Advanced International Journal for Research (AIJFR)
E-ISSN: 3048-7641 ● Website: www.aijfr.com ● Email: editor@aijfr.com

Effectiveness of Instructional Strategies On Academic Performance and Learning Engagement of Students in Public Elementary Schools

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1. The Problem and Its Sope

Introduction

Rationale of the Study

The delivery of quality education remained a critical global and national concern, particularly in ensuring student engagement and academic achievement. International studies underscored the importance of active, differentiated, and student-centered instructional strategies in enhancing learning outcomes and sustaining motivation (Ryan & Deci, 2000; Gagne, 1985). Countries such as China and Singapore demonstrated measurable improvements in student performance through structured, data-driven instructional reforms, highlighting the relevance of evidence-based pedagogy for national competitiveness (Perez & Tan, 2023). In the Philippine context, the Department of Education (DepEd) mandated the effective implementation of the K–12 Basic Education Program to produce functionally literate and globally competitive citizens (DepEd Order No. 008, 2020; Lopez & Marasigan, 2020). The Philippine Education Sector Roadmap (2025) emphasized a data-driven approach to teaching, targeting a measurable 15% increase in core subject mastery across regional divisions to meet national human capital objectives (NEDA Educational Outlook, 2025; Rivera, 2024).

The operational shift to remote and blended learning during the 2020–2022 pandemic exposed significant vulnerabilities in instructional delivery. The adoption of modular and asynchronous teaching, while ensuring continuity, created fragmented strategies that strained teacher capacity and contributed to widespread learning regression (Cruz & Reyes, 2021; UNICEF, 2023; Abueva, 2020). In Central Visayas, including Bohol, only 68% of grade-level competencies were achieved in core subjects, with applied literacy and computational skills showing notable decline compared to pre-pandemic benchmarks (RMRBE, 2022; Fabian, 2021; Cruz, 2022). These gaps underscored the inadequacy of undifferentiated instructional approaches and emphasized the need for a localized, evidence-based assessment to guide recovery interventions (Aguinaldo, 2021; Ramos & Torres, 2024).

Effective instruction extended beyond content delivery to fostering active student engagement. The absence of interactive and differentiated approaches had been linked to disinterest, passive learning behaviors, and lower participation rates, which directly affected academic performance (Vergara, 2021; Puno, 2023; Salazar, 2020). Engagement deficits highlighted the necessity of evaluating the effectiveness of instructional strategies not only in terms of subject mastery but also in promoting behavioral, cognitive, and emotional involvement among learners (Perez & Tan, 2023). Without such evaluation, even well-structured lessons risked failing to achieve meaningful educational impact.

The Loon North District of Bohol offered a unique context for this investigation due to its mix of coastal and upland schools, varied socio-economic conditions, and uneven adoption of high-impact strategies such as Project-Based Learning (PBL) and Differentiated Instruction (DI) (Lising, 2024; Lim & Chua, 2024). Documented gaps in implementation fidelity showed that teachers often struggled to translate training into effective classroom practice without localized, empirical feedback (Gomez, 2023; Almeida, 2022; Padilla, 2023). Existing literature provided general support for these strategies but lacked quantitative synthesis linking them to both academic performance and engagement outcomes within the specific resource-constrained context of elementary education in provincial districts (Garcia & Soriano, 2023; Santos & Dela Paz, 2021; Dimayuga & Santos, 2024).

This study was therefore justified as it sought to establish empirical evidence on the effectiveness of instructional strategies in improving academic performance and learning engagement in the Loon North District. By quantifying the correlation between teachers' strategy implementation and student outcomes, the research provided actionable insights for targeted professional development, curriculum planning, and resource allocation (Bautista, 2020; Dick & Carey, 2005; Gagne, 1985). The findings contributed to the development of a Strategic Instructional Enhancement Framework that enabled educators to implement high-impact teaching practices, maximize student engagement, and accelerate learning recovery, thereby supporting DepEd's mandate for quality, relevant, and context-sensitive education.

Theoretical Background

This study on the effectiveness of instructional strategies in the Loon North District was anchored on three complementary theoretical frameworks: Constructivist Learning Theory, Self-Determination Theory (SDT), and Instructional Systems Design (ISD) (Lopez & Marasigan, 2020; Soriano & Diaz, 2021). Constructivist Learning Theory posited that students actively constructed knowledge through experiences and social interactions (Piaget, 1952; Vygotsky, 1978). Strategies such as Project-Based Learning (PBL) and Differentiated Instruction (DI) operationalized constructivist principles by engaging students in collaborative problem-solving and inquiry-based activities (Abueva, 2020; Santos & Dela Paz, 2021; Gomez, 2023). In contexts like Loon North, where implementation fidelity varied across schools (Lim & Chua, 2024), constructivist principles justified assessing whether active, contextualized strategies effectively bridged learning gaps and improved knowledge retention (Ramos & Torres, 2024).

Student learning engagement, as the affective component, was grounded in Self-Determination Theory, which highlighted the importance of autonomy, competence, and relatedness in fostering intrinsic motivation (Deci & Ryan, 1985; Ryan & Deci, 2000; Panganiban, 2021). Traditional lecture-based approaches often failed to meet these needs, resulting in disinterest and passive behavior (Perez & Tan, 2023; Salazar, 2020). Active and collaborative instructional strategies satisfied these psychological needs,

promoting sustained engagement, participation, and emotional investment in learning tasks (Garcia et al., 2022; Malonzo, 2023). This theoretical lens provided a critical rationale for measuring both engagement and academic performance, recognizing that motivation

Academic performance, as the cognitive outcome, was informed by Instructional Systems Design, particularly Gagne's Nine Events of Instruction (Gagne, 1985; Dick & Carey, 2005). ISD emphasized structured, systematic instruction that linked learning activities to measurable outcomes, from gaining attention to providing feedback (Almeida, 2022; Fabian, 2021). This framework supported the quantitative, correlational methodology of the study, allowing researchers to examine how the fidelity of strategy implementation affected student achievement (Padilla, 2023; Dimayuga & Santos, 2024).

Collectively, these theories justified the conduct of the study: constructivism explained the nature of effective instructional strategies, SDT explained their motivational impact, and ISD provided a systematic approach for evaluating their effect on student performance. The findings were intended to inform a Strategic Instructional Enhancement Framework tailored to the Loon North District, ensuring theoretically grounded and context-sensitive interventions (Cruz, 2022; Rivera, 2024; Laquindanum, 2022).

The study evaluated how Instructional Strategy Implementation (independent variable) affected Student Academic Performance (dependent variable) as mediated by Student Learning Engagement (mediating variable), culminating in the development of a Strategic Instructional Enhancement Framework. The conceptual foundation rested on Constructivist Learning Theory, which emphasized that knowledge was actively constructed through experience and reflection (Piaget, 1952; Vygotsky, 1978). Strategies such as Project-Based Learning (PBL) and Differentiated Instruction (DI) operationalized this approach, fostering critical thinking, collaboration, and problem-solving. In the Loon North District, these active strategies were expected to bridge learning deficits caused by disruptions in traditional instruction and to enhance cognitive outcomes through deeper engagement with the curriculum (Abueva, 2020; Ramos & Torres, 2024).

Self-Determination Theory complemented the framework by explaining the mediating role of student engagement. SDT posited that intrinsic motivation was maximized when learners' needs for autonomy, competence, and relatedness were fulfilled (Deci & Ryan, 1985; Ryan & Deci, 2000). Traditional lecture-based methods often failed to satisfy these needs, resulting in disengagement and lower performance. By implementing strategies that supported choice, mastery, and collaboration, the study hypothesized that higher engagement mediated improved academic outcomes, highlighting the importance of affective factors in learning success (Perez & Tan, 2023; Puno, 2023).

