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PEDAGOGICAL LITERACY AND CLASSROOM MANAGEMENT OF ELEMENTARY TEACHERS IN TALAINGOD DAVAO DEL NORTE DIVISION

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ABSTRACT

This study determined the relationship between pedagogical literacy and classroom management among elementary teachers in the Division of Davao del Norte. Specifically, it examined the extent of pedagogical literacy in terms of learning-teaching process, class management, measurement and evaluation, and counseling, as well as classroom management in terms of adaptive teaching, relationship, and behavior management. A quantitative approach using a descriptive correlational research design was employed. The respondents consisted of 140 elementary teachers from public schools selected through appropriate sampling techniques. Data were collected using validated survey questionnaires and analyzed through weighted mean, standard deviation, Pearson product moment correlation, and multiple regression analysis at a 0.05 level of significance. The findings revealed that both pedagogical literacy and classroom management were extensive, indicating that these practices were oftentimes evident among teachers. Results further showed a significant relationship between pedagogical literacy and classroom management, implying that teachers with higher pedagogical literacy demonstrate more effective classroom management practices. Moreover, all domains of pedagogical literacy significantly predicted classroom management, with class management and counseling identified as the strongest predictors, followed by measurement and evaluation and learning-teaching process. Based on these findings, it is recommended that educational leaders strengthen targeted professional development programs that enhance teachers' competencies in instructional planning, assessment practices, and student support. School heads are encouraged to implement mentoring and monitoring systems, while teachers are urged to adopt reflective, learner-centered, and inclusive teaching approaches to sustain effective classroom management.

KEYWORDS: *pedagogical literacy; classroom management; Talaingod, Davao del Norte Division*

INTRODUCTION

In every classroom, teaching is more than the delivery of content; it is the deliberate orchestration of learning experiences that shape how students think, behave, and engage with knowledge. At the center of this process lies pedagogical literacy, a teacher's capacity to design meaningful instruction, manage classroom dynamics, assess learning effectively, and provide holistic support to learners. When these competencies are strong, classroom management becomes a natural extension of teaching, manifested through adaptive instruction, positive relationships, and constructive behavior systems. When they are weak or inconsistently applied, even well-designed lessons can fail to engage learners or sustain order. Thus, the interplay between pedagogical literacy and classroom management defines the quality of everyday teaching practice and ultimately determines whether classrooms become spaces of active learning or passive compliance, particularly among elementary teachers in the Division of Davao del Norte.

Globally, education systems continue to face challenges in translating student-centered and differentiated instruction into consistent classroom practice. Although differentiation is widely promoted, many teachers struggle to adapt instruction to diverse learner needs due to constraints such as large class sizes, limited resources, and insufficient training (Tomlinson, 2021). This gap affects the learning-teaching process, where teachers are expected to design responsive and engaging lessons but often rely on uniform strategies that limit meaningful student participation.

In addition, maintaining inclusive and positive classroom relationships remains a persistent global concern. Teachers in diverse classrooms often encounter difficulties in using inclusive language, addressing individual differences, and preventing exclusion or stigmatization, which are essential elements of effective classroom management (Gorski & Pothini, 2021). At the same time, the global shift to remote and hybrid learning during the pandemic further revealed that teachers with limited pedagogical literacy struggled to sustain engagement and manage classroom behavior across modalities (OECD, 2021). These issues underscore that classroom management is deeply rooted in teachers' pedagogical competence rather than merely in disciplinary control.

At the national level, the Philippine education system reflects similar challenges, particularly in assessment practices and classroom conditions. Although formative assessment is emphasized, teachers often experience difficulty providing timely and constructive feedback due to workload pressures and limited assessment literacy (Estrella & Alson, 2021). Classroom congestion and limited resources further constrain teachers' ability to implement adaptive teaching and maintain effective behavior management, reducing opportunities for individualized instruction and increasing classroom disruptions (Department of Education, 2022). Despite reforms such as the K–12 curriculum and the Basic Education Learning Continuity Plan, gaps persist in translating pedagogical knowledge into consistent practice, especially in resource-constrained contexts (Malipot, 2022).

At the local level, schools in Talaingod, Davao del Norte face more complex challenges shaped by geographical isolation, limited instructional materials, and diverse linguistic and cultural contexts. Teachers are expected to implement differentiated instruction, provide timely feedback, and manage classroom behavior effectively, yet these practices are not consistently sustained. There is a noticeable gap between teachers' awareness of pedagogical principles and their actual classroom implementation, particularly in designing varied instructional strategies, delivering clear feedback, and maintaining structured routines. These inconsistencies directly affect student engagement and the overall classroom climate.

