwards, I try to relate the lessons to their livelihood and future careers so that it feels meaningful to them."	Relationship-building, safety orientation, and lesson relevance
Tongs	"For me, the number one preventive technique I use is giving clear guidelines before any hands-on activity. I first provide the laboratory rules and the correct procedures, step by step, before they start."	Providing clear guidelines and step-by-step procedures
Peeler	"At the very beginning of their quarter, I already established the classroom rules and safety guidelines; I didn't just mention them once I repeat them, especially during hands-on activities. I give them clear instructions."	Setting clear rules, repetition, and clear instructions
Strainer	Stressed that clarity of rules and teacher expectations heavily support classroom stability.	Clarity of expectations and rules
Blender	Employs coping mechanisms and adjusts strategies based on student needs.	Adaptive strategies and coping
Apron	"I remind myself that, no matter how strict the rules are, behavioral challenges won't disappear completely. Instead of feeling discouraged, I tell myself that each challenge is an opportunity for growth for the students and for me."	Cognitive reframing and emotional regulation
Colander	"Kung wala ko sariling coping, basi dugay na ko nag-give up. So ginapaningwa ko gid nga kon ma-feel ko nga naga-init na akon ulo, I talk to my colleagues."	Peer support and emotional regulation

To effectively manage the behavioral issues outlined in Table 1, Table 2 demonstrates that TLE teachers rely heavily on preventive classroom management techniques. These include setting clear expectations, providing concise instructions, enforcing gadget restrictions, assigning group roles, and utilizing positive reinforcement. Teachers also lean on essential coping mechanisms such as emotional regulation, cognitive reframing, and peer support to navigate the emotional stress of the classroom. These pedagogical and personal strategies are highly aligned with evidence-based practices. Structuring the

physical and academic environment through clear communication of behavioral expectations is recognized as a fundamental pillar of effective classroom management (Putra & Yanto, 2025).

Moreover, behavioral interventions that utilize positive reinforcement and enforce consistent consequences are essential to modifying and maintaining desirable student behavior (Anthony et al., 2020). Beyond pedagogical strategies, an educator's ability to regulate their emotions and rely on social-emotional skills is critical for their well-being; developing these skills helps teachers navigate occupational stress, build resilience, and foster a more nurturing learning environment for their students (Shapira & Amzalag, 2025).

Table 3. Students' behavioral aspects affecting the professional growth and teaching practices of TLE teachers

Participant	Narrative	Formulated Theme
Pan	Described teaching as a “sacrificial profession” that deepened her understanding of learners.	Deepened understanding and empathy
Grater	Emphasized that these experiences helped her become more confident, reflective, and creative in managing behavior and improving instruction.	Increased confidence and creativity
Whisk	Experiences helped her become more confident, reflective, and creative in managing behavior.	Reflective practice and creativity
Ladle	“The major change I noticed is that I have become more intentional and structured in planning my lessons. I now prepare clearer instructions, establish routines, and set expectations before activities begin, especially during hands-on TLE tasks.”	Intentional and structured lesson planning
Tongs	Highlighted the need to improve teaching through clearer instructions and demonstrations, noting that students are getting more creative and patient.	Improved clarity and patience
Peeler	“Because of my experiences, I’ve become more structured and creative in delivering lessons. I’ve also become more conscious of classroom management and safety procedures.”	Structured delivery and consciousness of safety
Strainer	“Dealing with students’ behavioral aspects has made me much more structured and proactive in my teaching. Now, I give clear instructions, set detailed expectations before diving into hands-on activities, and add stricter safety briefings... All these adjustments have created a more organized and safer space for everyone.”	Proactive teaching and stricter safety briefings
Blender	“Teaching with this kind of students has really helped me grow as a TLE teacher. I've learned to be more patient, creative, and flexible with my lessons. I have to adjust my strategies based on each student's needs.”	Increased patience, creativity, and pedagogical flexibility
Apron	“Behavioral aspects of students have strengthened my long-term motivation by reminding me of the importance of patience, empathy, and persistence in teaching. They have shaped my perspective, helping me view challenges as opportunities for growth.”	Long-term motivation, patience, and empathy
Colander	“It’s very challenging on my part, but it also helped me in developing myself as a teacher because I keep on exploring different techniques just to address these kinds of students.”	Continuous exploration of teaching techniques

Table 3 highlights the transformative effect that managing students' behavioral aspects has on the professional growth of TLE teachers. The lived experiences of navigating classroom disruptions have ultimately strengthened the teachers' commitment and made them more structured, patient, proactive, and flexible in their teaching practices. This indicates that overcoming behavioral aspects of students acts as a catalyst for professional development. The necessity of managing diverse behavioral needs pushes educators to master complex technical abilities, such as providing targeted reinforcement and maintaining safe learning environments, which in turn boosts their professional efficacy and contributes to broader student success (Putra & Yanto, 2025).

Furthermore, continuously navigating these complex classroom dynamics requires and subsequently builds immense emotional resilience, an essential attribute for educators who must adapt to changing educational conditions while fostering positive teacher-student relationships (Shapira & Amzalag, 2025). By continuously exploring varied and interactive lessons and adjusting to non-verbal cues, teachers are able to foster stronger connections and promote a highly conducive learning environment.

CONCLUSION

Based on the findings of the study regarding the lived experiences of Technology and Livelihood Education (TLE) teachers, the following conclusions are drawn regarding how student behaviors impact the classroom environment and shape teaching practices:

1. **Digital Habits and Relevance Drive Misbehavior:** Common behavioral aspect of students, such as inattention, unnecessary talking, and horseplay, are heavily influenced by students' digital distractions, lack of sleep, and a disconnect between the lessons and their real-life applications.
2. **Disruptions Threaten Skill Mastery and Safety:** In a hands-on subject like TLE, disruptive behaviors do more than interrupt lectures; they consume valuable time meant for practical application, compromise the safety of the laboratory environment, and ultimately hinder students' confidence and skill mastery.
3. **Behavioral Aspect of Students Requires Proactive Management:** To effectively mitigate disruptions, teachers are compelled to transition toward highly structured, proactive teaching methods, such as setting clear expectations, establishing firm routines, and utilizing calm, emotionally regulated communication.
4. **Behavioral Issues Act as Catalysts for Professional Growth:** Rather than causing burnout, managing the behavioral aspect of students serves as a powerful driver for teacher development, pushing educators to continually explore new techniques and significantly enhancing their problem-solving, communication, and classroom management skills.
5. **Difficulties Deepen Professional Purpose:** Navigating these ongoing challenges ultimately strengthens teachers' long-term motivation, fostering greater patience, empathy, and resilience, while solidifying their commitment to supporting vulnerable or high-need learners.

RECOMMENDATIONS

Based on the conclusions derived from the lived experiences of Technology and Livelihood Education (TLE) teachers, the following recommendations are proposed to enhance classroom management, ensure student safety, and support the professional well-being of educators:

1. **Implement a Proactive Prototype Action Plan:** TLE teachers should adopt a structured approach to classroom management that begins with clear expectations and rigorous safety orientations for tools and equipment before any practical activities commence.
2. **Enforce Strict Gadget Regulations:** To minimize digital distractions and ensure safety, teachers should implement firm rules prohibiting the use of cellphones and other gadgets during demonstrations and hands-on tasks.

3. Foster Collaborative Learning Environments: Educators are encouraged to use a "Buddy System" or small-group roles to promote peer support, which can reduce unproductive time and encourage students to take ownership of their learning.
4. Prioritize Relationship-Building and Private Intervention: which can reduce unproductive time, teachers should utilize private consultations to address the root causes of disruptive behavior and build trust with students.
5. Strengthen Home-School Collaboration: Parents should be proactively engaged through regular communication to ensure that disciplinary efforts and student progress are supported consistently both at home and in school.
6. Support Teacher Well-being and Professional Growth: School administrators should establish peer-support systems and professional development programs that focus on emotional regulation and advanced behavioral management techniques specifically tailored for laboratory settings.
7. Enhance Pre-Service Training: Teacher Education Institutions (TEIs) should integrate practical, skill-based classroom management scenarios into their curricula to better prepare future TLE educators for the unique behavioral aspect of students for hands-on instruction.
8. Expand Future Research: Researchers should conduct further comparative or mixed-methods studies to evaluate the effectiveness of specific interventions across different TLE specializations and diverse educational contexts.

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ISANG KRITIKAL NA PAGSUSURI SA MGA PILING PELIKULA NI RODOLFO “DOLPHY” VERA QUIZON GAMIT ANG TEORYANG HISTORIKAL, KULTURAL, AT MORALISTIKO

A CRITICAL ANALYSIS OF SELECTED FILMS OF RODOLFO “DOLPHY” VERA QUIZON USING HISTORICAL, CULTURAL, AND MORALISTIC THEORIES

Dr. Nowel U. Ramos

College Of Education, Nueva Ecija University of Science and Technology

ABSTRACT

This study aimed to analyze selected films of Rodolfo “Dolphy” Vera Quizon using the historical, cultural, and moralistic theories. Specifically, it examined students' perceptions regarding the effectiveness of the films' cinematic elements and analyzed the historical, cultural, moral, and social aspects, as well as the values reflected in the characters and narratives of the selected films. The study employed a qualitative research design through critical analysis of four selected films: *Pasifica Falayfay* (1969), *Ang Tatay Kong Nanay* (1978), *Markova: Comfort Gay* (2000), and *Father Jejemon* (2010). The perceptions of twenty Filipino language students were also included as supporting data. The findings revealed that the cinematic elements obtained an overall weighted mean of 4.32, interpreted as very highly effective, with the theme emerging as the most effective element. The analysis further identified historical, cultural, and moral dimensions that reflect significant Filipino values, including love for family, compassion for others, respect, faith, and resilience. The films likewise portray various social issues such as discrimination, poverty, identity crises, and social inequality. Moreover, the main characters and overall narratives embody the values commonly associated with Dolphy, portraying him as compassionate, family-oriented, and a responsible artist. Overall, the study demonstrates that Dolphy's selected films serve as significant vehicles for preserving and communicating Philippine history, culture, and moral values, thereby fostering a deeper understanding of Filipino society.

Keywords: *Dolphy, Philippine films, Historical Theory, Cultural Theory, Moralistic Theory, Critical Analysis*

PANIMULA

Ang pelikula ay isa sa pinakamahalagang anyo ng sining at komunikasyon sa makabagong lipunan. Higit pa sa pagiging daluyan ng libangan, nagsisilbi itong instrumento sa pagpapahayag ng mga ideya, damdamin, karanasan, at pananaw na sumasalin sa buhay ng tao at sa kalagayang panlipunang kanyang kinabibilangan. Ayon kina Bordwell at Thompson (2019), ang pelikula ay isang masining na sistema na binubuo ng iba't ibang elementong tulad ng naratibo, sinematograpiya, tunog, pagganap, at pag-eedit na sama-samang lumilikha ng kahulugan at karanasan para sa mga manonood. Dahil dito, ang pelikula ay hindi lamang maituturing na isang anyo ng libangan kundi isang mahalagang tekstong maaaring suriin upang maunawaan ang lipunan at kulturang pinagmulan nito. Bilang isang tekstong pangkultura, nagsisilbing

salamín ang pelikula ng mga paniniwala, pagpapahalaga, tradisyon, at karanasan ng isang lipunan. Binibigyang-diin ni Monaco (2009) na ang pelikula ay may kakayahang kumatawan sa mga ideolohiya at realidad ng tao sa pamamagitan ng mga simbolo, tauhan, at pangyayaring inilalarawan nito. Dahil dito, nagiging mahalagang sanggunian ang pelikula sa pag-aaral ng kasaysayan, kultura, at mga pagbabagong panlipunang nagaganap sa isang bansa.

