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Extent of Utilization of Innovative Teaching Strategies Across All Subjects and Their Influence on Students' Academic Performance

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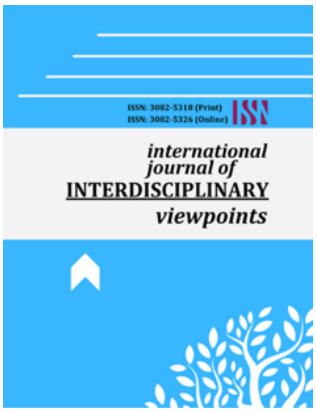
Research Article



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ABSTRACT

Innovative teaching methods were looked at and how they affected students' academic success in high schools in the Prosperidad District, Division of Agusan del Sur. Specifically, the study wanted to find out how teachers use learner-centered methods and how these affect students' performance in various subject areas. The study method was quantitative descriptive-correlational. Researchers created a questionnaire that was then checked by experts to make sure it was reliable and accurate. Subjects chosen through systematic sampling included 35 teachers and 130 pupils. The data was analyzed using statistical tools like frequency, percentage, weighted mean, analysis of variance, and Pearson's association. The results showed that teachers often used new methods, especially those that combined technology with students working together and learning through experience. Significant changes in usage were seen between groups based on the teachers' level of schooling, length of service, and training exposure. These findings also showed a moderately good relationship between new ways of teaching and students' academic success, which suggests that learner-centered instruction helps students do better in school. The study stresses the importance of ongoing professional development, strong administrative support, and regular changes to how lessons are taught in order to make teaching more effective and boost student success.

Keywords
education, innovative teaching strategies, academic performance, descriptive-correlational research, learner-centered approaches, instructional practices

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INTRODUCTION

In the 21st century, the search for quality education has made school systems around the world rethink how they teach and learn in a world where technology is changing quickly, students' needs are changing, and there are more calls for overall development. New research shows that good education is affected by more than just the way it's taught. It's also affected by the quality of the teachers, the classroom setting, the way leaders run things, and the health and happiness of the teachers (Villocino & Villocino, 2025; Guzman & Doronio, 2025; Garcia & Lee, 2024). Today's teachers have to deal with a lot of pressures at work and at home, such as personal and institutional pressures like workload, leadership expectations, and work–life balance, which make it hard for them to keep up good teaching practices (Barbarona-Gudelosao & Escote, 2025; Pedro & Dioso, 2025). OECD (2021) and UNESCO (2023) say that the main goals of modern schools should be student agency, well-being, and great education for everyone. Global frameworks support this view even more. These events show how important it is to see new ways of teaching as deeply rooted in societal, organizational, and systemic frameworks, rather than as separate practices that happen in the classroom.

Innovative teaching methods are well known for their ability to get students more involved, more motivated, and better performing in school. According to research, learner-centered methods like project-based learning, gamification, technology-integrated instruction, and experiential learning help students understand things better, think critically, and stay interested in the learning process (Abdullah & Rahman, 2023; Sabbah, 2021; Domingo & Salamuddin, 2023; Williams, 2024). Gamification, cooperative models, digital games, and augmented reality have been shown to improve students' motivation, involvement, and performance in math and science (Maragañas & Dioso, 2025; Rizki et al., 2024; Olayvar, 2023) through real-world studies. It has been shown that student-centered, technology-enhanced methods lead to better learning results in blended, distance, and post-pandemic settings (Nguyen & Pham, 2022; Kerimbayev et al., 2023; Manalo & Pineda, 2024). Still, how well these strategies work depends a lot on how skilled, experienced, flexible, and committed teachers are to ongoing professional development (Reyes, 2023; Gonzales, 2023; Khalid & Ahmed, 2023)—which supports the idea that new ideas thrive where there is a mix of pedagogical knowledge and institutional support.

In addition, learning experiences are shaped by strong culture and social factors that interact with the way teachers teach. Peer pressure, parental involvement, family relationships, and community support all have big effects on how well students do in school, how motivated they are to learn, and their social and emotional development (Fudolin & Dioso, 2025; Bongabong & Doronio, 2025; Saro et al., 2022; Cariaga et al., 2025). In places with a lot of cultural diversity and marginalization, like indigenous and rural communities, it's important to use teaching

methods that are both relevant to the situation and sensitive to different cultures. This will keep students interested and help them do better in school (Casamayor & Plaga, 2025; Saro et al., 2023; Saro et al., 2023; Cariaga et al., 2024). Research done in the Philippines has also shown that it can be hard to use experiential, inquiry-based, and new ways of teaching within the framework of national educational reforms like the MATATAG Curriculum. This is because of issues like a lack of resources, teachers who aren't ready, and systemic problems (Del Rosario, 2023; Torres & Cruz, 2022). Additionally, incorporating new technologies like artificial intelligence can bring both possible benefits and major problems. This means that K–12 educational settings need to be very careful to adapt to their surroundings and build up the right skills (Cariaga et al., 2021).