Despite these conditions, a significant research gap remains in understanding how pedagogical literacy influences classroom management within the specific context of Talaingod, Davao del Norte. Methodologically, existing studies often rely on generalized data that do not adequately represent rural and geographically isolated settings. Contextually, there is limited empirical investigation that captures the unique challenges of culturally diverse and resource-constrained classrooms in the area. Substantively, there is insufficient focus on how the domains of pedagogical literacy collectively influence key classroom management indicators such as adaptive teaching, relationship-building, and behavior management. Addressing these gaps is both scientifically and practically important, as it provides context-specific evidence that can guide targeted professional development, strengthen instructional and assessment practices, and ultimately improve classroom management, student engagement, and overall educational outcomes in the division.

THE STUDY'S OBJECTIVES

This study aimed to determine the relationship between pedagogical literacy and classroom management of teachers. Specifically, it sought to:

1. Determine the extent of pedagogical literacy in terms of:
   1.1. Learning-teaching process;
   1.2. Class management;
   1.3. Measurement and evaluation; and
   1.4. Counseling.
2. Determine the extent of classroom management in terms of:
   2.1. Adaptive teaching;
   2.2. Relationship; and
   2.3. Behavior management.
3. Establish whether there is a significant relationship between the pedagogical literacy and classroom management.
4. Identidy which of the domains of the pedagogical literacy significantly predict classroom management.

METHODOLOGY

This chapter presents the methodological framework of the study. It outlines the research design, the respondents who provided the data, and the instruments used for data collection. It also describes the procedures undertaken to ensure accurate, reliable, and ethical data gathering, as well as the techniques used in analyzing the data to answer the research questions. The major sections of this chapter include research design, ethical considerations, research respondents, research instruments, data gathering procedure, and data analysis.

Method Used

In this study, a quantitative research approach was employed, specifically utilizing a descriptive correlational design. Quantitative research focused on gathering numerical data and subjecting it to statistical analysis to answer research questions, test hypotheses, and identify patterns or relationships (Apuke, 2021). Descriptive correlational research aimed to describe variables as they existed naturally and to determine the degree of relationship between them without manipulation or intervention (Davis, 2021). This approach was suitable for the present study as it sought to examine the relationship between pedagogical literacy and classroom management, both measured using structured survey instruments.

Descriptive research provided a detailed account of the characteristics and status of variables, allowing researchers to capture a comprehensive picture of the phenomena under investigation (Korrapati, 2019). In correlational studies, the emphasis was on identifying whether changes in one variable were associated with changes in another, without assuming direct causality (Kabir, 2019). For this study, the design allowed the identification of patterns between teachers' pedagogical

literacy reflected in their learning-teaching processes, class management, measurement and evaluation, and counseling and their classroom management practices, which included adaptive teaching, relationship building, and behavior management.

The use of a descriptive correlational design was appropriate because it enabled the measurement of the strength and direction of relationships between the independent and dependent variables in a natural educational setting, without altering the conditions in which the participants operated (Creswell & Creswell, 2021). By employing statistical tools such as Pearson's correlation coefficient, the study determined whether higher levels of pedagogical literacy were associated with more effective classroom management. This methodological choice ensured the results were both contextually relevant and grounded in empirical evidence.

Sources of Data

The total population for this study comprised 216 elementary teachers across public schools in the Division of Davao del Norte. To determine the appropriate sample size, Slovin's formula was utilized. This formula is particularly useful when limited information is available about population variability and allows for precise estimation based on a tolerable margin of error. Slovin's formula, where n represents the minimum sample size, N represents the total population (216), and e represents the margin of error (0.05 for a 95% confidence level), was applied. Based on this computation, the study targeted 140 teacher respondents, ensuring that the results were statistically representative of the entire teacher population in the division.

Beyond numerical representation, the study carefully defined inclusion criteria to ensure that the sample reflected teachers capable of providing meaningful insight into the constructs of pedagogical literacy and classroom management. Specifically, respondents were required to be currently assigned as elementary classroom teachers within the Talaingod District, Division of Davao del Norte; possessed at least three years of teaching experience, ensuring familiarity with classroom dynamics, instructional practices, and learner diversity; were actively engaged in instructional roles rather than administrative-only positions to ensure relevance to classroom-based variables; and were willing to provide informed consent and complete the research instruments fully.

The choice of a three-year minimum teaching experience aligned with best practices in educational research, as teachers with at least this tenure tend to have stabilized instructional routines and developed reflective capacities, thereby enhancing data reliability. The purposive nature of these criteria ensured that the sample was both experienced and contextually appropriate.

The final sample of 140 teachers was selected using proportionate stratified sampling across schools within the division to reflect diversity in school size, geographic location such as urban and rural areas, and grade level assignments. This stratification enhanced the representativeness of the sample and allowed for more detailed subgroup analysis while maintaining feasibility within the time and resource constraints of the study.