Instructional Systems Design provided a systematic lens for evaluating strategy effectiveness and developing the final enhancement framework. Rooted in Gagne's principles, ISD ensured that instruction was structured, measurable, and outcome-focused, linking implementation fidelity to academic results (Gagne, 1985; Dick & Carey, 2005). The framework aligned with Philippine education law, including RA 10533 (K-12 Law) and RA 9155, which mandated high-quality curriculum delivery and local instructional leadership. DepEd policies on classroom assessment provided standardized metrics for measuring academic performance, ensuring that the study's findings were both legally grounded and practically actionable (DepEd Order No. 008, 2020; Belen, 2022). Collectively, these theoretical and legal

foundations justified the research and the design of an evidence-based, locally relevant instructional enhancement framework.

Research Methodology

This section presented the research methodology, including the method employed, the study's flow, the research locale, the research respondents, research tools, data collection procedures, statistical data treatment, scoring systems, and term definitions.

Design

This study utilized a descriptive-correlational research design. A quantitative method was employed to determine the relationship between instructional strategies and students' academic performance and learning engagement in selected elementary schools of Loon North District, Bohol Division.

The descriptive aspect of the study focused on identifying and analyzing the existing instructional strategies employed by teachers, as well as the levels of academic performance and learning engagement among students. The correlational component examined the degree of relationship between these variables, determining whether the use of specific instructional strategies was associated with higher student performance and greater engagement in learning activities.

Structured survey questionnaires and performance assessment scores served as the primary data-gathering instruments. The questionnaires were designed to measure key indicators of instructional strategies, including collaborative learning, interactive teaching, and technology-assisted methods, while academic performance was assessed through test scores and class evaluations, and learning engagement was measured through participation, motivation, and attention in classroom activities.

A descriptive-correlational design was appropriate for this study as it allowed the researcher to describe, analyze, and statistically examine relationships between instructional strategies, academic performance, and learning engagement without establishing a direct cause-and-effect relationship. This approach provided a data-driven foundation for proposing recommendations to enhance teaching practices and student learning outcomes in the elementary schools of Loon North District.

Flow of the Study

The Input-Process-Output (IPO) Framework was employed in this study to illustrate the systematic flow of activities in evaluating the effectiveness of instructional strategies on students' academic performance and learning engagement in selected elementary schools of Loon North District, Bohol Division. The input phase included the collection of essential data, such as the profile of teacher respondents—including age, gender, highest educational attainment, position, length of service, and relevant pedagogical training and professional development attended. It also encompassed information on the level of instructional strategy implementation, specifically the utilization of project-based learning (PBL), application of differentiated instruction (DI), and integration of collaborative and active learning approaches.

The process phase involved the core activities of the study, beginning with the submission of a transmittal letter to request approval, followed by the administration of the structured questionnaire, data gathering, data consolidation, and data presentation. During this phase, student engagement was evaluated across behavioral, cognitive, and emotional dimensions, and student academic performance was measured in Mathematics, Science, and English. Statistical analyses, including weighted mean, Pearson's r correlation, and regression analysis, were conducted to examine the relationship between instructional strategy implementation and student academic performance, ensuring a systematic and evidence-based evaluation.

The output phase of the framework reflected the results and practical implications of the study. Based on the data analysis and interpretation, a Strategic Instructional Enhancement Framework was proposed, incorporating the Energize Strategy Based on Learning Exercises. This framework aimed to improve instructional effectiveness, foster higher levels of student engagement, and enhance academic outcomes in the selected elementary schools of Loon North District, Bohol Division, providing actionable recommendations for teachers and school administrators.

Environment

This study was conducted in selected elementary schools within the Loon North District, Bohol Division, under the Department of Education (DepEd) Region VII – Central Visayas. The research involved elementary school teachers and students who were directly engaged in classroom teaching and learning processes. These schools represented diverse educational settings, encompassing both central and peripheral schools that varied in size, available resources, and learning environments. Such diversity provided a meaningful context for examining the implementation of instructional strategies, student engagement, and academic performance.

The Loon North District operated under the supervision of the Bohol Division Office, which ensured the delivery of quality instruction, effective school management, and alignment with DepEd's K–12 Basic Education Curriculum. Teachers in this district implemented instructional strategies such as Project-Based Learning (PBL), Differentiated Instruction (DI), and Collaborative Learning Approaches to address the heterogeneous learning needs of students and to foster active participation in the classroom. Observations and reports indicated that the fidelity of strategy implementation varied across schools, reflecting differences in teacher training, classroom resources, and student demographics.

The educational environment in Loon North District was characterized by a strong emphasis on instructional improvement and learner-centered pedagogy. Schools continuously adapted to evolving educational standards and post-pandemic learning recovery initiatives, which included supplemental modules, remedial programs, and blended learning approaches. Teachers participated in regular professional development activities, including in-service trainings, Learning Action Cell (LAC) sessions, and DepEd-led capacity-building programs, aimed at enhancing teaching effectiveness, innovation, and the integration of active, collaborative, and differentiated learning strategies.

Moreover, the schools prioritized student engagement, holistic development, and competency-based learning, consistent with DepEd's mission to produce lifelong learners who are academically competent, socially responsible, and emotionally resilient. Classrooms incorporated a combination of traditional and modern instructional approaches, including activity-based learning, performance-based

assessments, and technology-assisted methods, depending on the availability of resources and specific classroom contexts. These practices enabled students to develop critical thinking, problem-solving skills, and the ability to apply knowledge in real-world situations.

The Loon North District's educational environment provided a relevant and practical setting for assessing the relationship between instructional strategy implementation, student engagement, and academic performance. It also supported the development of a Strategic Instructional Enhancement Framework, designed to improve the consistency and effectiveness of teaching practices, enhance behavioral, cognitive, and emotional engagement, and ultimately strengthen student learning outcomes across the district's elementary schools.