Sa larangan ng edukasyon, kinikilala rin ang pelikula bilang mabisang kagamitang panturo at pampananaliksik. Ayon kay Champoux (1999), nakatutulong ang pelikula sa pagpapalawak ng pag-unawa ng mga mag-aaral sa mga konseptong historikal, panlipunan, at kultural dahil sa kakayahan nitong magbigay ng kongkreto at makatotohanang presentasyon ng mga karanasan ng tao. Sa pamamagitan ng pagsusuri sa mga pelikula, nahuhubog ang kritikal na pag-iisip at kakayahang magsuri ng mga isyung may kaugnayan sa lipunang ginagalawan. Mahalaga rin ang kritikal na pagsusuri sa pelikula upang higit na maunawaan ang mga mensaheng nakapaloob dito. Ayon kay Corrigan (2015), ang pagsusuri sa pelikula ay hindi lamang nakatuon sa banghay o kuwento kundi maging sa mga aspektong historikal, kultural, ideolohikal, at moral na nakapaloob sa isang likhang-sining. Sa pamamagitan ng sistematikong pagsusuri, natutukoy ang mga pagpapahalagang ipinahahayag ng pelikula at ang impluwensiya nito sa paghubog ng kamalayan ng mga manonood.

Sa konteksto ng Pilipinas, malaki ang naging papel ng pelikula sa paghubog ng kamalayang panlipunan at pangkultura ng mga mamamayan. Maraming pelikulang Pilipino ang nagsisilbing salamin ng kasaysayan, tradisyon, paniniwala, at mga suliraning kinakaharap ng bansa. Dahil dito, ang pelikula ay hindi lamang maituturing na anyo ng aliwan kundi isang mahalagang dokumentong pangkultura na maaaring pagkunan ng kaalaman tungkol sa identidad, pagpapahalaga, at karanasan ng mga Pilipino sa iba't ibang panahon.

Isa sa mga kinikilalang haligi ng pelikulang Pilipino ay si Rodolfo “Dolphy” Vera Quizon, na higit na nakilala bilang “Hari ng Komedyá” ng Pilipinas. Sa loob ng mahigit limang dekadang pananatili sa industriya ng pelikula at telebisyon, nakalikha siya ng mga obrang hindi lamang nagbigay-aliw sa milyun-milyong Pilipino kundi naglahad din ng iba't ibang realidad, pagpapahalaga, at karanasang panlipunan. Bagama't pangunahing nakilala sa larangan ng komedyá, marami sa kanyang mga pelikula ang naglalaman ng mahahalagang mensaheng may kaugnayan sa pamilya, kasarian, pagkakakilanlan, pananampalataya, at mga suliraning panlipunang kinakaharap ng bansa.

Kabilang sa mga pelikulang susuriin sa pag-aaral na ito ang Pasifica Falayfay (1969), Ang Tatay Kong Nanay (1978), Markova: Comfort Gay (2000), at Father Jejemon (2010). Ang mga pelikulang ito ay kumakatawan sa magkakaibang yugto ng kasaysayan at kulturang Pilipino at naglalarawan ng mga pagbabagong naganap sa pananaw ng lipunan hinggil sa pamilya, kasarian, identidad, relihiyon, at moralidad. Makikita rin sa mga ito ang iba't ibang suliraning panlipunan at pagpapahalagang Pilipinong nananatiling makabuluhan hanggang sa kasalukuyan. Bagama't kinikilala ang malaking ambag ni Dolphy sa industriya ng pelikulang Pilipino, nananatiling limitado ang mga akademikong pag-aaral na nagsusuri sa kanyang mga pelikula bilang mga tekstong historikal, kultural, at moralistiko. Higit na nakatuon ang karamihan sa mga umiiral na literatura sa kanyang karera bilang komedyante, artista, at personalidad sa telebisyon kaysa sa masusing pagsusuri sa mga mensaheng panlipunan, pagpapahalagang Pilipino, at mga realidad na inilalarawan ng kanyang mga pelikula. Dahil dito, kinakailangan ang isang sistematiko at kritikal na pagsusuring pampelikula upang higit na maunawaan ang ambag ng kanyang mga obra sa paghubog ng kulturang Pilipino at sa pagpapakita ng mga karanasang panlipunang sumasalamín sa iba't ibang yugto ng kasaysayan ng bansa.

Dahil dito, isinagawa ang pag-aaral na ito upang magsagawa ng isang kritikal na pagsusuri sa mga piling pelikula ni Rodolfo “Dolphy” Vera Quizon gamit ang Teoryang Historikal, Kultural, at Moralistiko. Layunin nitong tukuyin ang mga aspektong historikal, kultural, at moral na nakapaloob sa mga piling pelikula at suriin ang mga mensaheng ipinahahayag ng mga ito hinggil sa lipunang Pilipino. Samantala, ginamit ang persepsyon ng mga mag-aaral bilang suportang datos upang higit na mapagtibay ang pagsusuri sa kabisaan ng mga elementong pampelikulang matatagpuan sa mga nasabing pelikula. Sa pamamagitan ng pag-aaral na ito, inaasahang makapag-aambag sa larangan ng panunuring pampelikula at panitikang

Pilipino sa pamamagitan ng mas malalim na pag-unawa sa mga pelikula ni Dolphy bilang mahalagang bahagi ng pambansang kultura at sining.

PAGLALAHAD NG SULIRANIN

Ang pag-aaral na ito na pinamagatang “Isang Kritikal na Pagsusuri sa mga Piling Pelikula ni Rodolfo ‘Dolphy’ Vera Quizon Gamit ang Teoryang Historikal, Kultural, at Moralistiko” ay naglalayong suriin ang mga piling pelikula ni Dolphy batay sa mga aspektong historikal, kultural, at moral na masasalamain sa mga ito. Nilalayan din nitong matukoy ang persepsyon ng mga mag-aaral hinggil sa kabisaan ng mga elementong pampelikula na matatagpuan sa mga nasabing pelikula.

Partikular na sasagutin ng pag-aaral ang mga sumusunod na katanungan:

1. Ano ang persepsyon ng mga tagatugong mag-aaral hinggil sa kabisaan ng mga sumusunod na elemento ng pelikula matapos mapanood ang mga piling pelikula ni Rodolfo “Dolphy” Vera Quizon?
 - 1.1 tauhan;
 - 1.2 tagpuan;
 - 1.3 banghay;
 - 1.4 dayalogo;
 - 1.5 tema;
 - 1.6 musika;
 - 1.7 sinematograpiya; at
 - 1.8 pamagat.
2. Aling elemento ng pelikula ang may pinakamataas na antas ng kabisaan batay sa persepsyon ng mga tagatugon?
3. Anong mga eksena sa mga piling pelikula ang nagpapakita ng mga aspektong historical, kultural at moral?
4. Anong mga suliraning panlipunan at realidad ng lipunang Pilipino ang masasalamain sa mga piling pelikula?
5. Paano mababakas sa mga pangunahing tauhan at sa kabuuang naratibo ng mga pelikula ang mga pagpapahalagang iniuugnay kay Rodolfo “Dolphy” Vera Quizon bilang isang artista at personalidad sa kulturang Pilipino?

MGA KAUGNAY NA LITERATURA

Pelikula bilang Midyum ng Sining at Panitikan

Ang pelikula ay isa sa mga kinikilalang anyo ng sining na may kakayahang pagsamahin ang biswal, tunog, musika, at salaysay upang makalikha ng isang makabuluhang karanasan para sa mga manonood. Kasama ng pagpipinta, musika, drama, at arkitektura, ang pelikula ay itinuturing na mahalagang bahagi ng kulturang nagbibigay-hugis sa kamalayan at pananaw ng tao. Bilang isang anyong pampanitikan sa paraang biswal at pandinig, nagtataglay ito ng kakayahang maglahad ng mga kuwento at karanasang may kaugnayan sa tunay na buhay. Ayon kay Reyes (1996), ang isang pelikula ay nagkakaroon lamang ng ganap na buhay sa pamamagitan ng imahinasyon ng mga manonood. Bagama’t binubuo ito ng magkakasunod na larawang nakapaloob sa isang rolyo ng pelikula, ang mabilis na pagpapakita ng mga larawang ito ay lumilikha ng ilusyon ng paggalaw at nagiging dahilan upang maging makatotohanan ang karanasang pampelikula. Binigyang-diin naman ni Lumbera (2011) na higit pa sa simpleng libangan ang pelikula sapagkat nagsisilbi rin itong instrumento ng pagkatuto. Ayon sa kanya, ang bawat pelikula ay naglalaman ng mga kaisipan, pananaw, at pagpapahalagang maaaring makaapekto sa pag-unawa at pananaw ng manonood sa kanyang sarili at sa lipunang kanyang ginagalawan. Sa pag-unlad ng teknolohiya, higit pang lumawak ang kakayahan ng pelikula na magsilbing daluyan ng mga ideya at karanasan. Ayon kay Rubin (1977), ang pelikula ay isa

sa mga pinakabagong anyo ng sining na naging mahalagang bahagi ng pagpapahayag ng kultura at kasaysayan ng isang bansa.

Kasaysayan ng Pelikulang Pilipino

Malaki ang naging papel ng pelikula sa paghubog ng kulturang Pilipino. Ayon sa mga tala, nagsimula ang pagpapalabas ng pelikula sa Pilipinas noong huling bahagi ng ika-19 na siglo at unti-unting naging bahagi ng pang-araw-araw na buhay ng mga Pilipino. Ang unang pelikulang Pilipino ay ang Dalagang Bukid ni Jose Nepomuceno, na kinikilala bilang Ama ng Pelikulang Pilipino. Sa paglipas ng panahon, dumaan sa iba't ibang yugto ang industriya ng pelikulang Pilipino. Nakilala ang dekada 1950 bilang Gintong Panahon ng Pelikulang Pilipino, habang sumibol naman ang mga makabagong estilo at paksang panlipunan noong dekada 1960 at 1970. Sa panahong ito, naging mas malawak ang pagtalakay ng pelikula sa mga usaping may kaugnayan sa kahirapan, politika, pamilya, at pagkakakilanlang Pilipino. Ayon kay Eugenio, ang paglaya ng bansa at pagdami ng mga lokal na produksiyon ay nagbigay-daan upang higit na maipakita sa pelikula ang kultura, pangarap, at mga suliranin ng mga Pilipino. Dahil dito, naging mahalagang bahagi ng pambansang identidad ang pelikulang Pilipino.

Pelikula bilang Salamin ng Lipunan at Kultura

Hindi lamang libangan ang pelikula kundi isa ring salamin ng buhay at lipunan. Sa pamamagitan ng mga tauhan, tagpuan, banghay, at temang inilalarawan nito, naipakikita ang mga karanasan, pananaw, at pagpapahalagang umiiral sa isang panahon. Ayon kay Badayos (2008), mahalagang suriin ang mga akda at likhang-sining sa kontekstong historikal at kultural upang maunawaan ang kaugnayan ng mga ito sa mga karanasang panlipunan, pampolitika, pangkultura, at pangkabuhayan ng tao. Idinagdag pa habang nananatiling nakaugnay ang panitikan at sining sa lipunan, mananatiling mahalagang kasangkapan ang pagsusuring sosyolohikal at kultural sa pag-unawa sa mga akda. Dahil dito, ang pelikula ay maituturing na mahalagang dokumento ng kultura sapagkat naitatala nito ang mga paniniwala, kaugalian, tradisyon, at suliraning kinakaharap ng mga tao sa isang partikular na panahon.