Data Gathering Instrument

The primary instrument for data collection was a structured questionnaire designed to measure both, pedagogical literacy and classroom management. The questionnaire consisted of closed-ended questions with Likert-scale items to quantify perceptions and experiences.

For data collection, this study utilized an adapted survey questionnaire. The questionnaire that was employed in this undertaking was divided into two sets. The first set focused on the extent of pedagogical literacy. The second set focused on the extent of classroom management.

The pedagogical literacy questionnaire was adapted from Koçoğlu, et. al. (2022). The instrument consisted of 25 items. It had four indicators namely; learning-teaching process (1-8), class management (1-6), measurement and evaluation (1-5), and counseling (1-6).

The pedagogical literacy questionnaire adapted from Koçoğlu et al. (2022), the instrument was subjected to pilot testing involving a small group of respondents with similar characteristics to the target sample. The pilot test yielded a Cronbach's alpha coefficient of 0.81, indicating a very high level of internal consistency among the items. This result suggests that the instrument reliably measures the intended constructs learning-teaching process, class management, measurement and evaluation, and counseling within the context of the study. The high reliability score implies that respondents interpret the items consistently, ensuring the validity of the data to be gathered during the actual study. Consequently, the instrument can be confidently used without major revisions, aside from minor adjustments to wording for clarity. Below was the grading scale of the extent of pedagogical literacy.

Mean Interval	Descriptive Level	Descriptive Interpretation
4.20 - 5.00	Very Extensive	The pedagogical literacy is always evident.
3.40 - 4.19	Extensive	The pedagogical literacy is oftentimes evident.
2.60 - 3.39	Moderately Extensive	The pedagogical literacy is occasionally evident.
1.80 - 2.59	Less Extensive	The pedagogical literacy is seldom evident.
1.00 – 1.79	Not Extensive	The pedagogical literacy is never evident.

The classroom management questionnaire was adapted from Lutz, et. al. (2023). The instrument consisted of 21 items. It had three indicators namely; adaptive teaching (1-7), relationship (1-7), and behavior management (1-7).

The classroom management questionnaire adapted from Lutz et al. (2023), pilot testing was likewise conducted with a comparable set of participants to verify the reliability of the items measuring adaptive teaching, relationship, and behavior management. The analysis produced a Cronbach's alpha coefficient of 0.79, signifying excellent internal consistency. This high score indicates that the items are cohesively aligned with the construct of classroom management and that the scale is dependable for assessing teachers' practices and perceptions in inclusive classroom settings. Such reliability ensures that variations in responses will more likely reflect actual differences in classroom management practices rather than inconsistencies in measurement, thereby strengthening the accuracy and credibility of the research findings. Below was the grading scale of the extent of classroom management.

Mean Interval	Descriptive Level	Descriptive Interpretation
4.20 - 5.00	Very Extensive	Classroom management is always evident.
3.40 - 4.19	Extensive	Classroom management is oftentimes evident.
2.60 - 3.39	Moderately Extensive	Classroom management is occasionally evident.
1.80 - 2.59	Less Extensive	Classroom management is seldom evident.
1.00 – 1.79	Not Extensive	Classroom management is never evident.

The instruments in this study were contextualized to achieve the purpose of this study. The researcher integrated all the comments and suggestions of the adviser, panel members and expert validators for the refinement of the tools and to achieve construct validity.

Sampling Technique

The study employed a proportionate stratified random sampling technique to select the respondents from the target population of elementary teachers in the Division of Davao del Norte, particularly in Talaingod. The total population consisted of two hundred sixteen (216) elementary teachers, from which a sample of one hundred forty (140) respondents was determined using Slovin's formula with a margin of error of 0.05. Proportionate stratified sampling was utilized to ensure that teachers from different schools, grade levels, and geographic locations were adequately represented, thereby enhancing the generalizability and accuracy of the findings.

This approach was deemed appropriate for the study because it allowed for a balanced representation of teachers across various contexts within the division, including rural and geographically isolated schools. By dividing the population into strata based on relevant characteristics such as school assignment and teaching level, and then randomly selecting respondents from each group, the study minimized sampling bias and ensured that the perspectives of different subgroups were proportionally included. This method provided a more reliable reflection of the pedagogical literacy and classroom management practices of teachers in the division.

The application of clear inclusion criteria further strengthened the sampling process. Participants were required to be currently assigned as elementary classroom teachers in public schools within the Division of Davao del Norte, possess at least three years of teaching experience, be actively engaged in instructional roles rather than purely administrative positions, and be willing to provide informed consent and complete the research instruments. Teachers who did not meet these criteria were excluded to ensure that the data gathered were relevant to the study variables.