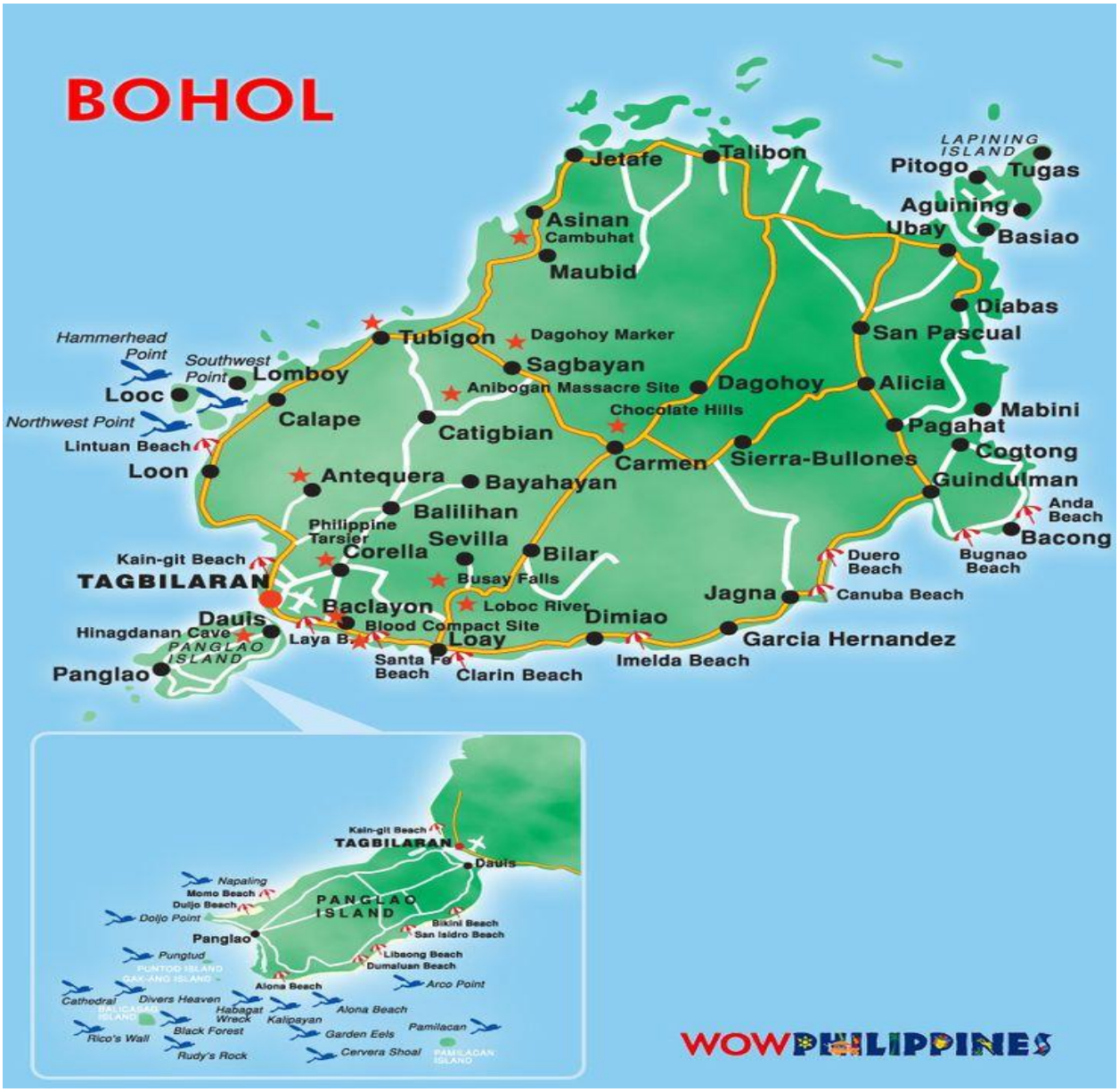

Figure 3. Location Map of the Study

Respondents

The respondents of this study consisted of 60 public elementary school teachers from Pondol, Cantomucad, Lawis, Calayugan, and Loon North Central Elementary Schools under the Department of Education – Bohol Division, Loon North District. Using purposive sampling, teachers were selected based on the following criteria: they were full-time employees during the School Year 2024–2025, had at least one year of teaching experience, participated in relevant professional development activities, and actively implemented instructional strategies aligned with DepEd's Most Essential Learning Competencies (MELCs).

Table 1 below presents the distribution of respondents across the selected schools in the Loon North District.

Table 1
Distribution of Respondents

Respondent Group	School	Respondents (f)	Percentage (%)
Elementary Teachers	Pondol Elementary School	14	23%
Elementary Teachers	Cantomucad Elementary School	7	12%
Elementary Teachers	Lawis Elementary School	13	22%
Elementary Teachers	Calayugan Elementary School	10	17%
Elementary Teachers	Loon North Central Elementary School	16	26%
Total		**60**	**100%**

The purposive sampling approach ensured that all participants had substantial classroom experience and familiarity with diverse instructional practices—key variables under investigation. This selection framework aligned with Creswell and Creswell (2018), who emphasized the use of purposive sampling for research focusing on participants with direct knowledge of the studied phenomenon.

By including teachers from multiple schools within the same district, the study captured a balanced view of instructional effectiveness and learner outcomes across varied classroom environments. The findings from this sample provided an empirical foundation for formulating strategies to enhance teaching effectiveness and student engagement, contributing to the broader goals of educational improvement within the Bohol Division – Loon North District.

Instruments

The primary instrument used in this study was a structured survey questionnaire, designed to collect empirical data on instructional strategies, student learning engagement, and academic performance among public elementary school teachers in Loon North District, Bohol Division. The questionnaire was developed based on established educational theories, namely Constructivist Learning Theory (Piaget, 1973), Multiple Intelligences Theory (Gardner, 1983), and Engagement Theory (Kearsley & Shneiderman, 1998), to ensure both theoretical rigor and contextual relevance. It was divided into five parts: respondent profile, instructional strategies, student learning engagement, student academic performance, and open-ended questions. Each part targeted specific constructs to establish relationships between teaching methods, learner engagement, and academic outcomes.

Part I gathered demographic and professional information about the respondents, such as age, gender, educational attainment, years of teaching experience, grade level or subject taught, number of training programs attended, and school assignment. Part II assessed the implementation of instructional strategies, including project-based learning, differentiated instruction, collaborative learning, and active learning approaches, using a 5-point Likert scale ranging from "Never Implemented" to "Always Implemented." Part III measured student learning engagement across behavioral, cognitive, and emotional dimensions, while Part IV evaluated student academic performance in core subjects, improvement in assessments, and application of learned concepts to real-life situations, also using 5-point Likert scales. Part V included open-ended questions to capture qualitative insights regarding effective instructional practices, challenges, and recommendations for enhancing teaching and engagement.

To ensure reliability and validity, the instrument underwent expert validation by education specialists, district supervisors, and research methodologists. A pilot test was conducted with 10 non-participating teachers from a neighboring district, achieving a Cronbach's Alpha coefficient of 0.80 or higher. Data collected from the questionnaire were analyzed using mean and standard deviation to describe levels of implementation and engagement, Pearson's r correlation to determine relationships between variables, and regression analysis to identify instructional strategies that significantly predicted student engagement and performance. The results served as the foundation for developing an Instructional Enhancement Framework aimed at improving teaching effectiveness, student engagement, and academic outcomes in Loon North District elementary schools.

Data Gathering Procedure

A formal transmittal letter was submitted to the Schools Division Office – Bohol Division, Loon North District, requesting approval to conduct the study entitled "Evaluating the Effectiveness of Instructional Strategies on Academic Performance and Learning Engagement of Students in Selected Elementary Schools of Loon North District, Bohol Division." Upon approval, coordination was made with the school principals and teacher-respondents of Pondol, Cantomucad, Lawis, Calayugan, and Loon North Central Elementary Schools to facilitate the distribution of the structured questionnaire. The instrument was administered in both printed and electronic formats (e.g., Google Forms or school email), depending on respondent accessibility and preference. Teachers were given 15–30 minutes to complete the survey, and participation was entirely voluntary, with all responses kept confidential and anonymous in accordance with ethical research standards.

After the questionnaires were collected, responses were tabulated, coded, and organized for statistical analysis. The data were analyzed using simple percentage to describe the demographic profile of respondents, weighted mean to determine the level of instructional strategy implementation and student engagement, Pearson r correlation to examine relationships among instructional strategies, engagement, and academic performance, and regression analysis to identify which instructional strategies significantly influenced learning engagement and academic outcomes. The findings served as the empirical basis for designing a Strategic Instructional Enhancement Framework aimed at improving teaching effectiveness and student performance in the Loon North District elementary schools.