Rodolfo “Dolphy” Vera Quizon at ang Pelikulang Pilipino

Si Rodolfo “Dolphy” Vera Quizon ay kinikilalang Hari ng Komedyang Pilipinas dahil sa kanyang natatanging ambag sa telebisyon at pelikula. Bagama't higit siyang nakilala sa larangan ng komedyang, nakapagpakita rin siya ng kahusayan sa mga pelikulang may temang drama, pantasya, at panlipunang komentaryo. Ayon sa dokumentaryong Tunay na Buhay, kinilala si Dolphy bilang isa sa pinakamahahalagang personalidad sa kasaysayan ng pelikulang Pilipino dahil sa lawak ng kanyang impluwensiya at husay sa pagganap. Sa disertasyon ni Hernando (n.d.), inilarawan si Dolphy bilang isang artistang sa pamamagitan ng kanyang mga karakter ay naipakita ang kaluluwa ng karaniwang Pilipino. Kadalasang inilalarawan sa kanyang mga pelikula ang mga pangkaraniwang mamamayan na humaharap sa iba't ibang pagsubok sa buhay ngunit nananatiling matatag, maparaan, at may pag-asa.

Historikal, Kultural, at Moralistikong Pagdulog sa Pelikula

Ang Teoryang Historikal ay nakatuon sa pagsusuri ng isang akda batay sa kontekstong pangkasaysayan at panlipunang pinagmulan nito. Samantala, ang Teoryang Kultural ay nagbibigay-pansin sa mga pagpapahalaga, tradisyon, at paniniwalang masasalaman sa isang akda. Ang Teoryang Moralistiko naman ay nakatuon sa mga pagpapahalagang moral at aral na maaaring mapulot mula sa isang akda. Sa paggamit ng mga teoryang ito sa pagsusuri ng pelikula, nagiging mas malalim ang pag-unawa sa mensaheng nais ipabatid ng pelikula at sa kaugnayan nito sa lipunang kinabibilangan ng mga manonood.

Mga Kaugnay na Pag-aaral

Maraming pag-aaral na ang naisagawa hinggil sa impluwensiya at kahalagahan ng pelikula sa lipunang Pilipino. Natuklasan nina Garcia et al. (2016) na ang pelikula ay may mahalagang papel sa pagpapalawak ng kaalaman ng mga manonood hinggil sa kultura at sa paglinang ng pagpapahalaga sa pamilya, pagkakaisa, at pagkakakilanlang pambansa. Ipinakita rin ng kanilang pag-aaral na ang mga

pelikulang Pilipino ay nagiging daluyan ng pag-unawa sa mga karanasan at realidad ng kapwa Pilipino. Sa pag-aaral nina Andres et al. (2013), binigyang-diin na ang pelikula ay isang natatanging anyo ng komunikasyon na gumagamit ng mga elementong biswal at naratibo upang katawanin ang mga realidad panlipunan. Ayon sa kanila, ang pelikula ay hindi lamang representasyon ng buhay kundi isa ring malikhaing konstruksiyon ng mga ideya at karanasang umiiral sa lipunan. Samantala, ipinakita ni Santos et al. (2014) na mahalagang salik sa pagtangkilik ng mga manonood ang mga elementong pampelikula gaya ng karakterisasyon, pagganap, musika, at iba pang aspektong teknikal na nakatutulong sa pagbuo ng kahulugan ng isang pelikula. Gayundin, binigyang-diin ni Maderazo (2010) na ang mga pelikula ay nakatutulong sa paghubog ng pag-unawa at kamalayang panlipunan ng mga manonood sapagkat nagiging daluyan ito ng mga karanasang maaaring maiugnay sa tunay na buhay. Natuklasan naman nina Maligon et al. (2016) na higit na tinatangkilik ng mga manonood ang mga pelikulang may temang maiuugnay nila sa kanilang sariling karanasan, partikular yaong tumatalakay sa pamilya, pakikipagkapwa, at mga suliraning panlipunan. Ipinakita nito na mahalagang salik sa tagumpay ng isang pelikula ang kakayahan nitong maging makabuluhan at makatotohanan para sa mga manonood. Kaugnay naman ng mga pelikula ni Rodolfo “Dolphy” Vera Quizon, binigyang-diin ni Hernando na ang mga karakter na kanyang ginampanan ay sumasalamin sa karanasan, mithiin, at pakikipagsapalaran ng karaniwang Pilipino. Sa pamamagitan ng komedya at drama, naipakita ni Dolphy ang iba’t ibang mukha ng buhay Pilipino at ang mga pagpapahalagang nakaugat sa kulturang Pilipino. Dagdag pa rito, ipinahayag ni Yapan (2012) na ang pelikula ay naging mahalagang bahagi ng buhay ng mga Pilipino dahil nagsisilbi itong anyo ng libangan, edukasyon, at pagkakabuklod ng mga tao. Dahil sa kakayahan nitong maghatid ng mga kuwento at karanasan, nagiging mahalagang salamin ito ng lipunang Pilipino at ng mga pagbabagong nagaganap dito.

METODOLOHIYA

Disenyo ng Pananaliksik

Ginamit sa pag-aaral ang kwalitatibong disenyo ng pananaliksik sa pamamagitan ng kritikal na pagsusuri ng mga piling pelikula ni Rodolfo “Dolphy” Vera Quizon. Ang pagsusuri ay isinagawa gamit ang Teoryang Historikal, Teoryang Kultural, at Teoryang Moralistiko upang matukoy ang mga aspektong historikal, kultural, at moral na nakapaloob sa mga pelikula. Ang kwalitatibong disenyo ay angkop sa pag-aaral sapagkat nakatuon ito sa masusing pag-unawa at interpretasyon ng mga mensahe, simbolismo, at pagpapahalagang makikita sa mga akdang pampelikula.

Corpus ng Pag-aaral

Ang corpus ng pag-aaral ay binubuo ng apat na piling pelikula ni Rodolfo “Dolphy” Vera Quizon na kumakatawan sa iba’t ibang yugto ng kanyang karera sa pelikula. Kabilang dito ang Pasifica Falayfay (1969), Ang Tatay Kong Nanay (1978), Markova: Comfort Gay (2000), at Father Jejemon (2010). Pinili ang mga pelikulang ito dahil sa kanilang popularidad, tematikong pagkakaiba-iba, at potensiyal na magpakita ng mga aspektong historikal, kultural, at moral na mahalaga sa pag-aaral.

Balangkang ng Pagsusuri

Isinagawa ang pagsusuri gamit ang Teoryang Historikal, Teoryang Kultural, at Teoryang Moralistiko. Ang Teoryang Historikal ay ginamit upang matukoy ang mga pangyayaring historikal at mga kondisyong panlipunang masasalamin sa mga pelikula. Ang Teoryang Kultural naman ay ginamit upang suriin ang mga pagpapahalaga, tradisyon, paniniwala, at kaugaliang Pilipino na inilalarawan sa mga pelikula. Samantala, ang Teoryang Moralistiko ay ginamit upang matukoy ang mga aral, pagpapahalagang moral, at mga mensaheng etikal na ipinahahayag ng mga pelikula.

Pangangalap at Pagsusuri ng Datos

Isinagawa ang paulit-ulit na panonood ng mga piling pelikula upang matukoy ang mahahalagang eksena, diyologo, tauhan, at temang may kaugnayan sa mga layunin ng pag-aaral. Ang mga natukoy na

datos ay inayos at sinuri batay sa mga kategoryang historikal, kultural, at moral. Bilang suportang datos, isinama rin ang mga resulta ng orihinal na sarbey na isinagawa sa mga mag-aaral hinggil sa kanilang persepsyon sa mga elementong pampelikula tulad ng tauhan, banghay, dayalogo, musika, pamagat, sinematograpiya, tagpuan, at tema. Ang mga resulta ng sarbey ay ginamit upang higit na mapagtibay ang interpretasyon sa mga pelikula ngunit hindi nagsilbing pangunahing batayan ng pagsusuri.

Mga Etikal na Konsiderasyon

Ang pag-aaral ay nakabatay sa pagsusuri ng mga pelikulang pampubliko at sa mga datos na nakalap sa orihinal na pananaliksik. Ang lahat ng impormasyon ay ginamit para lamang sa layuning akademiko at pananaliksik. Sa paggamit ng mga sanggunian, sinunod ang wastong pagkilala sa mga may-akda at pinagkunan ng datos upang mapanatili ang integridad ng pananaliksik.

RESULTA AT DISKUSYON

1. Persepsyon ng mga Manonood kaugnay sa Elemento ng Pelikula

1.1. Elemento ng Pelikula batay sa Artista/ Tauhan

Ipinakikita ang elemento ng pelikula batay sa artista / tauhan mula sa apat na pelikula ni Dolphy. Sa unang pahayag na "Nagagampanan ng may husay at galing ang bawat katangian na sumasalamin sa karakter na naibigay sa mga artista" nakakuha ng 4.5 mean ang pelikulang may pamagat na "Tatay kong Nanay" at may deskripsyong napakahusay, may 4.4 naman ang "Father Jejemon", sinundan ng "Markova na may 4.55 mean at ang "Fasifica Falayfay" na nakakuha ng 4.65 mean kung saan kapwa lahat ng pelikula sa unang pahayag ay nakakuha ng deskripsyon napakahusay.

Sa pangalawang pahayag naman na mas nabibigyang kulay at buhay ang bawat tagpo ng pelikula dahil sa mga gumaganap na artista, nakakuha ng 4.45 ang pelikulang Tatay kong Nanay at may deskripsyong napakahusay. Sinundan ng Father Jejemon na may 4.4 at deskripsyong napakahusay. May natuos namang 4.4 ang Markova at panghuli ay ang Fasifica Falayfay na may 4.30 na mean. Kapwa lahat ay nakakuha rin ng napakahusay na deskripsyon. Sa pangatlong pahayag naman na Malinaw ang karakterisasyon ng mga tauhan. Lumutang ang mga katangian ng tauhan upang makilala ang bida (Protagonista) at ang kontrabida (Antagonista). Nakakuha ng 4.5 ang pelikulang Tatay kong Nanay at may deskripsyong napakahusay. Sinundan ng Father Jejemon na may 4.24 at deskripsyong napakahusay. May natuos namang 4.15 ang Markova at panghuli ay ang Fasifica Falayfay na may 4.30 na mean. Kapwa lahat ay nakakuha rin ng napakahusay na deskripsyon. Lumalabas lamang na ang apat na pelikula batay sa mga manonood ay may napakahusay na pagganap ng mga artista, nabigyang – buhay at kulay ang mga tagpo at gayundin malinaw ang karakterisasyon ng mga tauhan. Nakatulong ang elementong ito upang mapalutang ang kabisahan ng pelikula at nakapukaw sa kawilihan at makaakit sa mga manonood. Ayon kay Lumbera (2011), ang mga tauhan ang siyang pinakapangunahing sangkap ng anupamang likha ng anumang akdang pampanitikan. Kaya, napakahalagang pagtuunan ito ng pansin ng mga manonood at mananaliksik lalo na sa mga kontemporaryong pelikula. Kaugnay dito, ang resulta ng apat na pelikulang nabanggit ay kakikitaan ng kahusayan ang Direktor sa pagpili ng artistang gumaganap sa pangunahing mga tauhang hinulma niya sa kwento ng kanyang pelikula. sa husay ng artistang napili, nabigyang – buhay at nagampanan niyang lubos ang hinihingi ng kwento.