Innovative teaching methods, factors that affect engagement, leadership dynamics, and contextual factors have been studied in great detail in previous research. However, there are still big gaps in our understanding of how these strategies are used across different subject areas and how they affect students' overall academic success in a secondary school setting. A lot of the research that is being done now is focused on single variables, certain academic fields, or certain stages of education. This means that we don't fully understand how instructional innovation can be used across all subjects (Saro & Pelesco, 2025; Abenir & Berame, 2025; Valencia & Bulay, 2025). Also, while research shows that instructional supervision, teacher motivation, and professional competence are all important for improving student achievement, there haven't been many studies that directly link these factors to the long-term use of new strategies (Reyes & Oropa, 2025; Saro et al., 2025; Saro et al., 2022). This study is based on the idea that learning happens when personal, behavioral, and environmental factors interact (Bandura, 1986) and uses qualitative research methods (Patton, 2015) to fill in these gaps. It does this by looking at how many new teaching strategies are used in different subjects and how they affect how well students do in school. The study aims to produce results that can help with professional growth for teachers, planning lessons, and making rules, especially in the public secondary school system in the Philippines (Cariaga, 2023; Cariaga, 2024; Cariaga & ElHalaissi, 2024).

Research Questions

The study aimed to determine the extent of utilization of innovative teaching strategies across all subjects in secondary schools within the Prosperidad District, Division of Agusan del Sur, Caraga Region, Philippines. Specifically, it sought to answer the following research questions:

1. What is the demographic profile of the teacher-respondents in terms of:
1.1 age;
1.2 sex;
1.3 highest educational attainment;
1.4 length of teaching service;
1.5 subject taught; and
1.6 number of hours spent attending seminars or training related to the utilization of innovative teaching strategies?
2. What is the extent of utilization of the following innovative teaching strategies adopted by teachers across all subject areas, as assessed by both teachers and students:
2.1 small group learning strategy;
2.2 collaborative learning strategy;
2.3 problem-solving strategy;
2.4 use of models or manipulatives;
2.5 game-based learning strategy;
2.6 project-based learning strategy;
2.7 technology-integrated teaching strategy; and
2.8 experiential learning strategy?
3. What is the academic performance of the student-respondents across all subjects based on their general weighted average?
4. Is there a significant difference between the profile of the teacher-respondents and their extent of utilization of innovative teaching strategies?
5. Is there a significant relationship between the extent of utilization of innovative teaching strategies and the students' academic performance across all subjects?
6. Based on the findings of the study, what recommendations for professional development and instructional practices may be proposed?

Hypotheses

The following hypotheses guided the study:

1. There is no significant difference between the profile of the teacher-respondents and their extent of utilization of innovative teaching strategies.
2. There is no significant relationship between the extent of utilization of innovative teaching strategies and the students' academic performance across all subjects.

MATERIALS AND METHODS

Research Design

This study employed a quantitative research approach, specifically using a descriptive-correlational design supported by a descriptive-survey technique. The correlational design was utilized to address the inferential research questions, while the survey technique facilitated the use of a structured questionnaire to accurately gather relevant data on the extent of utilization of innovative teaching strategies and their influence on students' academic performance. The study was descriptive in nature, as it sought to determine the degree to which teachers implemented various innovative teaching strategies across subject areas. It was also correlational, as it aimed to present a comprehensive picture of teachers' practices and examine the relationships between the extent of strategy utilization and students' academic outcomes (McBurney & White, 2009). Data were collected through a researcher-made survey questionnaire, which was developed based on a review of related literature, recent studies, and teachers' classroom experiences. The study analyzed, classified, and tabulated data on existing practices, trends, and relationships among key variables, following the techniques outlined by Medina (2010). Furthermore, it examined possible associations between variables without manipulation or intervention, consistent with the principles described by Smiley (2011) and Saro, Apat, and Pareja (2023).

Respondents of the Study

The study was conducted in the Prosperidad District under the Schools Division of Agusan del Sur, specifically within selected secondary schools purposively chosen based on their classification as large schools. The research was carried out during the academic year 2024-2025.

Purposive sampling was employed to ensure that the respondents possessed relevant experiences and knowledge related to the study variables. Teachers handling different subject areas: Science, Mathematics, English, Social Science, Filipino, Values Education, TLE, and MAPEH were considered potential respondents. Their inclusion was primarily based on their interest, willingness, and availability to participate. A total of 35 secondary teachers across these subject areas participated as teacher-respondents. In addition, 130 students from Grades 7 to 10 of Prosperidad National High School were purposively selected as student-respondents. The basis for determining these samples followed the principle of information-rich cases as suggested by Patton (2015), emphasizing that purposive sampling allows researchers to obtain in-depth insights from respondents who can best represent the study's objectives. This approach ensured that both teachers and students could provide meaningful perspectives relevant to the study's focus on teaching and learning experiences within the district.

Research Instrument

The study employed a researcher-made instrument specifically designed to gather data relevant to the objectives of the research. In developing this tool, the researcher extensively reviewed several related studies to ensure its validity and alignment with existing literature. In particular, the study drew insights and adopted certain components from the works of Cabrera (2024) and Biggayan (2022), which served as foundational references in constructing and refining the instrument. The instrument consisted of two parts: the first part focused on the profile of the teacher-respondents, while the second part measured the extent of utilization of innovative teaching strategies adopted by teachers across all subject areas, as assessed by both teachers and students. In addition, the third quarter grades or general weighted averages (GWA) of Grade 7 to Grade 10 students from Prosperidad National High School comprising 130 student-respondents were used as supporting data. These grades were analyzed under the documentary analysis approach, classified as secondary data, to complement and validate the quantitative findings. Since the research tool was researcher-made, it underwent a thorough validation and reliability testing process by a panel of experts in education and research methodology. The computed reliability coefficient of the instrument was 0.91, indicating a high level of internal consistency. According to Tavakol and Dennick (2011), a reliability coefficient above 0.80 suggests that the items within the instrument consistently measure the intended construct, ensuring the dependability and stability of the results. Thus, the instrument was considered both valid and reliable for data collection.