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2. Presentation, Analysis, And Interpretation of Data

This chapter **presented, analyzed, and interpreted** the data gathered from the respondents of the study titled "Effectiveness of Instructional Strategies on Academic Performance and Learning Engagement of Students in Public Elementary Schools of Loon North District, Bohol Division." The purpose of this chapter **was to examine** the demographic profile of teacher respondents, **assess** the level of instructional strategy implementation, **evaluate** student learning engagement, **determine** student academic performance, and **establish** the relationship between instructional strategies and academic outcomes. The findings **served** as the basis for proposing the Energize Strategy Based on Learning Exercises to enhance instructional effectiveness, student engagement, and academic performance.

A total of 60 elementary teachers **participated** in the study from five selected public elementary schools in the Loon North District, Bohol. The schools included in the study **were** Pondol Elementary School, Cantomucad Elementary School, Lawis Elementary School, Calayugan Elementary School, and Loon North Central Elementary School.

The presentation of data **was organized** into the following sections:

1. Demographic profile of teacher respondents
2. Level of Instructional Strategy Implementation
3. Level of Student Learning Engagement
4. Level of Student Academic Performance
5. Relationship between Instructional Strategy Implementation and Student Academic Performance

Demographic Profile of Respondents

The demographic profile **provided** essential background information about the respondents, including age, gender, educational attainment, position, teaching experience, and participation in relevant pedagogical training or professional development. These characteristics **helped** contextualize teachers' perspectives on instructional strategies and their influence on student engagement and academic outcomes.

Table 2

Gender of the Respondents

Gender	Frequency (n=60)	Percentage (%)
Male	18	30%
Female	42	70%
Total	60	100%

The data in Table 2 presented the gender distribution of the 60 teacher respondents from the selected elementary schools in the Loon North District. Among the participants, 42 were female,

representing 70 percent of the sample, while 18 were male, comprising 30 percent. This distribution highlighted a clear predominance of female teachers in the selected schools, reflecting the broader trend in Philippine elementary education, where the teaching workforce has historically been predominantly female.

The higher proportion of female respondents likely influenced classroom dynamics, instructional approaches, and student engagement, as previous studies indicated that female teachers often emphasize nurturing, communication, and collaborative learning in educational settings. Their dominant presence ensured that the perspectives on instructional strategies, student engagement, and academic performance were primarily informed by their experiences and pedagogical approaches. Conversely, male respondents, although fewer, contributed diversity in instructional perspectives, potentially focusing on structured, task-oriented, and discipline-based strategies in the classroom.

The inclusion of both genders, despite the imbalance, provided a more comprehensive understanding of instructional strategy implementation and its effects on student outcomes. By capturing responses from a majority female population while still accounting for male perspectives, the study ensured that the analysis reflected a realistic representation of the teaching workforce in the district. This gender distribution offered important context for interpreting subsequent findings on instructional strategies, student engagement, and academic performance, allowing the study to consider potential gender-related influences on teaching effectiveness and classroom interactions.

Table 3

Age of the Respondents

Age Group	**Frequency (n=60)**	**Percentage (%)**
21–25 years	5	8%
26–30 years	12	20%
31–35 years	15	25%
36–40 years	10	17%
41–45 years	10	17%
46 years and above	8	13%
Total	60	100%

The data in Table 3 **presented** the age distribution of the 60 teacher respondents from selected elementary schools in the Loon North District. Among the participants, the largest group **was** those aged 31–35 years, accounting for 25 percent of the respondents, followed by the 26–30 years age group at 20 percent. Teachers aged 36–40 years and 41–45 years **represented** 17 percent each, while those aged 46 years and above **comprised** 13 percent. The youngest group, 21–25 years, **constituted** 8 percent of the

sample. This distribution **indicated** a diverse age range among the respondents, encompassing early-career, mid-career, and senior teachers.

The predominance of teachers in the 26–35 years age bracket **suggested** that most respondents **were** in the early to mid-stages of their teaching careers. These teachers **likely possessed** a balance of classroom experience and adaptability to contemporary instructional strategies, such as project-based learning and differentiated instruction. Their relative familiarity with modern educational technologies, learner-centered approaches, and innovative pedagogical methods **may have contributed** positively to the implementation of effective teaching strategies and the promotion of active student engagement.

The presence of more experienced teachers, particularly those aged 36 years and above, **ensured** that institutional knowledge, classroom management expertise, and mentoring capabilities **were represented** in the sample. This combination of younger and more seasoned teachers **provided** a holistic perspective on instructional strategy implementation and its effects on student learning outcomes. Understanding the age distribution **was essential** for interpreting the study's findings, as age-related factors **could have influenced** teaching styles, openness to new methodologies, responsiveness to professional development, and engagement with instructional innovations.

Table 4

Highest Educational Attainment of Respondents

Educational Attainment	**Frequency (n=60)**	**Percentage (%)**
Bachelor's Degree	20	33%
Bachelor's + Units in Master's	18	30%
Master's Degree	12	20%
Master's + Units in Doctorate	6	10%
Doctorate	4	7%
Total	60	100%

The data in Table 4 **presented** the highest educational attainment of the 60 teacher respondents from selected elementary schools in the Loon North District. The largest group **consisted** of teachers holding a Bachelor's degree, representing 33 percent of the sample. Close behind **were** those who had completed additional units toward a Master's degree, comprising 30 percent of the respondents. Teachers who had already earned a Master's degree **accounted** for 20 percent, while those pursuing doctoral units and those holding a full Doctorate **comprised** 10 percent and 7 percent, respectively. This distribution **indicated** that the majority of teachers **possessed** at least an undergraduate degree, with a substantial proportion actively engaged in further studies.

The significant number of teachers pursuing advanced studies **reflected** a professional commitment to continuous learning and development. Teachers with Master's or doctoral-level education

likely possessed enhanced pedagogical knowledge, research skills, and familiarity with evidence-based instructional strategies. Their educational background **enabled** them to design more effective lesson plans, implement differentiated instruction, and apply innovative approaches, such as project-based and collaborative learning, to address diverse student needs. Such preparation **contributed** to higher teaching quality and fostered greater student engagement in classroom activities.

Moreover, the combination of teachers with varying levels of educational attainment **created** a dynamic teaching environment in which experienced and highly educated teachers **mentored** those in earlier stages of professional development. This diversity **supported** knowledge sharing, collaborative problem-solving, and the adoption of effective instructional practices, further enhancing teaching effectiveness. Understanding the distribution of educational attainment among respondents **was essential** for analyzing the relationship between teachers' qualifications, instructional strategy implementation, and student academic performance, as higher educational levels often **correlated** with greater pedagogical competence, adaptability, and capacity to apply student-centered teaching strategies.

Table 5

Years of Teaching Experience

Years of Service	**Frequency (n=60)**	**Percentage (%)**
0–2 years	5	8%
3–5 years	10	17%
6–10 years	15	25%
11–15 years	12	20%
16 years and above	18	30%
Total	60	100%

The data in Table 5 illustrated the distribution of teaching experience among the 60 teacher respondents from selected elementary schools in the Loon North District. The largest group consisted of teachers with 16 years and above of teaching experience, representing 30 percent of the sample. This was followed by teachers with 6 to 10 years of experience, accounting for 25 percent, and those with 11 to 15 years at 20 percent. Early-career teachers, with 3 to 5 years and 0 to 2 years of experience, comprised 17 percent and 8 percent, respectively. The data indicated a well-balanced mix of teaching experience, ranging from novice educators to seasoned professionals, contributing to a diverse and dynamic teaching workforce.

Teachers with longer years of service, particularly those with 16 years and above, brought a wealth of experience and practical knowledge to the classroom. Their extensive exposure to various instructional challenges enabled them to implement teaching strategies consistently and adapted lessons effectively to meet students' learning needs. These veteran teachers often served as mentors for less experienced

colleagues, sharing insights on classroom management, curriculum design, and innovative instructional methods, which enhanced overall instructional quality and student engagement.