1.2. Elemento ng Pelikula batay sa Tagpuan

Sa unang batayan na "Nakatutulong ang tagpuan sa pagpapasidhi at pagpapaganda ng bawat tagpo." nakakuha ng 4.6 mean ang pelikulang may pamagat na "Tatay kong Nanay" at may deskripsyong napakahusay, may 4.8 naman ang "Father Jejemon", sinundan ng "Markova na may 4.0 mean at ang "Fasifica Falayfay" na nakakuha ng 4.21 mean kung saan kapwa lahat ng pelikula sa unang pahayag ay nakakuha ng deskripsyon napakahusay. Sa pangalawang pahayag naman na "Angkop at akma ang ginamit na setting sa bawat eksena", nakakuha ng 4.28 ang pelikulang Tatay kong Nanay at may deskripsyong napakahusay. Sinundan ng Father Jejemon na may 4.32 at deskripsyong napakahusay. May natuos namang

4.14 ang Markova at panghuli ay ang Fasifica Falayfay na may 4.29 na mean. Kapwa lahat ng apat na pelikula ay nakakuha ng napakahusay na deskripsyon na may tuos na 4.40. Sa kabuuan, ang mga Tagpuan ay nakatulong sa pelikula sa pagpapaganda ng bawat eksena at ito ay angkop sa paningin ng mga manonood. Ayon kay McCracken, idinadala tayo ng mga pelikula sa lugar na hindi pa natin napupuntahan at nagiging tayo ang karakter. Hinahayaan nila tayong makatakas patungo sa mas malawak na mundo, nagpapatibay ng atin pagtingin at pag-intindi sa mga makabagong kagandahan. Ang paglalarawan ni McCracken ay akma sa mga tagpuang ginamit sa bawat eksena ng mga sinuring pelikula, nakatulong ang mga ginamit na tagpuan upang maidala ang mga manood sa bawat eksena na nakatulong din sa pagpapaganda ng daloy ng mga kwento nito.

1.3. Elemento ng Pelikula batay sa Banghay

Mula sa unang pahayag kaugnay sa maayos na pagkasunod-sunod ng kwento, nakakuha ng Mahusay na deskripsyon ang pelikulang Tatay kong Nanay na may 4.10 mean. Sinundan ng Father Jejemon na may mean 4.50 at deskripsyong napakahusay. Ang Markova naman ay nakakuha ng 4.30 mean na nahahanay sa deskripsyong napakahusay. Panghuli, ang pelikulang Fasifica Falayfay na may mean na 4.50 at may deskripsyong napakahusay. Sa kabuuan may napakahusay na pagkasunod-sunod ang mga kaganapan sa apat na pelikula mula sa kabuuang mean na 4.35. Kaugnay naman sa kapana-panabik na tagpo, kasukduklan at tunggalian nakakuha ng mean na 4.3 at deskripsyong napakahusay ang unang pelikula na ang Tatay kong Nanay. Ang Father Jejemon na may mean na 4.26 at deskripsyong napakahusay. Ang Markova na may 4.3 mean at 4.50 mean naman sa pelikulang Fasifica Falayfay na kapwa parehong nakakuha ng deskripsyon Mahusay. Sa pangkahalatan, ang apat na pelikula batay sa nabanggit na batayan ay may kabuuang mean na 4.15. Sa pagiging malikhain ng Direktor/ Scriptwriter sa paggamit ng balik – tanaw o patumbalik na lalong nagpatingkad at nagpalinaw sa mga kaganapan sa kwento kung saan kapwa nakakuha ng parehong mean na 4.35 ang Tatay kong Nanay at Markova na may deskripsyong napakahusay. Samantalang ang Father Jejemon ay may mean na 4.4 at deskripsyong napakahusay. Panghuli, ang Fasifica Falayfay na may mean na 4.2 at deskripsyong Mahusay. Sa kabuuan, napakahusay ang paggamit ng balik – tanaw o patumbalik ng mga Direktor/ Scriptwriter sa apat na pelikula na lalong nagpatingkad at nagpalinaw sa mga kaganapan sa kwento mula narin sa natuos na mean na 4.33.

Ang pagkakaugnay naman ng bawat tagpo ay nakatulong upang masundan ang kwento ng Tatay kong Nanay na nakakuha ng deskripsyon na napakahusay mula sa mean 4.35. Ang Father Jejemon naman na may mean na 4.5 at deskripsyong napakahusay. Ang pelikulang Markova na nakakuha ng mean na 3.9 na may deskripsyong Mahusay at panghuli ang Fasifica Falayfay na may mean na 4.3 at deskripsyong napakahusay. Sa kabuuan nito may napakahusay na pagkakaugnay ng bawat pangyayari sa apat na pelikula na may mean na 4.26. Sa kabuuan, ang apat na pelikula ay may napakahusay na banghay batay sa natuos na mean na 4.28. Nangangahulugan lamang na ang apat na pelikula sa elementong ito ay may napakahusay na pagkayari ang kwento, ang bawat himaymay o detalye ay magkakaugnay upang maging malinaw sa mga manonood ang mga kaganapan o pangyayari sa kwento.

Ayon kina Andres, et. al.2, ang pelikula ay maituturing na isa ring natatangi at espesyal na anyo ng komunikasyon sa panahon ng impormasyon. Ito ay tumutukoy sa pagdidirihe na nagbibigay ng sensitibo at matalas na atensyon, kapwa sa lenggwahe ng pelikula (presentasyon) at panlipunang realidad (representasyon) gaya nang lumutang sa kinalabasan ng pagsusuri. Dahil sa katangiang ito ng apat na pelikula, di kataka – takang tinatangkilik pa rin ito ng sambayang Pilipino kahit dekadang taon na mula ng ito’y unang naipalabas.

1.4. Elemento ng Pelikula batay sa Dayalogo

Sa unang pahayag, tumatalakay ito sa laman at tama ng mga linya sa puso ng mga manonood na ginamit ng mga artista sa pelikula. Kung saan sa unang pelikulang Tatay kong Nanay ay nakakuha ng mean na 4.35 at deskripsyong napakahusay. Ang Father Jejemon ay may 4.55 mean at napakahusay na deskripsyon. Ang Markova na may 4.6 mean at Fasifica Falayfay na may 4.5 mean na kapwa rin nakakuha ng deskripsyong napakahusay. Ipinakikita rin sa kabuuan na may 4.5 mean na nangangahulugan napakahusay ng pagsasaayos at pagpili ng mga linya ng mga artista na siyang nakaaapekto sa mga

manonood. Kaugnay naman sa linya ng pelikula na naaangkop sa edad ng target na manood ay nakakuha ng Mahusay na deskripsyon ang mga pelikulang Tatay kong Nanay, Father Jejemon na parehong nakakuha ng 4.2 mean. Ang Markova naman ay nakakuha ng 4.25 mean at deskripsyong napakahusay, at ang Fasifica Falayfay ay nakakuha naman ng 4.15 at deskripsyong Mahusay. Sa kabuuan mayroon itong 4.2 na mean na nangangahulugang Mahusay ang pagkakagawa ng mga linya ng pelikula kung saan naaangkop sa edad ng target na manood. Sa ikatlong pahayag na "Nakatulong ang mga makabuluhang linya sa ikinaganda ng pelikula". Nakakuha ng 4.15 na mean at deskripsyong Mahusay ang pelikulang Tatay kong Nanay na, Sinudan ng Father Jejemon na may mean na 4.35 at deskripsyong napakahusay. Ang Markova na may mean na 4.5 at deskripsyon napakahusay. Panghuli ang Fasifica Falayfay na may 4.15 mean at deskripsyon na Mahusay.

Sa panghuling batayan na Matino at di bulgar ang mga salitang ginamit sa kabuuan ng pelikula. Angkop ang lengguwahe sa takbo ng mga pangyayari. Nakakuha ng 4.43 na mean at deskripsyong napakahusay ang pelikulang Tatay kong Nanay na, Sinudan ng Father Jejemon na may mean na 4.55 at deskripsyong napakahusay. Ang Markova na may mean na 3.40 at deskripsyong katamtaman. Panghuli ang Fasifica Falayfay na may 4.27 mean at deskripsyon na Mahusay.

Sa kabuuan, ang elemento ng pelikula batay sa dayalogo ay nakakuha ng napakahusay na deskripsyon at mean na 4.29 sa apat na pelikula ni Dolphy. Ayon kay Dr. Lumbea³, “habang nasa pinadilimang sinehan ang manonood ay pinaliliguan ng mga salita at tunog na kalangkap ng mga larawan upang papaniwalain na ang karanasang dala ng palabas ay may kaugnayan sa kanyang buhay”, ibig sabi’y ang layunin ng pelikula ay libangin ang manonood. Ang mga dayalogong nagamit sa apat na pelikula ni Dolphy ay isang matibay na halimbawa ng paglalarawan ni Lumbea, lubhang kinamanghaan ng mga manonood ang mga ginamit na linya o pananalita ng bawat artist ana tumatak sa puso at isip ng mga manonood o nagsilbing tagatugon sap ag – aaral na ito.

1.5. Elemento ng Pelikula batay sa Tema o Paksang – Diwa

Ipinakikita sa talahanayang ito ang tema o paksang-diwa ng apat na pelikula ni Dolphy. Nakakuha naman ng ikalawang ranggo ang batayan na kapupulutan ng mga aral na magagamit sa pang-araw-araw na pamumuhay. Sa pahayag na ito nakakuha ng napakahusay na deskripsyon ang Tatay kong Nanay na may 4.5 mean na pareho ring nakuha ng pelikulang Father Jejemon. Ang Markova naman ay nakakuha ng 4.25 na mean at deskripsyong napakahusay. Panghuli, ang Fasifica Falayfay na mean na 4.6 at may napakahusay na deskripsyon. Nakapaloob din sa elementong ito, na ang tema ng pelikula ay sumasalamin sa buhay ng manonood o ng mga Pilipino. Kung saan nakakuha ng napakahusay na deskripsyon ang Tatay kong Nanay na may mean na 4.25. Father Jejemon na may mean na 4.05 at deskripsyong Mahusay. Ang pelikulang Markova na may mean na 4.5 at napakahusay na deskripsyon. At ang Fasifica Falayfay na may 4.45 mean at napakahusay na deskripsyon.

Ang batayan na "Ang paksa ng pelikula ay tumatatak sa isip at tumatagos sa puso ng bawat manonood." ay nagkamit ng unang ranggo Sa bahaging ito nakakuha ng 4.4 mean ang Tatay kong Nanay na may napakahusay na deskripsyon. At pareho namang nakakuha ng 4.5 mean ang Father Jejemon, Markova at Fasifica Falayfay na may deskripsyong napakahusay. Ang batayan na “Naglalahad ng kaisipan at diwang titimo sa isip at damdamin ng manonood kaugnay ng kanilang mga karanasan sa buhay”, ang nasa ikatlong ranggo na nakakuha ng 4.45 mean ang Tatay kong Nanay na may napakahusay na deskripsyon samantalang ang Father Jejemon ay may mean na 4.56, sa kabilag banda ang Markova ay may mean na 4.37 at ang Fasifica Falayfay ay 4.25 na kapwa may deskripsyong napakahusay.