To highlight, the use of proportionate stratified random sampling ensured that the study obtained comprehensive and representative data, thereby enhancing the validity and reliability of the findings regarding the relationship between pedagogical literacy and classroom management among elementary teachers.

Procedure of the Study

The data gathering procedure for this study follows a systematic and ethically guided process to ensure the accuracy, reliability, and integrity of the research results. The procedure includes securing the ethics compliance certificate, obtaining the endorsement letter from the dean, requesting the permit to conduct the study from the Schools Division Superintendent (SDS), sending letters to the school principals, and validating the research instruments prior to the administration of the questionnaires. The data collection is conducted among respondents in Davao del Norte Division.

Ethics Review. Prior to the conduct of the study, the researcher secures an Ethics Compliance Certificate on October 11, 2025. This process ensures that the study adheres to the ethical standards required for research involving human participants. The ethics review confirms that the rights, dignity, and welfare of the respondents are protected throughout the research process. Ethical principles such as voluntary participation, informed consent, confidentiality of responses, and proper handling of collected data are strictly observed in accordance with the provisions of the Data Privacy Act of 2012. The issuance of the certificate signifies that the study meets the required ethical guidelines and is permitted to proceed with the subsequent stages of the research.

Validation of the Instrument. Prior to the actual administration of the research instruments, the questionnaire undergoes expert validation on January 5-7, 2026. The researcher provides validation sheets to selected experts who evaluate the research instruments in terms of clarity, relevance, appropriateness of content, and alignment with the research variables. The experts record their comments and suggestions in the validation sheets, which are carefully reviewed by the researcher. Necessary revisions are incorporated to improve the quality of the questionnaire before the final administration to the respondents. This process ensures that the instrument is valid, reliable, and capable of accurately measuring the variables included in the study.

Endorsement from the Dean. After securing the ethics compliance certificate, the researcher requests an endorsement letter from the Dean of the Graduate School of Rizal Memorial Colleges, Inc. on November 22, 2025. The endorsement confirms that the research has undergone proper academic review and is aligned with the requirements of the graduate program. It also verifies that the study is legitimate, academically sound, and appropriate for implementation in the identified research setting. This endorsement serves as an official institutional support that allows the researcher to formally request permission from the Schools Division Office to conduct the study.

Permit to Conduct the Study. With the endorsement letter from the dean, the researcher submits a formal request for a Permit to Conduct the Study addressed to the Schools Division Superintendent (SDS) of Davao del Norte on December 22, 2025. The request includes the research title, objectives of the study, the target respondents, and the procedures for data collection. Supporting documents such as the endorsement letter, research instruments, and other required attachments are also submitted for review. Upon approval, the permit grants the researcher official authorization to conduct the study within the schools under the jurisdiction of the said division.

Permission from the Principals. After receiving the permit from the Schools Division Superintendent, the researcher prepares and sends letters to the school principals of the identified schools in Davao del Norte on January 26-30, 2026. The letter informs the school heads about the purpose of the research, the respondents involved, and the procedures for administering the research instruments. Coordination with the principals is conducted to schedule the appropriate time for the distribution and retrieval of the questionnaires while ensuring that the regular school activities will not be disrupted. Their cooperation is essential in facilitating smooth communication with the respondents and ensuring an organized data collection process.

Data Gathering. The data for this study were collected using validated questionnaires on work attitudes and occupational resilience, specifically designed for Special Needs Education (SNED) teachers. The questionnaires were administered face-to-face using the paper-and-pencil method to ensure direct interaction with the respondents and to facilitate clarification of any items if needed. Before distribution, the respondents were briefed on the objectives of the study, the significance of their participation, and the expected time required to complete the questionnaires. They were also informed of essential ethical considerations, including voluntary participation, the confidentiality of their responses, and their right to withdraw from the study at any point without any penalty. Informed consent was secured from all participants prior to data collection. During the administration, the researchers personally provided the questionnaires to each respondent at their respective schools. Clear instructions were given on how to answer each item, and respondents were encouraged to ask questions for clarification to ensure accurate understanding. Adequate time was allotted for the respondents to thoughtfully complete the questionnaires without feeling rushed. Completed questionnaires were immediately collected and checked on-site to ensure all items were properly answered, minimizing missing or incomplete data.

After collection, the questionnaires were systematically encoded and organized to prepare for statistical analysis. The data were carefully entered into a secure database to ensure accuracy and consistency. Throughout the entire process, strict adherence to ethical standards, confidentiality, and accuracy was maintained to uphold the credibility and integrity of the study's findings. This face-to-face, paper-based approach also allowed the researchers to build rapport with the participants, which enhanced engagement and response quality.