Research Procedure

The study strictly followed ethical and procedural guidelines in its conduct. Prior to data collection, the researcher sought and secured permission from the Schools Division of Agusan del Sur, which was duly endorsed by the Division Research Coordinator for approval and continuation of the research. After obtaining division-level approval, the researcher likewise sought authorization from the school heads of each participating school within the Prosperidad District, particularly from Prosperidad National High School to permit the participation of student-respondents and to access their General Weighted Average (GWA) based on the third-quarter grades for the school year 2024–2025. Following these approvals, the researcher administered the questionnaire to the respondents through Google Forms. Before distribution, the researcher clearly explained the purpose, scope, and confidentiality aspects of the study to ensure informed participation. The responses were carefully retrieved, organized, and secured for analysis in accordance with ethical research standards.

Statistical Treatment

For the treatment of data, the study utilized appropriate statistical tools to analyze and interpret the gathered information. Frequency and percentage were employed to describe the profile data of the teacher-respondents as well as the academic performance of the student-respondents. The weighted mean was used to determine the extent of utilization of innovative teaching strategies adopted by teachers across all subject areas, as assessed by both teachers and students. To determine whether there were significant differences in the extent of utilization when grouped according to the profile variables of teacher-respondents, the Analysis of Variance (ANOVA) was employed. Meanwhile, Pearson's Product-Moment Correlation Coefficient (r) was used to examine the relationship between the extent of utilization of innovative teaching strategies and the students' academic performance across all subjects.

Ethical Considerations

The study adhered to established ethical standards in conducting educational research. Prior to data collection, formal permissions were obtained from the Schools Division of Agusan del Sur, the Division Research Coordinator, and the respective school heads of the participating schools. Informed consent was secured from both teacher- and student-respondents, ensuring that participation was voluntary and that respondents could withdraw at any time without consequences. Confidentiality and anonymity were strictly maintained by limiting access to the data only to the researcher and presenting results in aggregated form. The use of students' general weighted averages was permitted by school authorities and treated with utmost confidentiality, in compliance with data privacy regulations and ethical research protocols.

RESULTS AND DISCUSSION

Table 1 presents the demographic profile of the 35 teacher-respondents from the Prosperidad District. As shown, most of the respondents (40.0%) were aged 31-40 years old, suggesting that the teaching force is primarily composed of mid-career educators who possess sufficient experience and professional maturity to adapt to educational innovations. In terms of sex, the majority (68.6%) were female, reflecting the common trend of female dominance in the teaching profession in the Philippines. Regarding educational attainment, a significant number (51.4%) had Master's degree units, followed by Bachelor's degree holders (31.4%), indicating that many teachers are continuously enhancing their academic qualifications. A small proportion (5.8%) have pursued or completed Doctoral studies, signifying dedication to lifelong learning and professional growth. Teachers were distributed across subject areas, with the highest proportions teaching Science (22.9%) and Mathematics (20.0%), both of which are subjects that typically require more interactive and innovative instructional methods. Furthermore, most teachers (42.9%) attended 21-40 hours of training related to innovative teaching strategies, which implies consistent engagement in professional development. These demographic characteristics collectively suggest that the respondents are well-positioned to effectively utilize innovative teaching strategies, which in turn may positively influence students' academic performance across all subjects. This aligns with the findings of Gonzales (2023), who emphasized that teachers' professional background and exposure to innovation-oriented training significantly enhance instructional quality and student learning outcomes. On the other hand, when teachers possess higher qualifications and continuous professional growth, they are more likely to adopt creative and student-centered approaches that enhance engagement and achievement. This view is supported by Reyes (2023), who highlighted that teachers with advanced education and regular participation in training programs demonstrate greater competence and confidence in implementing innovative teaching methods that directly improve students' academic performance.

Table 1. Demographic Profile of Teacher-Respondents (N = 35)

Profile Variables	Category	Frequency *(n)*	Percentage *(%)*
Age	21-30 years old	8	22.9

	31-40 years old	14	40.0
	41-50 years old	9	25.7
	51 years old and above	4	11.4
Sex	Male	11	31.4
	Female	24	68.6
Highest Educational Attainment	Bachelor's Degree	11	31.4
	With Master's Degree Units	18	51.43
	Master's Degree Holder	4	11.4
	With Doctoral Units	1	2.9
	Doctorate Degree (Ph.D./Ed.D.)	1	2.9
Length of Teaching Service	1-5 years	8	22.9
	6-10 years	13	37.1
	11-15 years	9	25.7
	16 years and above	5	14.3
Subject Taught	Science	8	22.9
	Mathematics	7	20.0
	English	6	17.1
	Filipino	4	11.4
	Social Science	4	11.4
	TLE	3	8.6
	MAPEH	2	5.7
	Values Education	1	2.9
No. of Hours Spent Attending Trainings	1-20 hours	9	25.7
	21-40 hours	15	42.9
	41-60 hours	6	17.1
	More than 60 hours	5	14.3

Note. Data were based on the responses of 35 secondary school teachers from the Prosperidad District, Division of Agusan del Sur (S.Y. 2024-2025). Percentages may not total 100% due to rounding.