Sa kabuuan ang apat na pelikula ni Dolphy ay nagpapakita ng napakahusay na pagpili ng tema o paksang-diwa na may kabuuang mean na 4.12. Ayon kay Hernando (n.d.), “Si Dolphy ay hindi lamang isang idolo; siya ay isa ring artist na sa mga nilikhang karakter ay mababanaag ang bugso ng iba’t ibang emosyon, ang malawak na pananaw, ang kaluluwa ng Filipino. Kadalasang papel niya’y pangkaraniwang mamamayan - maralita at api-apihan pero parating masaya, may pangarap, at di nagpapatalo sa bawat paghamon ng buhay; sa bandang huli’y nalalampasan ang sunud-sunod na krisis. Mala-henyong niyang tinatalakay ang bawat pagsubok ng tadhana, at sa nakatatayang paraan at paggamit ng perfect timing, pinapakita ang bawat damdamin ng isang nilalang: saya, lungkot, sigla, panlulumo,

kapilyuhan, takot, tapang, kabiguan, tagumpay. Damang-dama ng mga manonood ang pakikipagsapalaran ng bawat karakter ni Dolphy; kitang-kita nila ang mga sarili sa pagkatao nito”.

Mula sa sinabi ni Hernando, makikita na ang mga pelikula ni Dolphy ay hindi lamang nakapagpasaya o nakapag – aliw ng mga manood kundi may magandang paksang – diwa at angkop na tema na nakapagpapataas ng moralidad ng tao, nangangalaga ng kulturang Pinoy at may aral na historikal.

1.6. Elemento ng Pelikula batay sa Musika

Makikita na ang apat na pelikula ay nakakuha ng napakahusay na deskripsyon mula sa Tatay kong Nanay at Father Jejemon na may mean na 4.35, ang Markova na may 4.4 mean, sinundan ng Fasifica Falayfay na may 4.3 mean. Sa kabuuan nakakuha ito ng 4.35 mean at napakahusay na deskripsyon kaugnay sa mainam na pagplalapat ng mga sound effects na napgpapalutang sa tagpo, at eksena.

Batay naman sa kaangkupan ng theme song na ginamit sa pelikula, nakakuha ng mean na 4 at deskripsyong Mahusay ang Tatay kong Nanay, ang Father Jejemon na may 4.45 mean at napakahusay na deskripsyon, ang Markova na may 4.15 na mean at napakahusay na deskripsyon. Ang panghuli ay ang Fasifica Falayfay na may mean na 3.85 at Mahusay na deskripsyon. Sa kabuuan may 4.11 mean at Mahusay na deskripsyon.

Lumulutang sa kabuuang resulta kaugnay sa elemento ng pelikula batay sa musika ay may napakahusay na pagpili o angkop ang mga musikang nagamit sa apat na pelikula batay sa nakuhang kabuuang mean na 4.23. Ayon sa isinagawang pag-aaral ni Santos⁴, ang pag-aaral ng saykoanalitikal na teorya, cognitive studies, at cultural studies ay kapakipakinabang sa isang animated film. May apat na isyung pinagtatalunan dito, ang pagiging makatotohanan ng karakter at pagganap, sound effects at musika katulad na lamang ng naging bunga ng isinagawang pag – aanalisa sa pelikula ni Dolphy. Ang mga napiling tugtugin, musika, sounds effect at theme song ay akma sa bawat tagpo, nagawa nitong mapasidhi ang damdamin ng bawat manonood at mas lalong nakapagpalutang ng kagandahan sa bawat pelikula.

1.7. Elemento ng Pelikula batay sa Sinematograpiya

Nanguna sa ranggo ang batayan na maayos ang pagkakakuha ng mga anggulo sa mga bagay na kinuhanan ay nakadaragdag sa kasiningan ng pelikula. Sa bahaging ito nakakuha ng 4.4 mean ang Tatay kong Nanay, may 4.3 mean naman ang Father Jejemon na parehong nakakuha ng deskripsyong napakahusay. Samantala ang pelikulang Markova na may mean na 4.15 at deskripsyon Mahusay. At may 4.25 mean naman, ang Fasifica Falayfay at may deskripsyong napakahusay. Batay sa kabuuang resulta na may mean na 4.28 nakakuha ng napakahusay na deskripsyon kaugnay sa paraan ng pagkuha ng mga anggulo sa mga bagay na kinuhanan sa apat na pelikula.

Nakatulong ang paggamit ng Visual Effects sa paglutang ng mga pangyayari sa kwento sa apat na piling pelikula na siyang nakakuha ng ikalawang ranggo, ang naging resulta sa Tatay kong Nanay na may mean na 4.15 at deskripsyong Mahusay. Sinundan ng Father Jejemon na may mean na 4.25 at deskripsyon Mahusay. May nakuha namang 4.32 na mean ang pelikulang Markova na nangangahulugang napakahusay at ang Fasifica Falayfay naman na nakakuha ng 4.20 mean na may deskripsyong napakahusay.

Binigyan-pansin din ang pag – iilaw, na nakatutulong upang mapalutang ang mga emosyong nakapaloob sa kwento. Batay sa resulta mula sa unang pelikula na Tatay kong Nanay na may mean na 4.15 at deskripsyong Mahusay. Sinundan ng Father Jejemon na may mean na 4 at deskripsyon Mahusay. May nakuha namang 4.3 na mean ang pelikulang Markova na nangangahulugang napakahusay. At ang Fasifica Falayfay ay nakakuha naman ng 4.4 mean na may deskripsyong napakahusay.

Ang panghuli sa ranggo ang kaayusan ng editing ng pelikula kung saan nakakuha ng mean na 3.8 at Mahusay na deskripsyon ang Tatay kong Nanay. Ang Father Jejemon na may 4.3 mean at deskripsyong napakahusay, ganundin ang Markova na may mean na 4.45. Panghuli ang Fasifica Falayfay na may mean na 4.2 at deskripsyong Mahusay. Sa kabuuan, Mahusay ang pagkaka-edit ng apat na pelikula mula sa natuos na mean na 4.19.

Sa kabuuan may napakahusay na sinematograpiya ang apat na pelikula batay na rin sa natuos na mean na 4.23. Batay sa isinagawang pananaliksik nina Andres, Et. al.⁶, Ang daigdig ng pelikula ay umiikot sa pagkukunwari, may sarili itong lohika na hindi katulad ng lohika ng totoong mundo. Ang mga bagay na

itinuturing na imposible sa mundo ng tao ay maaaring maging posible sa mundo ng pelikula. Halimbawa, sa pamamagitan ng special effects, maaaring ipakita ng isang pelikula na may kakayahan ang isang taong lumipad sa himpapawid at kahit maraming tama ng bala ang katunggali ng bida, maaari pa itong mabuhay upang madagdagan ang kapapanabikan ng mga manonood. Ang mga pelikulang sinuri ay may mga special effects na ginamit gaya sa Fasifica Falayfay, si Dolphy na nabigyan ng kapangyarihan at lakas upang ipagtanggol si Pilar Pilapil at ang ilan pa sa mga pelikulang napanood.

1.8. Elemento ng Pelikula batay sa Pamagat

Batay sa resulta nangunguna ang unang batayan na nakakuha ng unang ranggo na kung saan may 4.6 na mean ang Tatay kong Nanay at may deskripsyon napakahusay. Sinundan ng Father Jejemon na may 4.1 na mean at deskripsyong Mahusay. Ang Markova na may mean 4.65 at deskripsyong napakahusay. Ganundin ang Fasifica Falayfay na may mean na 4.4. Sa kabuuan may 4.44 na mean at deskripsyong napakahusay. Ang pamagat ng apat na pelikula ay nakapukaw ng atensyon ng mga manonood.

Sa pangawalang pahayag na nababanaag sa pamagat ang paksang –diwa ng pelikula ay nakakuha ng napakahusay na deskripsyon ang Tatay kong Nanay na mean na 4.4. Ang Father Jejemon at Fasifica Falayfay na may natuos na parehong mean na 4.25 at deskripsyon napakahusay. Sinundan ng Markova na may 4.37 mean at deskripsyong napakahusay. Sa kabuuan kapwa ang apat na pelikula ay may napakahusay na pamagat na kinakakitaan ng paksang diwa mula sa mean na 4.31.

Sa pangatlong pahayag naman na nakikitaan ng malaking kaugnayan ang pamagat sa kabuuan ng pelikula na makikita sa bawat tagpo. May nakuhang 4.2 na mean ang Tatay kong Nanay na may deskripsyong Mahusay. Ang Father Jejemon na may 4.45 mean at deskripsyong napakahusay. Kapwa ring nakakuha ng napakahusay na deskripsyon ang Markova na may mean na 4.25 at Fasifica Falayfay na may mean na 4.35.

Sa kabuuan na may mean na 4.35 at deskripsyong napakahusay. Ipinapakita rin nito na sumasang – ayon ang mga tagatugon na napakahusay ang ginawang pagpili ng produksyon ng apat na pelikula sa naging pamagat ng mga nabanggit na pelikula.

Ayon kay McCracken⁵, hindi lang bintana ang pamagat ng isang pelikula. Isa rin itong magnifying glass. Binigyan nito ng pokus ang mga detalye at nilalaman ng isang pelikula gayundin nilalabas nito ang katotohanan sa paraang tinitingnan natin ang araw-araw sa kung anuman talaga ang nakapaloob sa pelikula. Nakatulong ang Pamagat upang hindi mailigaw ang bawat manood sa kahahantungan ng mga pelikula, mainam din ang mga piniling pamagat dahil akma sa nilalaman nito.

2. Elemento ng Pelikula Na May Pinakamataas na Antas ng Kabisaan

**Talahaynayan 1. Kabuuang Persepsyon ng mga Tagatugon
batay sa iba't ibang Elemento ng Pelikula**

Elemento Ng Pelikula	Kabuuang Bigat	Elemento Ng Pelikula	Kabuuang Bigat
Batay sa Artista/ Tauhan	4.38	Napakahusay	3
Batay sa Banghay	4.27	Napakahusay	6
Batay sa Dayalogo	4.29	Napakahusay	5
Batay sa Musika	4.24	Napakahusay	7
Batay sa Pamagat	4.40	Napakahusay	2
Batay sa Sinematograpiya	4.23	Napakahusay	8
Batay sa Tagpuan	4.36	Napakahusay	4
Batay sa Tema o Paksang – Diwa	4.42	Napakahusay	1
Pangkalahatang Kabuuang Bigat	4.32	Napakahusay	

Batay sa resulta ng pag-aaral, napakataas ang naging persepsyon ng mga tagatugon sa iba't ibang elemento ng mga piling pelikula ni Dolphy, na may kabuuang weighted mean na 4.32 at deskripsyong "Napakahusay." Pinakamataas ang marka ng tema o paksang-diwa (4.42), sinundan ng pamagat (4.40) at

artista o tauhan (4.38). Mataas din ang naging pagtataya sa tagpuan, dayalogo, banghay, musika, at sinematograpiya, na lahat ay nanatiling nasa antas na "Napakahusay."

Ipinapakita ng mga resulta na ang pangunahing lakas ng mga pelikula ni Dolphy ay ang makabuluhang tema, mahusay na pagganap ng mga tauhan, at mga kuwentong sumasalamin sa kulturang Pilipino, higit pa sa kanilang teknikal na aspekto. Pinatutunayan din nito na mahusay ang pagkakabuo ng mga pelikula at epektibo ang kanilang paghahatid ng mensahe sa mga manonood. Ang natuklasang ito ay umaayon sa pananaw nina Canto et al. at Lumbera (2011) na ang pelikula ay isang mahalagang midyum sa pagpapahayag ng mga ideya, pagpapahalaga, at karanasang panlipunan.