Statistical Treatment

For a comprehensive interpretation and analysis of the data, the following statistical tools were employed:

The weighted mean was used to determine and describe the extent of pedagogical literacy in terms of learning-teaching process, class management, measurement and evaluation, and counseling, as well as the extent of classroom management

in terms of adaptive teaching, relationship, and behavior management. It provided the average level of responses of the teacher-respondents for each indicator and overall domain. Through the weighted mean, the study was able to interpret whether the practices being measured were evident, moderately evident, or not evident in the classroom context. This statistical tool allowed for a clear and concise representation of the general tendency of teachers' responses, making it possible to identify which areas of pedagogical literacy and classroom management were most and least manifested.

The standard deviation was used to measure the variability or dispersion of the responses of the teacher-respondents. It indicated how much the responses deviated from the computed mean, providing insight into the consistency of teachers' practices. A lower standard deviation indicated that the responses were closely clustered around the mean, suggesting a high level of agreement and consistency among teachers. On the other hand, a higher standard deviation indicated a wider spread of responses, implying variability in how teachers perceived and implemented pedagogical literacy and classroom management practices. This measure complemented the weighted mean by showing not only the average level of responses but also the degree of uniformity across respondents.

The Pearson product-moment correlation coefficient was employed to measure the significant relationship between pedagogical literacy and classroom management. This statistical tool determined the strength and direction of the relationship between the pedagogical literacy and classroom management.

Multiple linear regression analysis was used to identify which specific domains of pedagogical literacy significantly predicted classroom management. This analysis determined the extent to which each domain contributed to variations in classroom management and identified the strongest predictors among the independent variables.

Ethical Consideration

The ethical consideration section of this study addressed principles that protected the rights, dignity, and well-being of the teacher-respondents from the Division of Davao del Norte. The study adhered to recognized research ethics frameworks, ensuring that participation was voluntary, informed, and safeguarded from harm, while also prioritizing fairness, transparency, and cultural sensitivity. Each ethical factor outlined below was specifically tailored to the unique context of this research.

Social Value. This study recognized the significant social value of exploring the relationship between pedagogical literacy and classroom management among teachers in the Talaingod, Davao del Norte Division. By identifying the extent to which competencies in the learning-teaching process, class management, measurement and evaluation, and counseling influenced adaptive teaching, relationship-building, and behavior management, the research contributed directly to teacher development initiatives. The findings helped inform local policies and professional development programs that aimed to improve instructional quality and classroom environment.

The benefits extended beyond the participating teachers to school administrators, learners, and the broader educational system. By strengthening classroom management practices through enhanced pedagogical literacy, the study supported higher student engagement, reduced behavioral issues, and promoted equitable learning opportunities. These outcomes aligned with the Division's long-term vision of producing competent, values-driven learners.

Informed Consent. Participation in this study was entirely voluntary, and informed consent was obtained from each teacher-respondent before data collection began. Consent forms provided clear information about the study's purpose, scope, methods, potential risks, and anticipated benefits, as well as the participants' rights, including the right to withdraw at any time without penalty. The language used in the consent process was straightforward and free of technical jargon to ensure full comprehension.

The researcher provided opportunities for respondents to ask questions before signing the consent form, ensuring that participation was based on a complete understanding of the study. Although assent is typically sought from minors, verbal affirmation was also requested alongside written consent to ensure that participants were personally comfortable with their involvement.

Vulnerability of Research Respondents. While teachers were capable of providing informed consent, their role within the Department of Education structure created potential vulnerabilities. Some participants might have perceived pressure to participate if recruitment occurred through school channels. To mitigate this, the researcher clarified that participation was voluntary and that refusal would not affect their professional standing or relationships with colleagues and administrators.

The study also acknowledged the professional sensitivity of the topic. Discussions on pedagogical literacy and classroom management might have caused teachers to feel evaluated or judged. To address this, questions were framed in a non-evaluative manner, and results were reported in aggregated form only, avoiding any identification of individual performance.

Privacy and Confidentiality. Strict adherence to the Data Privacy Act of 2012 was observed. All survey data were anonymized by assigning participant codes instead of using personal identifiers such as names or employee numbers. Digital data were stored in password-protected files, while physical documents were kept in locked cabinets accessible only to the researcher.

No individual responses were shared with school principals or division supervisors to prevent unintended consequences in workplace dynamics. Research outputs presented results in summary form only, ensuring that confidentiality was preserved throughout the study and beyond its conclusion.

Risk, Benefits and Safety. The risks involved in this research were minimal, primarily limited to possible discomfort when reflecting on personal teaching practices. To reduce this, the questionnaire was designed to encourage self-reflection without implying criticism. No classroom observations were conducted, thereby avoiding direct scrutiny of participants' instructional practices.