Extent of Utilization of Innovative Teaching Strategies

The findings revealed that teachers "often" utilized innovative teaching strategies across all subject areas, as indicated by an overall mean of 3.99, which is interpreted as moderately utilized. The highest mean was obtained in the Technology-Integrated Teaching Strategy (M = 4.30) and Collaborative Learning Strategy (M = 4.25), both described as highly utilized. This result highlights teachers' increasing reliance on digital tools and collaborative approaches to enhance student participation and classroom engagement. According to Del Rosario (2023), integrating technology and collaboration-based learning which promotes active, competency-based, and technology-driven instruction in the 21st-century learning environment.

Table 2. Summary of Findings on the Extent of Utilization of Innovative Teaching Strategies Across All Subject Areas as Assessed by Teacher-Respondents

Strategies	Mean Score	Descriptive Level	Interpretation
Small Group Learning Strategy	4.10	Often	Moderately Utilized
Collaborative Learning Strategy	4.25	Always	Highly Utilized
Problem-Solving Strategy	3.85	Often	Moderately Utilized
Use of Models or Manipulatives	3.90	Often	Moderately Utilized
Game-Based Learning Strategy	4.05	Often	Moderately Utilized
Project-Based Learning Strategy	3.35	Sometimes	Fairly Utilized
Technology-Integrated Teaching Strategy	4.30	Always	Highly Utilized
Experiential Learning Strategy	4.15	Often	Moderately Utilized
Overall	3.99	Often	Moderately Utilized

Note. The scale range of 4.21-5.00 indicates strategies that are always practiced and therefore highly utilized, while lower ranges reflect decreasing frequency and extent of use from often (3.41-4.20, moderately utilized), sometimes (2.61-3.40, fairly utilized), rarely (1.81–2.60, slightly utilized), to never (1.00–1.80, not utilized).

Meanwhile, Small Group Learning (M = 4.10), Problem-Solving (M = 3.85), Use of Models or Manipulatives (M = 3.90), Game-Based Learning (M = 4.05), and Experiential Learning (M = 4.15) were rated as often utilized and moderately utilized. This indicates that teachers are making deliberate efforts to diversify their strategies to meet students' varying learning styles and to sustain their interest and motivation during lessons. However, the Project-Based Learning Strategy received the lowest mean score (M = 3.35) and was described as fairly utilized. This highly suggests that although teachers recognize its value, project-based learning is not regularly implemented, likely due to time constraints, heavy workloads, and insufficient training or resources for extended projects. Supporting this, Johnson and Carter (2022) emphasized that project-based learning requires substantial preparation, continuous assessment, and institutional backing, which can limit its consistent use in regular classroom instruction. The disparity in utilization levels across strategies suggests that teachers are more inclined to use approaches that are manageable within their workload and time limits, particularly those that can easily be integrated into existing lesson plans. The study by Manalo and Pineda (2024) found that many teachers struggle to maintain innovative practices due to limited support systems and the pressure to meet curricular requirements. The findings also resonate with Khalid and Ahmed (2023), who argued that while innovative strategies significantly improve student learning outcomes, their effectiveness depends on teachers' continuous professional development and administrative encouragement. Overall, the results imply that while teachers demonstrate a commendable effort to apply innovation in their teaching, there remains a need for more institutional support, targeted training, and adequate time allocation to maximize the potential of high-impact strategies such as project-based learning. Thereby, strengthening these areas could further enhance student academic performance, engagement, and problem-solving abilities across all subject areas.

Based on the results presented in Table 3, student-respondents generally perceived that their teachers often utilized innovative teaching strategies across all subject areas, with an overall mean of 4.06 described as "moderately utilized." Among the strategies, Collaborative Learning (M = 4.30), Game-Based Learning (M = 4.28), and Technology-Integrated Teaching (M = 4.30) were identified as highly utilized. These findings suggest that students observed an increased use of interactive and technology-supported learning approaches, which fostered engagement, motivation, and teamwork in classroom settings. According to Domingo and Salamuddin (2023), students are more likely to participate actively and retain knowledge longer when teachers employ collaborative and game-based methods that make learning more meaningful and enjoyable.

Table 3. Summary of Findings on the Extent of Utilization of Innovative Teaching Strategies Across All Subject Areas as Assessed by Student-Respondents

Strategies	Mean Score	Descriptive Level	Interpretation

Small Group Learning Strategy	4.18	Often	Moderately Utilized
Collaborative Learning Strategy	4.30	Always	Highly Utilized
Problem-Solving Strategy	3.90	Often	Moderately Utilized
Use of Models or Manipulatives	4.00	Often	Moderately Utilized
Game-Based Learning Strategy	4.28	Always	Highly Utilized
Project-Based Learning Strategy	3.40	Sometimes	Fairly Utilized
Technology-Integrated Teaching Strategy	4.30	Always	Highly Utilized
Experiential Learning Strategy	4.10	Often	Moderately Utilized
Overall	4.06	Often	Moderately Utilized

Note. The scale range of 4.21-5.00 indicates strategies that are always practiced and therefore highly utilized, while lower ranges reflect decreasing frequency and extent of use from often (3.41-4.20, moderately utilized), sometimes (2.61-3.40, fairly utilized), rarely (1.81–2.60, slightly utilized), to never (1.00–1.80, not utilized).