Conversely, early-career teachers, comprising those with less than six years of teaching experience, introduced fresh perspectives and contemporary approaches informed by recent pedagogical training. They were typically more familiar with current educational technologies, project-based learning models, and differentiated instruction techniques. The combination of experienced and novice teachers fostered a collaborative environment where traditional teaching wisdom and modern strategies intersected, creating opportunities for professional growth, more effective instructional strategy implementation, and improved student academic performance across the schools in the Loon North District.

Table 6

Relevant Pedagogical Training or Professional Development Attended

Training/Professional Development	**Frequency (n=60)**	**Percentage (%)**
Project-Based Learning (PBL)	20	33%
Differentiated Instruction (DI)	15	25%
Collaborative Learning Approaches	10	17%
Assessment and Evaluation Techniques	8	13%
ICT Integration	5	8%
None	2	4%
Total	60	100%

The data in Table 6 **illustrated** the distribution of relevant pedagogical training and professional development programs attended by the 60 teacher respondents from the selected elementary schools of the Loon North District. The largest proportion of teachers, 33 percent, **reported having received** training in Project-Based Learning (PBL), followed by 25 percent who **attended** programs on Differentiated Instruction (DI). Additionally, 17 percent **participated** in training on Collaborative Learning Approaches, 13 percent **focused** on Assessment and Evaluation Techniques, and 8 percent **received** training in ICT Integration. Only a small fraction, 4 percent, **indicated** that they had not attended any formal professional development programs. This distribution **highlighted** the teachers' active engagement in continuous professional growth and capacity-building efforts aligned with modern instructional practices.

Teachers who **received** training in Project-Based Learning **were equipped** to design student-centered learning experiences that **promoted** critical thinking, problem-solving, and real-world application of knowledge. Their ability to **facilitate** projects **enabled** students to actively construct understanding through exploration, collaboration, and inquiry, which **enhanced** both cognitive and behavioral engagement in classroom activities. Similarly, teachers trained in Differentiated Instruction **demonstrated** the capacity to tailor lessons to meet diverse learning needs, adapting content, processes,

and assessments to support students with varying abilities and learning styles, thereby fostering more equitable and effective learning outcomes.

Participation in Collaborative Learning Approaches and Assessment and Evaluation Techniques **further strengthened** teachers' ability to implement interactive, student-centered, and data-driven strategies. These teachers **created** learning environments that **encouraged** peer interaction, teamwork, continuous feedback, and reflective learning, which collectively **promoted** higher levels of student engagement. The small proportion of teachers trained in ICT Integration **indicated** a growing yet underutilized potential for technology-enhanced instruction, suggesting opportunities for further professional development in digital pedagogy.

Level of Instructional Strategy Implementation

The extent of instructional strategy implementation **was measured** using a 5-point Likert scale ranging from 1 (Never Implemented/Very Low) to 5 (Always Implemented/Very High). The analysis **covered** Project-Based Learning (PBL), Differentiated Instruction (DI), and Collaborative/Active Learning Approaches.

Table 7

Utilization of Project-Based Learning (PBL)

Indicators	**Weighted Mean (WM)**	**Verbal Interpretation**
Students engage in real-world projects requiring problem-solving and creativity	4.35	Very High
Learning activities integrate multiple subject areas	4.10	High
Students work collaboratively to produce tangible project outputs	4.20	High
Projects are assessed based on process and output quality	4.15	High
Students reflect on their project experiences and learning outcomes	4.05	High
Average Mean	4.17	High

The data in Table 7 **showed** the level of utilization of Project-Based Learning (PBL) among teachers in the selected elementary schools of the Loon North District. The average weighted mean of 4.17, interpreted as "High," **indicated** that teachers consistently **implemented** PBL strategies in their classrooms. Among the indicators, students' engagement in real-world projects that required problem-solving and creativity **received** the highest rating (WM = 4.35, Very High), demonstrating that teachers **emphasized** experiential learning activities that connected academic content with practical applications. Learning activities that integrated multiple subject areas **scored** a weighted mean of 4.10 (High),

suggesting that teachers **employed** interdisciplinary approaches to strengthen students' holistic understanding (Lim & Chua, 2024).

Collaboration among students in producing tangible project outputs also **received** a high mean (WM = 4.20), reflecting the teachers' emphasis on cooperative learning. Assessment strategies that considered both the process and output quality **obtained** a mean of 4.15, highlighting that teachers **valued** not only final products but also students' engagement, effort, and problem-solving approaches during projects. Moreover, students' reflection on project experiences **scored** 4.05 (High), indicating that teachers **integrated** reflective practices to encourage metacognitive skills and self-assessment, which were essential components of effective PBL implementation (Lacson, 2022; Laquindanum, 2022).

The high level of PBL utilization **demonstrated** that teachers in the Loon North District **possessed** both the knowledge and capacity to design learning experiences that fostered creativity, critical thinking, and collaboration. This **aligned** with research emphasizing that professional development in pedagogical strategies **strengthened** instructional fidelity and **improved** student outcomes, particularly in contexts where problem-solving and active learning were prioritized (Lising, 2024; Lopez & Marasigan, 2020). Overall, these findings **suggested** that PBL **served** as a highly effective instructional strategy, promoting student-centered learning and providing a strong foundation for achieving enhanced academic performance across multiple subject areas.

Table 8

Application of Differentiated Instruction (DI)

Indicators	**Weighted Mean (WM)**	**Verbal Interpretation**
Lessons are modified to address diverse learning styles	4.05	High
Tasks are adjusted based on students' readiness levels	3.90	High
Learning materials and activities are varied	3.85	High
Students demonstrate learning through different assessments	3.95	High
Teachers provide individualized feedback	4.00	High
Average Mean	3.95	High

The data in Table 8 **presented** the level of application of Differentiated Instruction (DI) strategies among teachers in the selected elementary schools of the Loon North District. The average weighted mean of 3.95, interpreted as "High," **indicated** that DI strategies were consistently applied to address diverse learning needs in the classroom. Lessons **were modified** to cater to different learning styles, with a weighted mean of 4.05, highlighting teachers' efforts to create inclusive learning environments that **recognized** visual, auditory, and kinesthetic preferences. Tasks **were adjusted** based on students'

readiness levels, receiving a mean of 3.90, suggesting that teachers **were attentive** to the varying abilities of students and **scaffolded** learning accordingly (Cruz & Reyes, 2021).

The use of varied learning materials and activities, with a weighted mean of 3.85, **demonstrated** that teachers **incorporated** multiple instructional resources to enhance engagement and deepen understanding. Furthermore, students **were allowed** to demonstrate learning through different assessment methods (WM = 3.95), enabling them to showcase mastery in ways that aligned with their strengths. Teachers also **provided** individualized feedback, scored at 4.00, reflecting a commitment to supporting each student's progress and **promoting** self-regulated learning. These practices **aligned** with the principles of intrinsic motivation and self-determination theory, which **emphasize** the importance of autonomy and competence in student learning (Deci & Ryan, 1985; Dela Cruz, 2021).

The high application of DI strategies **indicated** that teachers in the Loon North District **were responsive** to the individual differences among learners, ensuring equitable access to learning opportunities. This **was consistent** with the K-12 curriculum guidelines, which **advocated** for differentiated approaches to enhance student engagement and mastery of competencies (DepEd Order No. 008, s. 2020; Cruz, 2022). By implementing DI, teachers not only **accommodated** diverse learning needs but also **fostered** motivation, deeper understanding, and improved academic performance, creating a classroom culture that **supported** both inclusivity and effective instructional practice (Dick & Carey, 2005).