The benefits included contributing to a deeper understanding of how pedagogical literacy influenced classroom management, which could lead to more targeted professional development programs in the Division of Davao del Norte. Safety was ensured by conducting the survey in secure environments, either within school facilities or through encrypted online platforms, allowing participants to respond without distractions or interruptions.

Justice. Justice in this study involved fair selection and equitable treatment of respondents. Teacher-participants were selected across different schools and grade levels within the Division of Davao del Norte to ensure diversity in experience, teaching context, and geographic representation.

The study ensured that no single school or group of teachers bore the burden of participation disproportionately. The distribution of potential benefits, such as access to findings and recommendations, was shared equally among all stakeholders, regardless of their level of participation.

Transparency. Transparency was maintained through open communication before, during, and after the research process. All participants received information about the study's objectives, methodology, and intended uses of the results through written documents and verbal orientation sessions.

At the conclusion of the study, a summary of the results was made available to the Division of Davao del Norte, participating schools, and interested teachers. This ensured that the findings were utilized not only for academic purposes but also for practical application in the local education system.

Qualification of the Researcher. The researcher possessed a Bachelor of Science in Hotel and Restaurant Management and gained professional experience working as hotel personnel in Dubai, where strong organizational skills, communication abilities, and customer service competencies were developed. These experiences contributed to the researcher's ability to manage diverse individuals, respond effectively to varying needs, and maintain professionalism in dynamic environments. Subsequently, the researcher transitioned into the field of education and served as a teacher in the Department of Education, specifically in the Talaingod District, Division of Davao del Norte. This teaching experience provided direct exposure to classroom realities, including managing diverse learners, implementing instructional strategies, and addressing behavioral and academic concerns, which are central to the variables of this study.

In addition, the researcher actively participated in various professional development activities organized by the Department of Education, including trainings on teaching enhancement, classroom management strategies, learner-centered instruction, and assessment practices. The researcher also attended seminars, workshops, and in-service trainings focused on improving pedagogical competence and instructional delivery. These continuous learning engagements strengthened the researcher's understanding of pedagogical literacy and classroom management practices. Throughout the conduct of the study, the researcher sought guidance from mentors and complied with institutional ethical standards, ensuring that the research was carried out with competence, credibility, and sensitivity to the local educational context of Talaingod, Davao del Norte.

Conflict of Interest. A potential conflict of interest could have arisen if the researcher had professional or personal relationships with participating teachers or school leaders. For instance, prior professional engagement within the division might have influenced participants' perceptions regarding the use of their responses.

To address this, the researcher disclosed any relevant connections and emphasized the independence and confidentiality of the research process. Data analysis was conducted objectively, and interpretations were based solely on the collected evidence, free from personal or institutional bias.

Adequacy of Facilities. Data collection was conducted in school meeting rooms, faculty lounges, or other designated quiet spaces to ensure privacy and minimize distractions. These facilities were equipped with necessary materials such as printed questionnaires and secure storage for completed surveys. For online data collection, devices with internet access were utilized to facilitate efficient and secure responses.

Data processing took place in a secure workspace using licensed statistical software such as SPSS. This ensured accurate and reliable analysis while maintaining strict data security protocols throughout the research process.

Community Involvement. The research process actively involved the educational community in the Division of Davao del Norte. Prior to implementation, school heads and division officials were informed about the study's purpose, scope, and potential benefits, and their input was considered to ensure alignment with local priorities.

Upon completion of the study, findings were shared through school-based or division-level presentations, providing teachers and administrators with actionable insights. This participatory approach ensured that the research served as a collaborative effort aimed at improving teaching practices and learning outcomes within the community.

RESULTS

The pedagogical literacy of teachers was found to be extensive, with an overall mean of 3.95 and a standard deviation of 0.947. Among its domains, counseling obtained the highest mean (M = 3.97), followed by class management (M = 3.96), measurement and evaluation (M = 3.94), and learning-teaching process (M = 3.92). These results indicate that teachers oftentimes demonstrate pedagogical literacy through learner-centered instruction, classroom organization, assessment practices, and student support. The moderate standard deviations suggest generally consistent practices, although some variations remain in the level of implementation among teachers.

Classroom engagement was likewise rated extensive, with an overall mean of 4.00 and a standard deviation of 0.837. Relationship obtained the highest mean (M = 4.02), followed by adaptive teaching (M = 4.01) and behavior management (M = 3.98). This implies that teachers frequently promote positive relationships, adapt instruction to learner needs, and manage classroom behavior effectively. The relatively low to moderate variability suggests that these engagement practices are consistently evident across classrooms.