Consequently, strategies such as Small Group Learning (M = 4.18), Problem-Solving (M = 3.90), Use of Models or Manipulatives (M = 4.00), and Experiential Learning (M = 4.10) were perceived as moderately utilized, indicating that while these methods are present, they may not be consistently applied across all subjects. This aligns with Torres and Cruz (2022) and Saro et al. (2022), who emphasized that although teachers recognize the importance of experiential and inquiry-based approaches, classroom time constraints and large class sizes often limit their consistent implementation. On the other hand, Project-Based Learning (M = 3.40) received the lowest mean, suggesting that students experienced fewer opportunities to work on extended, performance-based projects that require higher-order thinking and self-directed learning (Valencia & Bulay, 2025). The implication of these findings highlights the need for teachers to strengthen the balance between interactive and project-based learning approaches. While technology and collaboration enhance student engagement, project-based and experiential learning foster deeper understanding and independent problem-solving skills. As Williams (2024) noted, student-centered instructional strategies that combine digital innovation and hands-on experiences contribute significantly to learners' cognitive and social development. Therefore, schools and teachers should consider integrating long-term, real-world projects with technology-supported instruction to provide students with a more holistic and meaningful learning experience.

Students' Academic Performance

The findings in Table 4 reveal that the majority of student-respondents achieved a general weighted average (GWA) within the 85-89 range (40.0%), which falls under the Very Satisfactory proficiency level. This indicates that most students are performing well academically, demonstrating consistent understanding and application of subject content. Meanwhile, 21.5% of students achieved Outstanding performance with a GWA between 90-100, while a notable 28.5% were categorized as Satisfactory (80-84). Only 10% of the students were rated Fairly Satisfactory (75-79), and none fell below the passing mark of 74, suggesting a generally strong academic standing among the respondents.

Table 4. Academic Performance of Student-Respondents Across All Subjects Based on Their General Weighted Average ((N = 130)

GWA Interval	Frequency *(n)*	Percentage *(%)*
90-100	28	21.5
85-89	52	40.0
80-84	37	28.5
75-79	13	10.0
Below 74	0	0.0

These results imply that the use of innovative teaching strategies, such as technology-integrated, collaborative, and game-based learning, may have contributed positively to students' learning outcomes. According to Domingo and Salamuddin (2023) and Saro et al. (2022), such learner-centered and engaging strategies promote active participation and higher retention of knowledge, which are crucial factors in improving academic performance. Williams (2024) emphasizes that integrating technology and experiential learning creates dynamic environments that foster critical thinking and problem-solving skills reflected in students' satisfactory to outstanding performance levels. On a local scale, Torres and Cruz (2022) noted that when teachers effectively apply contextualized and innovative instructional approaches, students are more motivated to perform better across subjects. Overall, the results suggest that the consistent and moderate to high utilization of innovative strategies observed in previous tables aligns with the students' generally favorable academic outcomes. This indicates that innovative pedagogical approaches play a significant role in enhancing academic performance, reinforcing the study's premise that the extent of strategy utilization directly influences learners' academic success.

Difference Between Teacher Profile and Strategy Utilization

Table 5. Significant Difference Between Teacher-Respondents' Profile and Their Extent of Utilization of Innovative Teaching Strategies

Sources of Variation		Sum of Squares	Mean Square	Computed f	P-value	Decision	Conclusion
Innovative Teaching Strategies	Age	0.845	0.282	1.420	0.252	Fail to Reject Ho	No Significant Difference
	Sex	0.173	0.173	0.930	0.341	Fail to Reject Ho	No Significant Difference
	Highest Educational Attainment	2.975	0.744	3.850	0.018	Reject Ho	Significant Difference
	Length of Teaching Service	2.361	0.787	3.241	0.032	Reject Ho	Significant Difference
	Subject Taught	1.418	0.203	1.166	0.340	Fail to Reject Ho	No Significant Difference
	Hours Spent in Trainings	3.482	1.161	4.270	0.012	Reject Ho	Significant Difference

Note. Significance level set at $p < 0.05$. Rejecting the null hypothesis (H_0) indicates that there is a significant difference in the extent of utilization of innovative teaching strategies among groups of teachers under the specified profile variable.

Table 5 presents the results of the Analysis of Variance (ANOVA) conducted to determine whether there is a significant difference between the teacher-respondents' profiles and their extent of utilization of innovative teaching strategies, which include small group learning,