3. Mga Aspektong Historikal, Kultural at Moral na Masasalamin sa mga Piling Pelikula ni Dolphy

Historikal. Lumitaw sa pagsusuri na ang mga piling pelikula ni Dolphy ay nagsisilbing salamin ng iba't ibang yugto ng kasaysayan at panlipunang karanasan ng mga Pilipino. Pinakamalinaw itong nakita sa pelikulang Markova: Comfort Gay, na naglalarawan sa karanasan ng mga Pilipino noong panahon ng pananakop ng mga Hapones, kabilang ang diskriminasyon, karahasang seksuwal, at pakikibaka para sa pagkilala at katarungan. Sa Father Jejemon, naipakita naman ang impluwensiya ng Simbahang Katolika sa lipunang Pilipino at ang pakikilahok nito sa mga usaping panlipunan at pampolitika. Samantala, ang Pasifica Falayfay ay nagtatanghal ng ilang kaugaliang Pilipino na may historikal na ugat, tulad ng pagsunod sa huling habilin ng namamatay at ang malalim na paghanga ng mga Pilipino sa mga artista. Ang mga representasyong ito ay nagpapakita na ang pelikula ay hindi lamang anyo ng aliwan kundi isa ring dokumentasyon ng mga karanasang historikal ng bansa.

Kultural. Malinaw ding masasalamin sa apat na pelikula ang iba't ibang pagpapahalaga at kaugaliang Pilipino. Kabilang sa mga pinakamatitingkad na temang kultural ang pagmamahal sa pamilya, paggalang sa matatanda, pagkakaisa sa panahon ng pagsubok, at mataas na pagpapahalaga sa relihiyon. Ang mga ito ay makikita sa Pasifica Falayfay, Ang Tatay Kong Nanay, at Father Jejemon. Ipinakita rin ng mga pelikula ang ilang mahahalagang usaping pangkultura gaya ng diskriminasyon sa kasarian, gender identity, at ang kalagayan ng mga kasapi ng LGBTQ+ community sa lipunang Pilipino. Sa Ang Tatay Kong Nanay at Markova: Comfort Gay, naipakita ang mga hamon ng pagtanggap sa sariling identidad at ang pagnanais ng mga indibidwal na makamit ang pagkilala at paggalang mula sa lipunan. Ang mga representasyong ito ay nagpapatunay na ang pelikula ay isang mahalagang lunan ng pagtalakay sa mga umuusbong na usaping panlipunan at pangkultura.

Moral. Nangingibabaw sa mga piling pelikula ni Dolphy ang mga pagpapahalagang moral na may kaugnayan sa pagmamahal, sakripisyo, katapatan, paggalang, at pananampalataya. Sa Ang Tatay Kong Nanay, binigyang-diin ang walang kondisyong pagmamahal ng magulang sa anak at ang kahalagahan ng pagtanggap sa kapwa sa kabila ng pagkakaiba. Sa Father Jejemon, binigyang-halaga ang katapatan sa pananampalataya at ang paglaban sa tukso ng kapangyarihan at salapi. Samantala, ipinakita ng Markova: Comfort Gay ang kahalagahan ng dignidad, katatagan, at paggalang sa karapatang pantao. Ang mga natuklasang ito ay nagpapakita na ang mga pelikula ni Dolphy ay hindi lamang nakapagbibigay ng aliw kundi nagsisilbi ring instrumento sa paghubog ng pagpapahalaga at kamalayang panlipunan ng mga manonood.

4. Paglalarawan ng mga Suliraning Panlipunan at Realidad ng Lipunang Pilipino sa mga Piling Pelikula ni Dolphy

Inilalarawan sa pagsusuring ito ang iba't ibang suliraning panlipunan at realidad ng lipunang Pilipino na masasalamin sa mga piling pelikula ni Dolphy. Ipinakita na ang kanyang mga pelikula ay hindi lamang nakatuon sa pagpapatawa kundi nagsisilbi ring salamin ng kultura, pagpapahalaga, at mga isyung kinakaharap ng mga Pilipino. Sa Pasifica Falayfay, binigyang-diin ang kahalagahan ng pagmamahalan ng pamilya, pagmamalasakit ng magulang sa anak, kagustuhan ng mga magulang na magkaroon ng anak na partikular ang kasarian, paggalang sa huling habilin ng yumao, paghanga sa mga artista, kahirapang nagtutulak sa ilan sa paggawa ng krimen, at pang-aabuso sa kababaihan at sa kahinaan ng tao.

Sa Ang Tatay Kong Nanay, tampok ang wagas na pagmamahal ng magulang, sakripisyo sa pagpapalaki ng anak, sistema ng extended family, kakayahan at ambag ng mga LGBTQ+ sa lipunan, krisis

sa identidad ng kasarian, at ang diskriminasyong patuloy nilang nararanasan. Sa Markova: Comfort Gay, tinalakay ang pagtatago ng tunay na identidad, diskriminasyon batay sa kasarian, patriyarkal na pananaw, matibay na pananampalataya, katatagan ng mga Pilipino sa kabila ng matitinding pagsubok, pagpapahalaga sa tradisyon at aliwan, kalagayan ng matatandang nag-iisa, at kamalayan sa HIV/AIDS. Ipinakita rin ang kasaysayan ng pang-aabuso sa mga comfort gay noong panahon ng pananakop ng mga Hapones. Samantala, sa Father Jejemon, inilahad ang papel ng mga pari sa pagsusulong ng katarungang panlipunan, impluwensiya ng modernisasyon at teknolohiya, pagbaba ng partisipasyon ng kabataan sa simbahan, malalim na pananampalataya ng mga Pilipino, impluwensiya ng mga elitista sa pulitika at ekonomiya, kasikatan ng mga talent search, crab mentality, at pang-aabuso sa kapangyarihan.

Sa kabuuan, ipinakikita ng mga piling pelikula ni Dolphy na ang komedya ay isang mabisang daluyan upang mailarawan ang tunay na kalagayan ng lipunang Pilipino. Sa pamamagitan ng katatawanan at makatotohanang mga tauhan, naipamalas ang mahahalagang pagpapahalagang Pilipino tulad ng pagmamahal sa pamilya, pananampalataya, at katatagan, kasabay ng paglalandad sa mga suliraning panlipunan gaya ng kahirapan, diskriminasyon, hindi pagkakapantay-pantay, katiwalian, at pang-aabuso. Dahil dito, nagiging daan ang mga pelikula upang mahikayat ang mga manonood na magnilay, maging mulat sa mga isyung panlipunan, at pahalagahan ang pagkakapantay-pantay, paggalang, at malasakit sa kapwa.

5. Pagpapahalagang Pilipino at Personalidad ni Dolphy na Masasalamín sa mga Tauhan at Naratibo ng mga Piling Pelikula

Sa mga piling pelikula ni Dolphy, malinaw na naipakita ang kanyang mga pagpapahalagang Pilipino at tunay na personalidad. Sa Pacifica Falayfay, naipamalas ang kanyang pagiging masayahin, palangiti, at matulungin sa kapwa, mga katangiang kinilala rin ng kanyang pamilya at mga kasamahan sa industriya. Sa Ang Tatay Kong Nanay, nakita ang kanyang pagiging mapagmahal, responsable, at pantay na ama sa lahat ng kanyang mga anak at anak-anakan. Sa Markova: Comfort Gay, ipinakita ang kanyang kabutihan, katapatan, pagiging mapagpakumbaba, at pagiging mabuting kaibigan, na sumasalamín din sa kanyang tunay na buhay bilang isang artistang madaling lapitan at bukas sa publiko. Samantala, sa Father Jejemon, inilarawan si Dolphy bilang isang taong may pananampalataya, mapagbigay-galang sa iba't ibang paniniwala, at may malasakit sa lipunan. Ipinakita rin ang kanyang katapangan sa pagpapahayag ng kanyang paninindigan sa mga isyung panlipunan at pampulitika.

Sa kabuuan, ang mga tauhang ginampanan ni Dolphy ay sumasalamín sa kanyang tunay na pagkatao—isang masayahin, mapagmahal, mapagpakumbaba, matulungin, may pananampalataya, at may malasakit sa kapwa at sa bayan.

KONKLUSYON

Batay sa mga resulta, ang mga sumusunod ay konklusyon ng pananaliksik:

1. Ipinakita ng pag-aaral na ang mga piling pelikula ni Rodolfo “Dolphy” Vera Quizon—Pacifica Falayfay, Ang Tatay Kong Nanay, Markova: Comfort Gay, at Father Jejemon—ay may mataas na antas ng kasiningan at makabuluhang nilalaman. Lahat ng elementong pampelikula, kabilang ang tauhan, tagpuan, banghay, dayalogo, tema, musika, sinematograpiya, at pamagat, ay tinaya ng mga kalahok bilang “Napakahusay,” kung saan ang tema o paksang-diwa ang may pinakamataas na pagpapahalaga.
2. Natuklasan din na ang mga pelikula ay nagsisilbing mahalagang salamin ng kasaysayan, kultura, at pagpapahalagang Pilipino. Inilarawan ng mga ito ang mahahalagang pangyayaring panlipunan, tradisyon, pananampalataya, matibay na ugnayan ng pamilya, at mga aral tungkol sa pagmamahal, sakripisyo, pananagutan, at paggalang sa dignidad ng tao. Bukod dito, tinalakay rin ng mga pelikula ang iba't ibang suliraning panlipunan tulad ng diskriminasyon, kahirapan, hindi pagkakapantay-pantay, at krisis sa identidad, habang ipinakikita ang kahalagahan ng pag-asa at katatagan sa pagharap sa mga hamon.

3. Sa kabuuan, ang mga pelikula ni Dolphy ay sumasalamín sa kanyang mga personal na pagpapahalaga—pagiging makatao, mapagmahal sa pamilya, matulungin, mapagpakumbaba, at matatag. Dahil dito, maituturing ang kanyang mga pelikula bilang mahalagang ambag sa kulturang Pilipino na hindi lamang nagbibigay-alíw kundi nagtuturo rin ng mahahalagang aral at nagsisilbing salamin ng lipunan.

MGA REKOMENDASYON

Batay sa mga natuklasan at kongklusyon ng pag-aaral, inirerekomenda ang mga sumusunod:

1. Gamitin ang mga piling pelikula ni Rodolfo “Dolphy” Vera Quizon bilang kagamitang panturo sa mga asignaturang Filipino, Panitikan, Araling Panlipunan, at iba pang kaugnay na larangan upang higit na maunawaan ng mga mag-aaral ang ugnayan ng pelikula, kasaysayan, kultura, at mga pagpapahalagang Pilipino.
2. Hikayatin ang mga guro at mananaliksik na magsagawa ng higit pang pag-aaral sa iba pang pelikula ni Dolphy at ng iba pang mahahalagang personalidad sa pelikulang Pilipino gamit ang iba’t ibang teoretikal na pagdulog tulad ng feminismo, sosyolohikal, sikolohikal, at postkolonyal na pagsusuri.
3. Paigtingin ang paggamit ng pelikulang Pilipino bilang sanggunian sa pagtalakay ng mga suliraning panlipunan upang mahubog ang kritikal na pag-iisip at kamalayang panlipunan ng mga mag-aaral.
4. Magsagawa ng mga susunod na pag-aaral na may mas malawak na saklaw ng kalahok at mas maraming pelikulang susuriin upang higit na mapagtibay ang mga natuklasan hinggil sa impluwensiya at kabuluhan ng mga pelikulang Pilipino sa paghubog ng pananaw at pagpapahalaga ng mga manonood.
5. Suportahan ng mga institusyong pang-edukasyon at pangkultura ang dokumentasyon, konserbasyon, at mas malawak na pagpapalaganap ng mga klasikong pelikulang Pilipino bilang mahalagang bahagi ng pambansang pamana at identidad ng bansa.