Table 9

Integration of Collaborative and Active Learning Approaches

Indicators	**Weighted Mean (WM)**	**Verbal Interpretation**
Students participate in group discussions, pair work, or peer teaching	4.25	Very High
Cooperative learning techniques promote teamwork	4.10	High
Classroom activities encourage critical thinking collaboratively	4.05	High
Teachers act as facilitators	4.15	High
Students take responsibility for their own learning	4.20	High
Average Mean	4.15	High

The data in Table 9 **illustrated** the level of integration of collaborative and active learning approaches among teachers in the selected elementary schools of the Loon North District. The average weighted mean of 4.15, interpreted as "High," **indicated** that teachers consistently applied strategies that encouraged student participation, teamwork, and autonomy. Students actively engaged in group discussions, pair work, or peer teaching, which **received** the highest weighted mean of 4.25 and was

interpreted as "Very High," demonstrating that teachers **prioritized** interactive and participatory learning environments (Almeida, 2022). Cooperative learning techniques, with a weighted mean of 4.10, further **promoted** teamwork and social interaction, allowing students to develop essential interpersonal skills and a sense of shared responsibility (Alonzo, 2020).

Classroom activities **were designed** to encourage critical thinking collaboratively, with a weighted mean of 4.05, indicating that students **were challenged** to analyze, synthesize, and problem-solve together. Teachers **served** primarily as facilitators (WM = 4.15), guiding learning processes rather than relying solely on traditional lecture methods, which **aligned** with the principles of active learning and learner-centered pedagogy (Bautista, 2020). Additionally, students **were encouraged** to take responsibility for their own learning (WM = 4.20), reflecting an emphasis on autonomy and self-regulated learning. These practices **ensured** that students were not merely passive recipients of knowledge but active participants in constructing understanding collaboratively.

The strong application of collaborative and active learning strategies **highlighted** teachers' commitment to fostering engagement, autonomy, and critical thinking among learners. This approach **aligned** with curriculum guidelines and instructional strategies advocated in the Philippine education framework, which **emphasized** learner-centered methods to enhance student performance and classroom interaction (Belen, 2022; Catacutan, 2023). By integrating these strategies, teachers **created** a dynamic and inclusive learning environment that **supported** both cognitive and social development, ultimately improving academic outcomes while nurturing essential 21st-century skills.

Level of Student Learning Engagement

Student engagement was analyzed across behavioral, cognitive, and emotional dimensions.

Table 10

Behavioral Engagement

Indicators	**Weighted Mean (WM)**	**Verbal Interpretation**
Students actively participate in classroom activities	4.10	High
Students complete tasks and assignments on time	4.05	High
Students demonstrate focus and attentiveness during class	4.00	High
Students follow classroom rules and routines effectively	3.95	High
Students volunteer to participate in learning activities	4.05	High
Average Mean	4.03	High

The data in Table 10 **presented** the level of behavioral engagement of students in the selected elementary schools of the Loon North District, showing an overall weighted mean of 4.03, interpreted as "High." This **indicated** that students consistently **demonstrated** active involvement in classroom activities, completed tasks on time, maintained attentiveness, followed classroom routines, and volunteered to participate in learning exercises. The highest weighted mean of 4.10 **was observed** in students' active participation in classroom activities, suggesting that learners **were motivated** to engage directly with instructional content and contribute meaningfully to classroom interactions (Lacson, 2022). Completing tasks and assignments on time, with a WM of 4.05, further **reflected** students' commitment to meeting academic expectations and the positive influence of structured classroom management (Laquindanum, 2022).

Students' focus and attentiveness during lessons, measured at a weighted mean of 4.00, **highlighted** the effectiveness of instructional strategies, including project-based and collaborative learning, in sustaining concentration and minimizing distractions (Lim & Chua, 2024). Similarly, adherence to classroom rules and routines (WM = 3.95) **indicated** that students **understood** behavioral expectations, contributing to an orderly and productive learning environment. Volunteering to participate in learning activities, also with a weighted mean of 4.05, **demonstrated** students' willingness to take initiative and engage beyond the minimum requirements, reflecting intrinsic motivation and the impact of autonomy-supportive teaching practices (Malonzo, 2023).

The consistently high behavioral engagement observed among students **indicated** a learning environment that **fostered** participation, responsibility, and attentiveness, which were critical for academic success. Such engagement **was closely linked** to the effective implementation of instructional strategies, scaffolding techniques, and classroom management approaches employed by teachers (Lising, 2024; Lopez & Marasigan, 2020). By actively participating and adhering to established routines, students not only **enhanced** their learning outcomes but also **developed** foundational habits for self-regulated learning and collaborative problem-solving, ultimately **contributing** to the achievement of mastery competencies across subjects.

Table 11

Cognitive Engagement

Indicators	**Weighted Mean (WM)**	**Verbal Interpretation**
Students ask meaningful questions and show curiosity	4.00	High
Students demonstrate critical and analytical thinking	3.95	High
Students apply concepts to new situations	3.90	High
Students use self-assessment to monitor learning progress	3.85	High
Students engage in problem-solving and higher-order thinking	4.00	High

Average Mean	3.94	High

The data in Table 11 **revealed** the level of cognitive engagement among students in the selected elementary schools of the Loon North District, with an overall weighted mean of 3.94, interpreted as "High." This **indicated** that students consistently **demonstrated** mental involvement in learning activities, **engaged** in critical thinking, problem-solving, and the application of concepts to new contexts. The highest weighted means of 4.00 **were observed** in students asking meaningful questions and engaging in higher-order thinking, suggesting that learners **were intellectually curious** and **motivated** to explore and deepen their understanding of subject matter (Panganiban, 2021). Applying concepts to new situations (WM = 3.90) **demonstrated** students' ability to transfer knowledge across contexts, a critical aspect of cognitive engagement that **supported** academic growth and mastery (Perez & Tan, 2023).

Critical and analytical thinking, with a weighted mean of 3.95, **highlighted** students' capacity to evaluate, synthesize, and interpret information effectively. The use of self-assessment to monitor learning progress (WM = 3.85) **reflected** students' developing metacognitive skills, allowing them to identify strengths, address gaps, and take ownership of their learning process (Piaget, 1952). These cognitive engagement behaviors **were influenced** by instructional strategies that **emphasized** active learning, scaffolding, and differentiated instruction, which **encouraged** students to think independently and critically while engaging meaningfully with lesson content (Panganiban, 2025).

The high level of cognitive engagement among students **demonstrated** a learning environment that **supported** intellectual growth, problem-solving, and reflective thinking. By consistently **applying** critical and analytical skills, students **were better able** to navigate complex tasks, make informed decisions, and achieve mastery competencies. Such engagement **was foundational** to long-term learning success, **fostering** autonomy, intrinsic motivation, and a deeper understanding of academic content, all of which **were essential** for sustained achievement in core subjects like Mathematics, Science, and English (Puno, 2023; Perez & Tan, 2023).