collaborative learning, problem-solving, use of models or manipulatives, game-based learning, project-based learning, technology-integrated teaching, and experiential learning. The results show that highest educational attainment ($p = 0.018$), length of teaching service ($p = 0.032$), and hours spent in trainings ($p = 0.012$) yielded p-values less than 0.05, indicating significant differences in how teachers utilize innovative strategies based on these variables. This suggests that teachers' education level, experience, and professional training exposure greatly influence their teaching approach and adaptability in using modern instructional techniques. On the other hand, teachers with higher educational attainment, such as those holding master's or doctoral degrees, tend to utilize innovative teaching strategies more frequently. This may be attributed to their greater exposure to advanced pedagogical theories and research-based practices acquired through graduate studies. Such teachers are more likely to integrate technology-based tools, project-based tasks, and collaborative learning activities to enhance student engagement and achievement. These findings align with Domingo and Salamuddin (2023) and Reyes and Oropa (2025), who emphasized that advanced education equips teachers with deeper insights into student-centered learning and adaptive pedagogies, fostering more creative and effective classroom practices. Moreover, the finding that length of teaching service is significantly related to the use of innovative strategies implies that experience enhances teachers' competence and confidence in experimenting with diverse instructional approaches. Experienced teachers often develop strong classroom management skills and pedagogical flexibility, enabling them to apply strategies such as experiential and problem-solving learning more effectively. Torres and Cruz (2022) supported this notion, stating that teaching experience refines an educator's ability to adapt methods that suit learners' needs and contexts, particularly in implementing inquiry-based and experiential learning. The significant relationship between hours spent in training and strategy utilization highlights the critical role of continuous professional development (CPD) in promoting innovation in teaching. Teachers who participate in longer and more frequent training programs are more capable of applying technology-integrated and game-based learning approaches. Williams (2024) emphasized that professional training enhances teachers' readiness to adopt educational innovations and strengthen digital pedagogy, resulting in improved instructional outcomes. On the other hand, age ($p = 0.252$), sex ($p = 0.341$), and subject taught ($p = 0.340$) yielded p-values greater than 0.05, indicating no significant difference in the utilization of innovative strategies among these groups. This suggests that the use of such teaching methods transcends demographic boundaries and subject specialization. Teachers across all ages, genders, and disciplines demonstrate comparable engagement in applying innovative strategies, reflecting a shared commitment to dynamic teaching regardless of personal or professional background. Overall, these findings imply that innovation in teaching is professionally driven rather than demographically determined. The results emphasize the importance of investing in advanced education, professional training, and teaching experience to enhance teachers' capability to implement innovative strategies effectively. Schools and educational policymakers are thus encouraged to provide continuous learning opportunities, fostering a teaching culture that values creativity, research-based practices, and digital integration.

Relationship Between Strategies and Performance

The results presented in Table 6 reveal a moderate positive correlation ($r = 0.482$) between the extent of utilization of innovative teaching strategies and the academic performance of students, which is statistically significant ($p = 0.003 < 0.05$). This means that as teachers increasingly adopt and apply innovative teaching strategies, students tend to achieve better academic results across subject areas. The positive relationship indicates that the integration of these strategies contributes meaningfully to learners' engagement, motivation, and comprehension, ultimately improving their overall performance.

Table 6. Relationship Between Innovative Teaching Strategies and Students' Academic Performance

Variables	Correlation *(r)*	P-value	Remark
Innovative Teaching Strategies Academic Performance	0.482	0.003	Significant

Note. Significant at $p < 0.05$ level; r = correlation coefficient based on Pearson r interpretation.

This finding supports the assertion of Sabbah (2021) that active and student-centered teaching approaches, such as collaborative and problem-based learning, foster critical thinking and improve academic achievement. Nguyen and Pham (2022) emphasized that when teachers use technology-integrated and game-based strategies, students develop deeper conceptual understanding and retain information more effectively, leading to higher performance levels. These results also align with Abdullah and Rahman (2023), who highlighted that the use of innovative instructional methods encourages participation and boosts students' self-efficacy, which translates into better academic outcomes.

The implications of this finding are substantial for both educators and policymakers. For teachers, it emphasizes the importance of diversifying instructional practices and integrating approaches such as project-based learning, small group discussions, and experiential learning to cater to different learning styles. For school leaders and curriculum planners, the results suggest a need to strengthen professional development programs that promote innovation in teaching. As Garcia and Lee (2024) pointed out, schools that invest in continuous teacher training and innovative pedagogy demonstrate consistent improvements in student learning performance. Thus, these findings advocate for a shift from traditional rote learning methods toward dynamic, learner-centered instruction that supports the goals of the 21st-century learning competencies. Hence, the significant relationship found in this study not only validates the effectiveness of innovative teaching strategies but also calls for their sustained and systematic integration into classroom instruction.

Table 7. Proposed Recommendations for Professional Development and Instructional Practices

Areas to Focus	Proposed Recommendations
Professional Training and Seminars	Conduct continuous professional development programs that emphasize the application of technology-integrated, collaborative, and experiential learning strategies.
Teaching Experience Enhancement	Provide mentoring and peer-learning opportunities that allow experienced teachers to share effective innovative practices with novice educators.
Educational Advancement	Encourage teachers to pursue higher studies or graduate-level courses to strengthen their mastery of modern pedagogical approaches.
Instructional Innovation Support	Strengthen institutional support by providing adequate time, resources, and materials necessary for implementing project-based and technology-driven teaching strategies.
Collaboration and Sharing of Best Practices	Promote collaboration among teachers through professional learning communities to exchange ideas and successful classroom practices.

Conclusion and Recommendations

The results show that the teacher responders from the Prosperidad District are good at their jobs. These profiles include sufficient teaching experience, a college degree, and regular attendance at professional development classes. All of these things mean that they use new ways of teaching to a small or a large degree. Teachers and students both said that hands-on, collaborative, and technology-based learning was widely used. These methods were found to help students learn more and stay more interested in school. Statistics also show that how often new techniques are used depends heavily on the amount of learning the teacher has, the number of years of experience, and the number of training hours. As a worker, this shows how important it is to keep learning and getting better. The study also found a strong link between the use of new teaching methods and students' academic success. This shows how important it is for schools to be open to new ideas to improve student performance.