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LEADERSHIP IN DIGITAL AGE AND ACCESSIBLE LEARNING SUPPORT ENVIRONMENT: SPRINGBOARD FOR ENHANCE INCLUSIVE EDUCATION INNOVATION

Elmer T. Buan
Sultan Kudarat State University

ABSTRACT

In the 21st century, educational administrators play a critical role in fostering inclusive and equitable learning environments in increasingly complex and technology-driven contexts. This study aimed to determine the level of digital age leadership skills of school administrators and examine their relationship with the level of support provided for an accessible learning environment, serving as a basis for an enhanced inclusive education innovation. A descriptive-correlational research design was employed, involving six (6) school heads and sixty (60) teachers from selected public elementary schools in the Tboli West District during the School Year 2025–2026. Findings revealed that school administrators demonstrated a moderate level of digital age leadership skills across all domains, with emotional intelligence ranking highest and digital literacy lowest. Similarly, the level of support for an accessible learning environment was rated as moderate, with the social-emotional environment receiving the highest rating and the digital environment the lowest. Pearson's correlation analysis indicated a significant but low positive relationship between digital leadership skills and support for accessible learning environments ($r = .365$, $p = .005$), suggesting that improvements in leadership competencies may enhance inclusive practices. The study concludes that strengthening digital age leadership skills is essential in promoting inclusive, accessible, and responsive learning environments. Based on the findings, an enhanced inclusive education innovation focusing on leadership development was proposed to support the realization of equitable and quality education for all learners.

INTRODUCTION

In the 21st century, educational administrators are at the forefront of ensuring that schools are not only inclusive but also equipped to meet the diverse needs of all learners. As society grows increasingly complex and interconnected, the role of administrators has evolved into that of transformational leaders who foster accessible and supportive learning environments.

In the Philippines, the Department of Education (DepEd) has prioritized inclusive education and digital transformation through policies such as the Basic Education Learning Continuity Plan (BE-LCP) and the implementation of the Inclusive Education Policy Framework (Department of Education, 2025). These initiatives highlight the need for school leaders to effectively manage digital learning environments and ensure accessibility for all learners, including those with disabilities and those in marginalized communities. Despite these efforts, challenges persist, including limited infrastructure, unequal access to digital tools, and varying levels of digital leadership competence among school administrators (Baldera et al., 2025). Many schools continue to face issues in providing adequate support systems, such as instructional materials, digital resources, and socio-emotional services (Tang et al., 2024). Consequently, there is a growing need to enhance school leaders' digital leadership skills to bridge gaps in access and to strengthen the implementation of inclusive education across the country.

Although numerous studies have examined digital leadership and inclusive education independently, there is a limited body of research exploring the relationship between school administrators'

digital age leadership skills and the level of support provided to learning environments. Most existing literature addresses either the development of administrators' digital competencies or the accessibility of learning resources and support systems for diverse learners, without investigating how these two variables interact to influence inclusive education outcomes (Olofsson et al., 2021). Similarly, while frameworks emphasize the importance of leadership in promoting equitable and technology-supported learning, empirical evidence linking digital leadership practices directly to the effectiveness of physical, instructional, socio-emotional, and digital learning supports is scarce (OECD, 2020). This gap indicates the need for studies that examine how administrators' skills in communication, collaboration, critical thinking, agility, and digital literacy translate into meaningful support for accessible and inclusive learning environments, providing a basis for evidence-informed innovations in inclusive education.

Thus, despite the implementation of inclusive education policies, many schools in rural communities still struggle with digital accessibility and leadership readiness.

STATEMENT OF THE PROBLEM

This research determined the level of digital age leadership skills of school administrators. This has also measured the level of support in ensuring an accessible and supportive learning environment as well as their relationships which leads to the development of enhanced inclusive education innovation. Specifically, it has sought answers to the following questions:

1. What is the level of school administrators' digital age leadership skills with regards to emotional intelligence, communication, collaboration, creativity and innovation, critical thinking, agility and adaptability, and digital literacy?
2. What is extent of school administrators support access to learning environment with regards to physical environment, instructional environment, social-emotional environment, digital environment and support services?
3. Is there a significant relationship between the level of digital age leadership skills and extent of support to access learning environment?
4. What enhanced inclusive education innovation can be proposed based on the findings?

REVIEW OF LITERATURE

Digital Age Leadership Skills of School Administrators

The rapid digital transformation of education has significantly reshaped the role of school administrators, requiring them to move beyond traditional managerial functions and demonstrate competencies that support innovation, collaboration, adaptability, and technology integration. Contemporary educational leadership increasingly emphasizes digital-age leadership skills that enable administrators to manage institutional change, promote inclusive learning environments, and respond effectively to evolving educational demands (Uzorka & Kalabuki, 2025).

Literature consistently highlights that effective digital leaders function as transformational leaders who promote shared vision, organizational improvement, and stakeholder engagement. Hamzah et al. (2025) emphasized that digital leadership involves strategic vision, collaboration, and continuous professional development, while Baldera et al. (2025) found that resilient and adaptable administrators are more effective in sustaining digital initiatives despite institutional constraints. These findings align with transformational leadership theory, which underscores the importance of motivating stakeholders and fostering innovation.

Among the most essential digital-age leadership skills are creativity and innovation, which enable administrators to support continuous school improvement and technology-driven practices (Cortellazzo et al., 2019). Effective communication and collaboration are likewise important because they strengthen transparency, stakeholder participation, and professional learning within schools (Dexter, 2021). In

addition, critical thinking enables administrators to make evidence-based decisions and address complex educational challenges, while emotional intelligence supports relationship-building, conflict management, and positive school climates (Mahfouz et al., 2021). Agility and adaptability are also crucial in responding to rapidly changing technological and educational environments. Fernandez & Shaw (2020) noted that adaptable leadership promotes organizational resilience during periods of uncertainty. Meanwhile, digital literacy remains a foundational competency because it enables administrators to integrate technology effectively into school management, communication, and instruction (Petko et al., 2020). Despite the recognized importance of these competencies, studies continue to identify challenges related to limited infrastructure, inadequate training, resistance to change, and technological constraints that hinder effective digital transformation in schools.

In the Philippine context, school administrators generally demonstrate moderate levels of digital leadership competencies, indicating the continuing need to strengthen digital-age leadership skills that support inclusive and technology-driven learning environments (De Los Reyes & Paglinawan, 2024).

Accessible and Supportive Learning Environment

An accessible and supportive learning environment is essential in promoting inclusive and equitable education because it ensures that all learners, regardless of ability, background, or learning needs, can participate meaningfully in the educational process. Literature consistently emphasizes that school administrators play a vital role in establishing learning environments that are safe, inclusive, learner-centered, and responsive to diverse student needs (Leithwood et al., 2020). Global educational frameworks, including UNESCO (2021) and Sustainable Development Goal 4, further advocate for accessible and inclusive educational systems that promote equal learning opportunities and student well-being. An accessible learning environment consists of interconnected physical, instructional, socio-emotional, digital, and support-service components. The physical environment refers to safe, flexible, and resource-rich spaces that enhance student participation and accessibility. Studies indicate that adequate facilities, classroom organization, and learning resources positively influence student engagement and learning outcomes (Salcedo & Paglinawan, 2025).

However, disparities in infrastructure and resource allocation continue to affect educational accessibility, particularly in underserved schools. The instructional environment focuses on teaching practices, learning materials, and assessment strategies that accommodate diverse learner needs. Inclusive instructional approaches, such as Universal Design for Learning, promote flexibility, accessibility, and active learner participation. Research also suggests that differentiated instruction and technology-enhanced learning improve student achievement and participation among diverse learners.

The socio-emotional environment is likewise important because supportive relationships, emotional safety, and positive school climates contribute significantly to learner motivation, emotional resilience, and inclusion. Studies show that socio-emotional support systems strengthen student engagement and foster positive interactions among teachers and learners. Schools that prioritize emotional support are more likely to sustain inclusive and supportive learning cultures. The digital environment has become increasingly important in ensuring accessibility and participation in education. Technology-supported learning environments provide opportunities for adaptive instruction, personalized learning, and expanded access to educational resources. Navas-Bonilla et al. (2025) found that digital technologies improve participation among diverse learners, while Rincon-Flores et al. (2024) emphasized that smart learning systems enhance accessibility through interactive and technology-driven instructional practices. Nevertheless, studies continue to identify challenges related to ICT infrastructure, technical support, and professional development opportunities, particularly in resource-constrained schools. Support services also remain essential components of accessible learning environments because they provide academic, emotional, psychological, and specialized assistance to learners and teachers. Counseling programs, health services, and learner support systems contribute significantly to student well-being and educational success. However, literature reveals continuing concerns regarding coordination, accessibility, and implementation of support services within schools. Overall, the literature suggests that establishing accessible and supportive learning environments requires not only adequate facilities and technologies but also inclusive

instructional practices, emotional support systems, responsive leadership, and sustained institutional commitment to educational inclusion.

METHODOLOGY

This study employed a descriptive-correlational research design to examine the relationship between school administrators' digital age leadership skills and their effectiveness in creating accessible and supportive learning environments, as well as their contribution to inclusive education policies. The study was limited to selected public schools in Tboli West District; therefore, the findings may not fully represent other districts or educational contexts. Namely Datal Dlanag Integrated School, Tudok Integrated School, Salacafe Integrated School, Datal Bila Integrated School, Kboyong Elementary School, and Lacag Elementary School. The respondents consisted of 66 participants, including 6 school heads and 60 teachers, who were selected through simple random sampling to ensure fair representation.

A researcher-made structured questionnaire was utilized to measure the administrators' digital age leadership skills in terms of creativity and innovation, communication, collaboration, critical thinking, emotional intelligence, agility and adaptability, and digital literacy. It also assessed the level of support for accessible learning environments, including the physical, instructional, social-emotional, and digital environments, as well as support services. The instrument used a four-point Likert scale and underwent expert validation and pilot testing, obtaining a validation mean of 4.73 and a Cronbach's alpha of .971, both interpreted as excellent.

Prior to data gathering, the researcher secured permission from the Graduate School of Sultan Kudarat State University, the Department of Education, school principals, and the study participants. The questionnaires were personally administered and retrieved after completion. The collected data were analyzed using mean and standard deviation to describe the variables and Pearson's correlation coefficient to determine the relationship between digital age leadership skills and support for accessible learning environments.

Ethical considerations were strictly observed by ensuring informed consent, confidentiality, anonymity, voluntary participation, and proper acknowledgment of all referenced sources throughout the conduct of the study.

FINDINGS

Table 1. Level of School Head's Leadership Skills

Variable	Mean	SD	Description
Emotional intelligence	2.86	.76	High Support
Communication	2.79	.76	High Support
Collaboration	2.79	.81	High Support
Creativity and innovation	2.77	.77	High Support
Critical thinking	2.73	.77	High Support
Agility and adaptability	2.73	.78	High Support
Digital literacy	2.71	.77	High Support
Grand Mean	2.77	.77	High Support

The highest-rated domain in the summary of school heads' leadership efficiency is emotional intelligence, with a mean of 2.86 (SD = 0.76), interpreted as high support. This indicates that school heads are most effective in managing relationships, demonstrating empathy, and fostering a supportive work environment. It suggests that leaders prioritize interpersonal connections and emotional support, which are essential in maintaining teacher motivation and engagement, especially during periods of digital transition.

In contrast, the low rating in digital literacy suggest that administrators may still need further training in managing digital tools and technology-based learning system, with a mean of 2.71 (SD = 0.77), also described as high support. Although still within the positive range, this relatively lower score implies that school heads may have limitations in more advanced digital competencies, particularly in areas requiring deeper technical knowledge and understanding of digital systems. This suggests a need for further capacity-building in digital skills to fully support technology-driven initiatives.