The correlation analysis revealed a significant positive relationship between pedagogical literacy and classroom engagement ($r = .811$, $p = .001$). All domains of pedagogical literacy were significantly related to adaptive teaching, relationship, behavior management, and overall classroom engagement. These findings indicate that teachers with higher pedagogical literacy tend to demonstrate stronger classroom engagement practices.

The regression analysis further showed that pedagogical literacy significantly predicts classroom engagement, $F = 111.887$, $p < .001$. The model yielded an R value of 0.877 and an R^2 of 0.768, indicating that 76.8% of the variance in classroom engagement is explained by the combined domains of pedagogical literacy. Among the predictors, class management had the strongest influence ($\beta = 0.387$), followed by counseling ($\beta = 0.341$), measurement and evaluation ($\beta = 0.200$), and learning-teaching process ($\beta = 0.033$). Thus, the null hypothesis was rejected.

Overall, the findings suggest that pedagogical literacy is a major contributor to classroom engagement. Teachers who possess strong competencies in managing classrooms, supporting learners, assessing progress, and designing instruction are more likely to create engaging, inclusive, and well-managed learning environments. These results support the need for continuous professional development programs focused on classroom management, counseling, assessment literacy, and learner-centered teaching.

Summary

The main focus of the study was to determine the significance of the relationship between pedagogical literacy and classroom engagement of elementary teachers. The study was conducted among one hundred forty (140) elementary teachers across public schools in the Division of Davao del Norte. A quantitative research approach employing a descriptive correlational design was utilized in the study. The research made use of adapted survey questionnaires that measured pedagogical literacy and classroom engagement. These instruments were validated by experts and subjected to pilot testing to ensure reliability and internal consistency prior to administration. Statistical tools such as Weighted Mean, Pearson Product Moment Correlation, and Multiple Regression Analysis were employed to analyze the data. The hypotheses of the study were tested at a 0.05 level of significance.

The major findings of the study revealed that the extent of pedagogical literacy of teachers is extensive across all its domains, namely learning-teaching process, class management, measurement and evaluation, and counseling. This indicates that teachers oftentimes demonstrate competencies related to instructional planning, classroom organization, assessment practices, and student support. Similarly, the extent of classroom engagement among teachers is also extensive

in terms of adaptive teaching, relationship, and behavior management, suggesting that teachers consistently apply strategies that promote active participation, positive interactions, and effective classroom control. These findings imply that teachers possess the necessary pedagogical competencies that support the creation of engaging and responsive classroom environments.

Further, the study established that there is a significant relationship between pedagogical literacy and classroom engagement. This indicates that higher levels of pedagogical literacy are associated with higher levels of classroom engagement among teachers. The findings suggest that teachers who are more knowledgeable and skilled in pedagogical practices are more capable of fostering active, inclusive, and well-managed learning environments. Additionally, the regression analysis revealed that all domains of pedagogical literacy significantly influence classroom engagement, with class management and counseling emerging as the strongest predictors, followed by measurement and evaluation, and learning-teaching process.

Consequently, the hypotheses stating that there is no significant relationship between pedagogical literacy and classroom engagement and that none of the domains of pedagogical literacy significantly influence classroom engagement were both rejected. The results underscore the importance of strengthening teachers' pedagogical literacy, particularly in classroom management and student support, to further enhance classroom engagement. Overall, the findings highlight that pedagogical literacy is a critical determinant of effective classroom engagement and plays a vital role in improving teaching practices and learning outcomes in the Division of Davao del Norte.

Conclusions

Based on the findings of the study, several conclusions are drawn in relation to the statement of the problem.

1. The extent of pedagogical literacy among elementary teachers in the Division of Davao del Norte was extensive across all its domains, namely learning-teaching process, class management, measurement and evaluation, and counseling. This indicates that teachers consistently demonstrated the competencies needed to design instruction, organize classroom structures, assess learning, and provide student support. These findings imply that teachers possess a strong pedagogical foundation that enables them to respond to diverse learner needs and instructional demands. This conclusion supports the theory of constructivism by Jean Piaget, which emphasizes that teachers play a crucial role in facilitating meaningful learning experiences where students actively construct knowledge through guided interaction and structured learning environments (Piaget, 1973).
2. The extent of classroom management was also found to be extensive in terms of adaptive teaching, relationship, and behavior management. This suggests that teachers were capable of implementing inclusive teaching strategies, fostering positive relationships, and maintaining classroom order. The consistency of these practices reflects teachers' ability to create environments that promote engagement and participation. This finding is consistent with the experiential learning theory of David Kolb, which highlights the importance of structured experiences, reflection, and interaction in enhancing student learning (Kolb, 1984). Teachers who effectively manage classrooms provide opportunities for students to engage in meaningful activities that reinforce understanding and participation.
3. The study established a significant relationship between pedagogical literacy and classroom management. This indicates that higher levels of pedagogical literacy are associated with more effective classroom management practices. Teachers who demonstrate strong instructional planning, assessment skills, and counseling abilities are more likely to create structured, engaging, and supportive classroom environments. This finding is consistent with the social learning theory of Bandura, which emphasizes that teachers influence student behavior and learning through modeling, interaction, and reinforcement within a social context (Bandura, 1977).
4. The results revealed that all domains of pedagogical literacy significantly predicted classroom management, with class management and counseling emerging as the strongest predictors, followed by measurement and evaluation, and learning-teaching process. This implies that teachers' ability to establish classroom norms, communicate effectively, and provide emotional and academic support plays a critical role in managing classroom engagement. It further indicates that classroom management is not limited to controlling behavior but involves a comprehensive set of pedagogical skills that address learners' cognitive, social, and emotional needs.
5. The hypotheses stating that there is no significant relationship between pedagogical literacy and classroom management and that none of its domains significantly predict classroom management were both rejected. The findings confirm that pedagogical literacy is a strong determinant of classroom management, highlighting the importance of strengthening teachers' competencies across all domains to improve instructional practices and learning environments in the Division of Davao del Norte.