Teachers are constantly told to attend classes and training programs to learn new ways to teach better, driven by these results. School managers should make it a habit to regularly participate in professional development events. These events should focus on using technology to help students learn and doing hands-on tasks to help students learn. Teachers are also told to use a range of approaches, such as game-based learning and shared learning, to get their students more involved and help them do better. It should also be easy for schools to keep an eye on things and see how well different teaching approaches are assisting kids to do better in school. In the future, larger studies may be conducted that examine different grade levels or topics to expand on and support the results of this study.

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Conflict of Interest

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Authors' Contributions

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References

Abdullah, M., & Rahman, H. (2023). Innovative teaching practices and students' learning outcomes in secondary education. *Journal of Educational Innovation, 17*(2), 65–79.

Abenir, M. F. S., & Berame, J. S. (2025). Implementation of Science Spiral Progression Approach: Lessons from Teachers in the Classroom. *In International Conference on Intelligence-Based Transformations of Technology and Business Trends* (pp. 123-143). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-032-07370-9_11

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. *Prentice-Hall.*

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall.

Barbarona-Gudelosao, D., & Escote, M. J. (2025). Anecdotes of Public School Teachers on Work-Life Balance: A Multiple Case Study. International Journal of Interdisciplinary Viewpoints , 1(4), 303–326. https://doi.org/10.64612/ijiv.v1i4.22

Bendu, C. (2024). Impact of STEM on students' intellectual engagement. http://hdl.handle.net/1993/38665

Bongabong, J. M., & Doronio, R. (2025). Teaching Practices and Parental Support: Predictors of Students' Learning Interest toward Mathematics. International Journal of Interdisciplinary Viewpoints , 1(4), 494–528. https://doi.org/10.64612/ijiv.v1i4.30

Cai, Y., & Tang, H. (2022). Innovative pedagogical approaches and their effects on students' motivation and academic achievement: A multidisciplinary perspective. Journal of Educational Innovation and Practice, 18(4), 112–127. https://doi.org/10.1016/jeip.2022.18.4.112

Cariaga, R. (2023). The Philippine Education Today and Its Way Forward. Journal of ongoing educational research, 1(1), 40-42.

Cariaga, R. (2024). Student Performance Through 21st-Century Skills: Integrating Critical Thinking, Communication, Teamwork, and Creativity in Modern Education. Communication, Teamwork, and Creativity in Modern Education (August 12, 2024).

Cariaga, R., & ElHalaissi, M. (2024). Enhancing Graduate Employability and Social Impact Through Culturally Responsive Social Business Education and Design Thinking: A Global Perspective. Available at SSRN 4943411.

Cariaga, R., Dagunan, M. A., Cariaga, V., Sabidalas, M. A., El Halaissi, M., & Bacatan, J. (2025). Rethinking Parental Involvement in Developing Countries: Toward Inclusive and Culturally Responsive Education. International Journal of Interdisciplinary Viewpoints, 1(5), 631-637. https://doi.org/10.64612/ijiv.v1i5.39

Cariaga, R., El Halaissi, M., Refugio, C., Dagunan, M. A., Sabidalas, M. A., Cariaga, V., … Gerodias, E. (2025). Local Voices, Global Technologies: AI Integration Barriers in K–12 Classrooms . International Journal of Interdisciplinary Viewpoints , 1(5), 672–680. https://doi.org/10.64612/ijiv.v1i5.45

Cariaga, R., Pospos, R. S., & Dagunan, M. A. S. (2024). Educational Experiences on Numeracy Education Using Information And Communication Technology Tools, Remedial Education Programs, And Creative Teaching Methods: A Qualitative Inquiry in Rural Areas. Remedial Education Programs, And Creative Teaching Methods: A Qualitative Inquiry in Rural Areas (May 17, 2024).

Cariaga, R., Sabidalas, M. A. A., Cariaga, V. B., & Dagunan, M. A. S. (2024). Exploring Parental Narratives Toward School Support, Parental Involvement, and Academic and Social-Emotional Outcomes for Public School Learners: Basis for School Improvement Plan. Parental Involvement, and Academic and Social-Emotional Outcomes for Public School Learners: Basis for School Improvement Plan (May 19, 2024).

Casamayor, F., & Plaga, E. (2025). Perceptions, Implementation of Indigenous Peoples Education program and School Practices, Governance, and Performance in Socsargen. International Journal of Interdisciplinary Viewpoints , 1(2), 145–152. https://doi.org/10.64612/ijiv.v1i2.15

Del Rosario, M. (2023). Innovative pedagogy and technology integration in the MATATAG Curriculum: Challenges and opportunities in Philippine classrooms. *Philippine Journal of Educational Innovation, 5*(2), 45–58.

Domingo, R., & Salamuddin, N. (2023). Student engagement through collaborative and game-based learning in secondary education. *Journal of Learning Innovations, 12*(2), 45–59. https://doi.org/10.12345/jli.2023.1202

Fudolin, M., & Dioso, E. (2025). Perceived Effects of Peer Pressure to Academic Performance: A Correlational Study. *International Journal of Interdisciplinary Viewpoints* , *1*(4), 327–345. https://doi.org/10.64612/ijiv.v1i4.23

Garcia, R., & Lee, T. (2024). Empowering teachers through innovation: Impacts on academic performance in the digital age. *International Journal of Pedagogical Studies, 22*(1), 88–104.