Overall, the total mean of 2.77 (SD = 0.77), verbally interpreted as “High Support,” indicates that school heads demonstrate a moderate to high level of leadership efficiency across all domains. This suggests that while they are generally effective in leading their schools in the digital age, there remains room for enhancement, particularly in strengthening technical expertise and higher-order digital competencies to complement their strong interpersonal and leadership skills.

The findings align with Fullan (2020) who emphasizes that for leadership to be fully effective in digitally evolving environments, school heads must not only demonstrate strong interpersonal skills but also continuously develop their digital competencies to lead innovation, ensure informed decision-making, and sustain meaningful educational transformation. While administrators excel in certain aspects of digital leadership, there are evident areas for improvement.

Table 2. Level of Support for Access to Learning Environment

Indicators		Mean	SD	Verbal Description
1.	Social-emotional environment	2.88	.69	High Support
2.	Physical environment	2.87	.83	High Support
3.	Instructional environment	2.87	.74	High Support
4.	Support services	2.86	.75	High Support
5.	Digital environment	2.83	.72	High Support
Grand Mean		2.86	.75	High Support

The highest-rated indicator in the overall level of support for access to the learning environment is the social-emotional environment, with a mean of 2.88 (SD = 0.69), interpreted as high support. This suggests that school administrators are most effective in fostering positive relationships, supporting emotional well-being, and ensuring a nurturing environment for both teachers and students. It reflects a leadership focus on creating a supportive and inclusive culture that promotes engagement and learning.

In contrast, the lowest-rated indicator is the digital environment, with a mean of 2.83 (SD = 0.72), also described as high support. Although still within the positive range, this relatively lower score indicates that support for digital resources, technical assistance, and innovative technology use may require further strengthening to fully optimize teaching and learning in digital contexts.

Overall, the total mean of 2.86 (SD = 0.75), verbally interpreted as high support, indicates that school administrators demonstrate a moderate level of support for the learning environment across all domains. This suggests that while administrators effectively provide guidance, resources, and support for social-emotional, physical, instructional, and service-related aspects of the learning environment, attention to enhancing the digital environment could further improve accessibility and learning outcomes.

The findings are consistent with Usop & Lumapenet (2024), who observed that school administrators play a significant role in shaping school culture; however, their support is often perceived as moderate and largely centered on adaptive or managerial strategies rather than direct instructional engagement. This implies that while administrators contribute positively to the overall school environment, their involvement in providing hands-on classroom support remains somewhat limited. In contrast, these results diverge from Shah (2023), who argued that school leaders tend to allocate a substantial portion of their time to non-instructional responsibilities, thereby limiting their capacity to focus on instructional leadership practices. This difference suggests that although administrators may demonstrate presence and support, the depth and focus of their instructional involvement can vary across contexts.

Table 3. Relationship Between the Level of School Administrators' Digital Age Leadership Skills and Level of Support for Access to Learning Environment

Variables	r	p-value	Interpretation
Digital Age Leadership Skills	0.495	<.001	Significant Positive Moderate Correlation
Creativity and Innovation	0.514	<.001	Significant Positive Moderate Correlation
Communication	0.503	<.001	Significant Positive Moderate Correlation
Collaboration	0.466	<.001	Significant Positive Moderate Correlation
Critical Thinking	0.433	<.001	Significant Positive Moderate Correlation
Emotional Intelligence	0.454	<.001	Significant Positive Moderate Correlation
Agility and Adaptability	0.435	<.001	Significant Positive Moderate Correlation
Digital Literacy	0.418	<.001	Significant Positive Moderate Correlation

$\alpha=.05$ level of Significance

The analysis of the relationship between school administrators' digital-age leadership skills and the level of support for access to the learning environment revealed a definite but low positive correlation with an r-value of 0.495 ($p = 0.001$). This indicates that as administrators' digital-age leadership skills improve, there is a corresponding; but modest, increase in the support provided for the learning environment. In other words, administrators who are more adept in digital leadership tend to offer better guidance, resources, and facilitation across physical, instructional, socio-emotional, digital, and support service domains, but the strength of this association is limited.

The findings further reveal that all dimensions of digital leadership skills are significantly and moderately positively correlated, indicating that these competencies are interrelated and tend to develop together. This suggests that strengthening one aspect of digital leadership may also contribute to improvements in other areas. The moderate strength of the relationships implies that while the dimensions are connected, each retains a distinct role in shaping overall leadership effectiveness. Consequently, school leaders should adopt a holistic approach to developing digital leadership skills, ensuring balanced growth across all dimensions to effectively support technology integration and foster a sustainable digital learning environment.

The findings align with Gómez-Leal et al. (2022) who emphasizes that strong communication skills and emotional intelligence are crucial for effective school leadership, enabling leaders to build relationships that enhance student achievement.

Table 4. Matrix of the Proposed Enhanced Inclusive Education Innovation

Leadership Domain	Objectives	Activities	Basis of Inclusion (Findings Support)
Creativity & Innovation	Strengthen administrators' ability to generate and implement novel solutions for school improvement.	Organize benchmarking activities to visit best-practice schools.	Study showed moderate creativity skills with lower scores in risk-taking indicating capacity building is needed.

Communication	Improve administrators' ability to clearly convey goals, feedback, and digital priorities.	Schedule regular town hall meetings or open forums with stakeholders.	Communication domain showing moderate skills that could be enhanced for stronger influence on learning support.
Collaboration	Foster collaborative culture and participatory decision-making.	Conduct team-building and collaborative leadership seminars.	Collaboration was moderate with lowest sub-indicator on digital PLC collaboration indicating a need to strengthen collaboration skills.
Critical Thinking	Enhance evidence-based decision-making in digital initiatives.	Establish a technical working group to review and validate plans before implementation.	Critical thinking showing moderate skills; lower scores in risk assessment highlight need for stronger analytical capabilities.
Emotional Intelligence	Improve leaders' ability to manage relationships and support staff.	Implement regular performance appraisal and coaching sessions.	Emotional intelligence was moderate showing a strength to leverage for overall leadership impact.
Agility & Adaptability	Strengthen leaders' ability to respond quickly to technological and instructional changes.	Encourage participation in seminars on future-ready leadership.	Agility was moderate with lowest indicator in rapid adjustments suggest need for proactive adaptability training.
Digital Literacy	-Enhance technical proficiency and safe, effective use of digital tools.	Establish a Tech Help Desk or Peer Mentoring system for continuous learning.	Digital literacy was lowest overall, indicating a priority for capacity-building initiatives.

The proposed Enhanced Inclusive Education Innovation emphasizes the strengthening of school administrators' digital leadership competencies as a strategic mechanism for advancing inclusive education. Anchored on the study's findings, the matrix identifies key leadership domains that require targeted development due to their moderate levels of manifestation, thereby underscoring the need for systematic capacity-building interventions. Strengthening leadership practices has been widely recognized as essential in fostering inclusive and technology-driven school environments (Fullan, 2020; Trust & Whalen, 2020).

In the domain of creativity and innovation, the innovation seeks to enhance administrators' capacity to design and implement novel and responsive solutions for school improvement. The findings indicate moderate competence, particularly with lower emphasis on risk-taking, suggesting a need to cultivate a leadership culture that supports experimentation and continuous improvement. This is supported by research highlighting that innovative school leadership requires openness to change and the willingness to take calculated risks in order to respond effectively to evolving educational demands (Fullan, 2020).

With respect to communication, the innovation focuses on improving administrators' ability to clearly articulate digital goals, provide constructive feedback, and align stakeholders with institutional priorities. Although communication skills were found to be moderate, enhancing this domain is critical for ensuring shared understanding and coordinated action toward inclusive education goals. Effective communication has been identified as a core component of digital leadership, enabling transparency, stakeholder engagement, and successful implementation of school reforms (Trust & Whalen, 2020).

In terms of collaboration, the innovation promotes the development of a participatory and collegial school culture through strengthened teamwork and shared decision-making. The findings revealed

moderate collaboration, with particular gaps in digital Professional Learning Communities (PLCs), indicating a need for more structured collaborative practices. Literature affirms that collaborative leadership enhances teacher capacity, supports knowledge sharing, and improves inclusive practices, especially when supported by digital platforms (OECD, 2020).

For critical thinking, the innovation aims to strengthen administrators' ability to engage in evidence-based decision-making, particularly in relation to digital initiatives. The study highlighted limitations in risk assessment and data-informed decisions, suggesting the need to enhance analytical competencies. Research underscores that effective digital leadership is grounded in data literacy and critical analysis, enabling leaders to evaluate programs, anticipate challenges, and make informed decisions that support diverse learners (Datnow & Park, 2020).

The domain of emotional intelligence is identified as a relative strength that can be further leveraged. While administrators demonstrated moderate to high competence in this area, the innovation aims to deepen their ability to build supportive relationships, manage change, and respond to the socio-emotional needs of teachers and students. Emotional intelligence has been consistently linked to effective leadership, particularly in fostering positive school climates and supporting inclusive education (Mahfouz et al., 2021).

Regarding agility and adaptability, the innovation targets the enhancement of administrators' responsiveness to rapid technological and instructional changes. Though the limited internet connectivity and insufficient digital resources in rural schools may affect the implementation of the proposed innovation. The findings suggest limitations in making timely adjustments, indicating the need for proactive and flexible leadership approaches. Studies have shown that agile leadership is essential in navigating uncertainty and sustaining school improvement, particularly in digitally evolving educational contexts (Krehl & Büttgen, 2022).

Lastly, digital literacy emerged as the lowest-rated domain, highlighting it as a priority area for development. The innovation therefore emphasizes improving administrators' technical competence, as well as their understanding of digital ethics, cybersecurity, and data privacy. Strengthening digital literacy is critical for enabling school leaders to effectively guide technology integration and ensure equitable access to learning opportunities.

CONCLUSION

The study underscores that while schools are making some progress in supporting accessible learning environments, the current leadership skills are not yet strong enough to fully drive transformative change. Strengthening administrators' competencies; particularly in digital literacy, critical thinking, and adaptability, is crucial because these skills directly influence how effectively schools can implement inclusive practices, integrate technology, and respond to diverse student needs. The study further highlights digitally competent and adaptable school administrators are essential for fostering inclusive and equitable learning environments, aligning with SDG 4's vision of quality education for all. Strengthening digital leadership skills; including creativity, collaboration, critical thinking, and digital literacy, can empower administrators to drive innovation, support diverse learners, and ensure that inclusive education is effectively implemented. Ultimately, the findings highlight that investing in leadership development is not only crucial for school improvement but also for achieving broader global goals of educational equity and accessibility.

RECOMMENDATION

On the basis of the data and findings from this study, the following suggestions are offered:

1. School Administrators may enhance digital age leadership skills through continuous professional development programs focused on digital literacy, critical thinking, creativity, and adaptive leadership. Strengthening these competencies will enable administrators to more effectively lead inclusive education initiatives and foster supportive learning environments.
2. Department of Education (DepEd) may enhance and implement the proposed inclusive education innovation; a structured capacity-building programs for school leaders that emphasize technology integration, innovation, and inclusive education practices. Providing resources, policy guidance, and monitoring mechanisms will ensure that digital leadership translates into improved support for all learners.
3. Teachers may also engage in professional learning communities and collaborative training opportunities to strengthen instructional strategies that leverage digital tools and promote inclusivity. This will allow teachers to complement administrators' leadership efforts and contribute to a more accessible and supportive learning environment.
4. Future Researchers may conduct longitudinal or experimental studies that examine the impact of enhanced digital leadership interventions on inclusive education outcomes. Future research could also explore the mediating factors between administrators' leadership skills and the effectiveness of support provided to diverse learners.

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