The results of the study further conform to the theory of constructivism, as the extensive level of pedagogical literacy and classroom management indicates that teachers are actively facilitating learning experiences that allow students to engage, explore, and construct knowledge. The integration of instructional strategies, assessment practices, and student support reflects a learning environment where knowledge is built through interaction and guided experiences. This suggests that the principles of constructivism are evident in the teaching practices of the respondents (Piaget, 1973).

Similarly, the findings resonate with the experiential learning theory, as teachers demonstrated the ability to structure lessons that promote active engagement, reflection, and application of knowledge. The strong relationship between pedagogical literacy and classroom management indicates that teachers are not only delivering content but are also creating opportunities for students to participate in meaningful learning experiences (Kolb, 1984). The results also affirm the relevance of social learning theory, as teachers' classroom management practices, particularly in relationship-building and behavior management, serve as models that influence student behavior and interaction (Bandura, 1977). Overall, the findings agree with these learning theories, reinforcing the idea that effective teaching and classroom management are grounded in well-established educational principles.

Recommendations

In the light of the foregoing findings and conclusions, the following recommendations are offered:

It is highly recommended that the Schools Division Office of Davao del Norte - Curriculum Implementation Division (CID), design and implement sustained, division-wide professional development programs that directly address the weaker domains of pedagogical literacy, particularly the learning-teaching process and measurement and evaluation. The CID should develop structured, competency-based training modules focusing on differentiated instruction, contextualized lesson planning, and effective assessment practices, including the provision of timely and constructive feedback. These initiatives should incorporate demonstration teaching, coaching sessions, and hands-on workshops to ensure practical application. Strengthening monitoring and technical assistance is also essential through regular classroom observations, mentoring by master teachers, and feedback mechanisms that guide teachers in improving instructional delivery and assessment practices. Additionally, a systematic evaluation framework should be established to track teachers' progress and ensure that professional development efforts lead to sustained improvements in classroom management across schools in the division.

It is recommended that school principals intensify instructional leadership by closely supervising and supporting teachers in the implementation of pedagogical practices, particularly in areas that demonstrated relatively lower performance. School heads should enhance school-based learning action cells that focus on enhancing instructional planning, assessment literacy, and adaptive teaching strategies. Classroom observations should be more focused on how teachers differentiate instruction, provide feedback, and engage learners through meaningful activities. School principals should also foster collaborative environments where teachers can share best practices, reflect on classroom experiences, and develop innovative approaches to improve both pedagogical literacy and classroom engagement.

It is recommended that teachers continuously enhance their pedagogical competencies by engaging in reflective teaching practices and professional learning opportunities that strengthen areas such as instructional design and assessment strategies. Greater emphasis should be placed on improving the learning-teaching process by incorporating varied, student-centered activities that address individual differences and promote deeper understanding. Teachers should also improve their measurement and evaluation practices by conducting regular formative assessments, providing timely and constructive feedback, and using assessment data to guide instructional decisions. Strengthening these areas will further improve classroom engagement, particularly in adaptive teaching and behavior management.

It is recommended that future researchers expand the scope of this study by including additional variables that may influence classroom engagement, such as teacher motivation, school climate, or leadership practices. Similar studies may be conducted in other divisions or educational levels to validate and compare findings across different contexts. Future investigations may also employ mixed-method approaches to gain deeper insights into how pedagogical literacy is practiced in real classroom settings. There is also a need to explore intervention-based studies that test specific training programs aimed at improving the learning-teaching process and assessment practices to determine their effectiveness in enhancing classroom engagement.

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