Table 12

Emotional Engagement

Indicators	**Weighted Mean (WM)**	**Verbal Interpretation**
Students express enthusiasm and interest in learning activities	4.05	High
Students show positive attitudes toward teachers and peers	4.10	High
Students demonstrate confidence in their learning abilities	4.00	High

Students enjoy collaborative or hands-on learning experiences	4.15	High
Students are motivated to achieve academic success	4.05	High
Average Mean	4.07	High

The data in Table 12 **indicated** a high level of emotional engagement among students in the selected elementary schools of the Loon North District, with an overall weighted mean of 4.07. Students **exhibited** enthusiasm and interest in learning activities (WM = 4.05) and **demonstrated** enjoyment in collaborative or hands-on learning experiences (WM = 4.15), reflecting a positive emotional connection with classroom experiences. This high engagement **supported** intrinsic motivation, which was critical for sustaining attention, effort, and persistence in academic tasks, aligning with principles of Self-Determination Theory that **emphasized** autonomy, competence, and relatedness in fostering meaningful learning (Ryan & Deci, 2000; Puno, 2023).

The indicators further **showed** that students **maintained** positive attitudes toward teachers and peers (WM = 4.10) and **demonstrated** confidence in their learning abilities (WM = 4.00). These results **highlighted** the supportive classroom climate, where teacher encouragement, peer collaboration, and a constructive learning environment **enhanced** students' self-efficacy and emotional well-being (Roxas & Montejo, 2024; Rivera, 2024). Positive interactions within such learning environments **helped** students develop social-emotional skills, **reinforcing** motivation to participate actively and persist through challenges, which was essential for achieving mastery in core subjects like Mathematics, Science, and English (Santos & Dela Paz, 2021).

The high level of emotional engagement **demonstrated** that students were not only cognitively and behaviorally involved in learning but also emotionally invested, which **contributed** to holistic academic development. The observed engagement patterns **suggested** that strategies promoting collaborative, hands-on, and autonomy-supportive learning experiences **effectively enhanced** student interest, confidence, and motivation. By fostering positive emotions and relatedness in the classroom, teachers **created** a sustainable foundation for continuous learning, deeper understanding, and higher academic achievement (Ramos & Torres, 2024; Salazar, 2020; Vergara, 2021).

Level of Student Academic Performance

Student performance was assessed in core subjects: Mathematics, Science, and English.

Table 13

Student Academic Performance

Indicators	**Weighted Mean (WM)**	**Verbal Interpretation**
Mastery of competencies in Mathematics, Science, and English	4.05	High

Improvement in quiz and test scores	4.00	High
Meeting or exceeding expected learning standards	3.95	High
Application of learned concepts in real-life contexts	4.00	High
Overall academic performance improvement throughout the year	4.05	High
Average Mean	4.01	High

The data in Table 13 **revealed** that students **demonstrated** high academic performance across core subjects, with an overall weighted mean of 4.01. Mastery of competencies in Mathematics, Science, and English **received** a weighted mean of 4.05, reflecting students' solid understanding of essential concepts and skills. The consistent improvement in quiz and test scores (WM = 4.00) and the ability to meet or exceed expected learning standards (WM = 3.95) **suggested** that the instructional strategies implemented by teachers, such as differentiated instruction and project-based learning, **effectively addressed** diverse learning needs while **promoting** comprehension and retention of knowledge (Gomez, 2023; Lacson, 2022).

Furthermore, students' capacity to apply learned concepts in real-life contexts (WM = 4.00) **underscored** the practical relevance of classroom instruction and the integration of active, collaborative, and inquiry-based learning approaches. By connecting academic content to real-world scenarios, students **developed** critical thinking and problem-solving skills, as well as the confidence to transfer knowledge beyond the classroom setting (Laquindanum, 2022; Lim & Chua, 2024). The positive trend in overall academic performance improvement throughout the school year (WM = 4.05) **reflected** the cumulative effect of consistent engagement, scaffolded learning, and supportive teaching practices (Lising, 2024).

The findings **indicated** that effective instructional strategies **had** a significant impact on student academic performance. The alignment of pedagogy with students' cognitive, behavioral, and emotional engagement **fostered** a learning environment conducive to high achievement and continuous growth. By maintaining instructional fidelity, providing autonomy-supportive guidance, and implementing differentiated and collaborative learning strategies, teachers **contributed** to both academic excellence and the holistic development of students (Lopez & Marasigan, 2020; Malonzo, 2023). These results **highlighted** the importance of evidence-based instructional practices in enhancing learning outcomes in elementary education.

Significant Relationship Between Instructional Strategy Implementation and Student Academic Performance

Pearson's correlation coefficient (r) at a 0.05 significance level was used to determine the relationship between instructional strategy implementation and student academic performance.

Table 14

Relationship Between Instructional Strategy Implementation and Academic Performance

Instructional Strategy	Correlation Coefficient (r)	p-value	Interpretation
Project-Based Learning (PBL)	0.482	0.002*	Significant, moderate positive relationship
Differentiated Instruction (DI)	0.455	0.004*	Significant, moderate positive relationship
Collaborative/Active Learning	0.510	0.001*	Significant, moderate positive relationship

*Significant at 0.05 level

The data in Table 14 **indicated** that there **was** a significant moderate positive relationship between the implementation of various instructional strategies and students' academic performance. Project-Based Learning (PBL) **showed** a correlation coefficient of 0.482 with a p-value of 0.002, demonstrating that students' engagement in real-world, hands-on projects **was** positively associated with higher academic achievement. This **suggested** that when teachers consistently integrated PBL activities, students **were** more likely to develop critical thinking and problem-solving skills, as well as a deeper understanding of concepts, which **translated** into improved performance in core subjects.

Similarly, Differentiated Instruction (DI) **exhibited** a correlation coefficient of 0.455 with a p-value of 0.004, indicating a moderate positive relationship with academic performance. The application of DI, which **addressed** students' varying learning styles, readiness levels, and interests, **enabled** learners to access content in ways that best suited their abilities. This tailored approach not only **supported** comprehension and retention but also **encouraged** student engagement, motivation, and self-efficacy, all of which **contributed** to consistent academic progress and achievement.

Collaborative and active learning strategies **showed** the strongest relationship with academic performance among the three, with a correlation coefficient of 0.510 and a p-value of 0.001. This **highlighted** the effectiveness of group discussions, peer teaching, cooperative problem-solving, and active participation in fostering both cognitive and social skills. The positive correlation **indicated** that students who **were** actively involved in collaborative learning environments **were** more likely to achieve higher academic outcomes, as such strategies **promoted** critical thinking, autonomy, and accountability while **reinforcing** understanding through interaction with peers.

3. Summary, Findings, Conclusions, And Recommendations

This chapter **presented** the summary, findings, conclusions, and recommendations based on the results of the study. The study **utilized** a descriptive-correlational research design with a quantitative approach to examine the relationship between teachers' instructional strategies, student engagement, and academic performance. Data **were collected** on teacher demographic profiles, the level of implementation of instructional strategies, student engagement levels, student academic performance in Mathematics, Science, and English, and the relationship among these variables.

Summary

The study **focused** on 60 elementary teachers from five selected schools in the Loon North District, namely Pondol, Cantomucad, Lawis, Calayugan, and Loon North Central Elementary Schools. The demographic profile **revealed** that the majority of teachers **were** female and aged 31–35 years, holding at least a Bachelor's degree and possessing substantial teaching experience. Most **had received** relevant professional development in Project-Based Learning, Differentiated Instruction, and Collaborative/Active Learning Approaches. The study also **evaluated** the extent to which teachers **implemented** these instructional strategies, how students **engaged** behaviorally, cognitively, and emotionally, and the corresponding academic outcomes. Furthermore, the study **analyzed** the relationship between instructional strategy implementation and student performance, providing a basis for proposing the Energize Strategy Based on Learning Exercises.

Findings

The findings **indicated** that teachers **implemented** instructional strategies at high levels, with Project-Based Learning receiving an average weighted mean (WM) of 4.17, Differentiated Instruction at WM = 3.95, and Collaborative/Active Learning Approaches at WM = 4.15. These results **suggested** that teachers consistently **applied** diverse instructional methods to enhance student learning, promote active participation, and address individual learning needs. The use of collaborative and project-based strategies **encouraged** students to engage in real-world problem-solving, teamwork, and critical thinking exercises, demonstrating effective pedagogical practice.

In terms of student engagement, the study **revealed** high levels across all three dimensions. Behavioral engagement scored WM = 4.03, reflecting students' active participation and timely completion of tasks. Cognitive engagement scored WM = 3.94, showing that students **were** mentally involved in learning, demonstrating curiosity and critical thinking. Emotional engagement scored WM = 4.07, indicating students' positive attitudes toward learning, peers, and teachers. These findings **implied** that the instructional strategies employed by teachers successfully **fostered** a supportive and engaging learning environment.

The analysis of student academic performance **indicated** high achievement in Mathematics, Science, and English, with an overall average WM = 4.01. Correlation analysis further **revealed** a significant positive relationship between instructional strategy implementation and student academic performance. Project-Based Learning ($r = 0.482$, $p = 0.002$), Differentiated Instruction ($r = 0.455$, $p = 0.004$), and Collaborative/Active Learning Approaches ($r = 0.510$, $p = 0.001$) **were** all significantly related

to higher academic performance. This **demonstrated** that the consistent application of diverse instructional strategies effectively **enhanced** student engagement and learning outcomes.

Conclusions

Based on the findings, the study concludes that elementary teachers in the selected schools of the Loon North District demonstrate strong professional qualifications, relevant experience, and adequate training that enable them to effectively implement learner-centered instructional strategies. The consistently high level of implementation of approaches such as Project-Based Learning, Differentiated Instruction, and Collaborative/Active Learning reflects teachers' commitment to adopting responsive, evidence-based practices that address diverse learner needs and enhance instructional quality.

Furthermore, the study concludes that the strategic use of these instructional approaches significantly promotes students' behavioral, cognitive, and emotional engagement. Learners were observed to be more attentive, participative, and intrinsically motivated, contributing to a positive and inclusive classroom environment. The integration of interactive and collaborative learning experiences plays a critical role in sustaining student interest and deepening understanding.

Finally, the study establishes that the effective implementation of varied instructional strategies has a significant positive influence on students' academic performance in Mathematics, Science, and English. These approaches support the development of higher-order thinking skills and facilitate mastery of essential competencies. Therefore, the sustained use of structured, innovative, and differentiated teaching practices, reinforced by continuous professional development and systematic monitoring, is essential in achieving improved learning outcomes and long-term educational success.

Recommendations

Based on the conclusions, the following recommendations **were proposed** to enhance instructional effectiveness, student engagement, and academic performance:

1. Sustain and strengthen the implementation of learner-centered instructional strategies.
   School administrators should encourage the continuous and consistent use of Project-Based Learning, Differentiated Instruction, and Collaborative/Active Learning through instructional supervision, provision of resources, and recognition of effective teaching practices.
2. Institutionalize continuous professional development programs for teachers.
   Regular training, workshops, and learning action cell (LAC) sessions should be conducted to further enhance teachers' competencies in innovative and student-centered pedagogies, including the integration of technology and inclusive teaching practices.
3. Enhance student engagement through structured and supportive learning environments.
   Teachers should adopt varied and interactive strategies that address students' behavioral, cognitive, and emotional needs, such as collaborative tasks, real-world problem-solving activities, and reflective learning exercises.
4. Strengthen competency-based instruction to improve academic performance.
   Teachers should focus on reinforcing mastery of key competencies in Mathematics, Science, and English through differentiated activities, formative assessments, and targeted remediation programs for struggling learners.

5. Establish a robust monitoring and evaluation (M&E) system.
   School leaders should develop and implement clear mechanisms to regularly assess the effectiveness of instructional strategies, track student engagement, and evaluate academic performance, ensuring data-driven decision-making and continuous improvement.
6. Promote a culture of collaboration and professional learning communities.
   Teachers should be encouraged to share best practices, conduct peer observations, and engage in collaborative planning to improve instructional delivery and student outcomes.
7. Provide adequate instructional materials and resources.
   Schools and stakeholders should ensure the availability of teaching aids, technological tools, and learning materials that support the effective implementation of innovative instructional strategies.
8. Encourage stakeholder involvement and support.
   Parents, community members, and local education authorities should be engaged in supporting school programs and initiatives that aim to enhance student engagement and academic achievement.

4. Output of The Study

Energize Strategy Based On Learning Exercises

Rationale

Effective instructional strategies **were identified** as essential for promoting student engagement and enhancing academic performance. Teachers who **implemented** diverse and research-based teaching approaches, such as Project-Based Learning, Differentiated Instruction, and Collaborative/Active Learning, **created** learning environments where students **actively participated**, **thought critically**, and **emotionally invested** in their education. High levels of behavioral, cognitive, and emotional engagement **positively influenced** mastery of competencies in Mathematics, Science, and English.

Based on the study results, teachers **frequently implemented** instructional strategies, and students **demonstrated** high engagement and strong academic performance. However, there **were** gaps in consistency across certain strategies, and some students **demonstrated** only moderate cognitive engagement or **required** additional support in applying learned concepts. The Energize Strategy Based on Learning Exercises **was designed** to address these gaps by providing structured interventions that **enhanced** instructional effectiveness, **fostered** student engagement, and **improved** overall academic outcomes.

Objectives

This plan **is aimed** to:

1. **To strengthen the consistent and effective implementation of learner-centered instructional strategies**, such as Project-Based Learning, Differentiated Instruction, and Collaborative/Active Learning, among elementary teachers to promote meaningful and engaging classroom experiences.
2. **To enhance students' behavioral, cognitive, and emotional engagement** by fostering an inclusive, interactive, and supportive learning environment that encourages active participation and deeper understanding.

3. **To improve students' academic performance in Mathematics, Science, and English** through the systematic reinforcement of core competencies and the use of evidence-based instructional practices.
4. **To provide continuous and sustainable professional development opportunities for teachers**, focusing on innovative, responsive, and student-centered pedagogical approaches that address diverse learner needs.
5. **To establish and institutionalize a comprehensive monitoring and evaluation system** that ensures the consistent implementation of effective teaching practices and supports ongoing improvement in student learning outcomes.

Scheme of Implementation

Objective	Strategies/Activities	Persons Responsible	Timeline	Resources Needed	Success Indicators
Strengthen instructional strategies	Conduct LAC sessions; Classroom observations	School Head, Master Teachers	Quarterly	Training materials	Improved teaching practices
Enhance student engagement	Use collaborative tasks; Interactive lessons	Teachers	Ongoing	Instructional materials	Increased participation
Improve academic performance	Remediation programs; Formative assessments	Teachers	Monthly	Assessment tools	Higher test scores
Provide professional development	Workshops and seminars	School Head	Bi-annual	Budget, trainers	Enhanced teacher competencies
Establish M&E system	Regular monitoring; Data analysis	School Head, Coordinators	Quarterly	Monitoring tools	Data-driven decisions
Promote collaboration	Peer observations; Team planning	Teachers	Monthly	Meeting space	Shared best practices
Provide resources	Procure teaching aids	School Admin	Annual	Budget	Adequate materials available
Engage stakeholders	PTA meetings; Community programs	School Head, Teachers	Quarterly	Communication materials	Active stakeholder support

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