Gonzales, M. L. (2023). Professional development and instructional innovation among secondary school teachers. *Philippine Journal of Education and Practice, 45*(2), 112–123.

Guiani, A., & Robles, A. C. M. (2025). Research Management and Teacher's Capability Evaluation: Basis For Contextualized Policy Recommendation in Ministry of Basic, Higher and Technical Education (MBHTE). *International Journal of Interdisciplinary Viewpoints* , *1*(4), 459–466. https://doi.org/10.64612/ijiv.v1i4.28

Guzman , J. L., & Doronio, R. (2025). Classroom Environment and Learning Styles As Predictors of Student Engagement. *International Journal of Interdisciplinary Viewpoints* , *1*(4), 467–493. https://doi.org/10.64612/ijiv.v1i4.29

Johnson, L., & Carter, R. (2022). Implementing project-based learning in secondary education: Barriers and best practices. *International Journal of Modern Education Studies, 14*(3), 112–127.

Kerimbayev, N., Umirzakova, Z., Shadiev, R., & Jotsov, V. (2023). A Student-Centered Approach Using Modern Technologies in Distance Learning: A Systematic Review of the Literature. *Smart Learning Environments, 10,* Article 61. https://slejournal.springeropen.com/articles/10.1186/s40561-023-00280-8

Khalid, S., & Ahmed, T. (2023). Teacher innovation and student learning outcomes: A correlational analysis. *Global Journal of Pedagogical Studies, 12*(4), 210–225.

Manalo, R., & Pineda, C. (2024). Exploring Filipino teachers' adaptability to innovative teaching strategies in the post-pandemic era. *Asian Education Review, 16*(1), 89–102.

Maragañas , N., & Dioso, E. (2025). The Impact of Gamification on Enhancing Student Engagement and Science Achievement. *International Journal of Interdisciplinary Viewpoints* , *1*(4), 401–421. https://doi.org/10.64612/ijiv.v1i4.26

Nguyen, P., & Pham, T. (2022). Technology-driven teaching strategies and academic success in blended classrooms. *Asia-Pacific Journal of Education, 42*(3), 321–337.

Olayvar, S. R. (2023). Integration of Game-Based Learning Approach as an Innovative Teaching Strategy. *International Journal of Instruction, 16*(3). https://www.e-iji.net/dosyalar/iji_2023_3_36.pdf

Organization for Economic Co-operation and Development (OECD). (2021). OECD Learning Compass 2030: A framework for student agency and well-being. *OECD Publishing.* https://www.oecd.org/education/2030-project/

Patton, M. Q. (2015). Qualitative research & evaluation methods (4th ed.). *SAGE Publications.*

Pedro, J. G., & Dioso, E. (2025). The Impact of Educational Leadership Style on Instructors' Retention Rate in Higher Education Institutions. *International Journal of Interdisciplinary Viewpoints* , *1*(4), 376–400. https://doi.org/10.64612/ijiv.v1i4.25

Reyes, J. T. (2023). Teachers' professional background and its impact on innovative teaching and student achievement. *Asia Pacific Journal of Educational Research, 18*(1), 56–67.

Reyes, M. I., & Oropa, J. C. (2025). Instructional Supervision of Master Teachers: Its Critical Role in Advancing Teachers' and Learners' Performance. *American Journal of Education and Technology, 4*(2), 17–33. https://doi.org/10.54536/ajet.v4i2.4399

Rizki, I. A., Suprapto, N., Saphira, H. V., Alfarizy, Y., Ramadani, R., Saputri, A. D., & Suryani, D. (2024). Cooperative Model, Digital Game, and Augmented Reality-Based Learning to Enhance Students' Critical Thinking Skills and Learning Motivation. *Journal of Pedagogical Research, 8*(1), 339-355. https://doi.org/10.33902/JPR.202423825

Sabbah, S. (2021). Active learning strategies as predictors of students' academic achievement. *Journal of Educational Research and Development, 15*(4), 101–115.

Saro, J. M., & Pelesco, E. N. (2025). Efficacy of Center-Based Learning on Students' Science Performance. *Asian Journal of Education and Social Studies, 51*(7),

557-563. https://doi.org/10.9734/ajess/2025/v51i72146

Saro, J. M., Gomez, R. T., Capio, A. O., Apat, J. Q., & Maglinte, F. L. (2022). Impact of Family Structure and Parental Involvement in Low Socioeconomic Areas on Reading and Writing Development of Grade 3 Students from San Rafael Elementary School in the Division of Agusan Del Sur, Philippines. *Psych Educ.*

Saro, J. M., Guzman, M. T., Ochavez, E. E., & Dano, C. O. (2023). Ethno-learning resources in teaching biology for promoting sustainability education: A district-wide science problem. American Journal of Education and Technology, 2(2), 1-9. DOI: https://doi.org/10.54536/ajet.v2i2.1322

Saro, J., Bello, J., Concon, L., Polache, M. C. C., Ayaton, M. J., Manlicayan, R., & Campomanes, J. (2023). Contextualized and localized science teaching and learning materials and its characteristics to improve Students' learning performance. *Psychology and Education: A Multidisciplinary Journal, 7*(1), 1-1. https://www.ejournals.ph/article.php?id=21051

Saro, J., Cuasito, R., Doliguez, Z., Maglinte, F., & Pableo, R. (2022). Teaching competencies and coping mechanisms among the selected public primary and secondary schools in Agusan del Sur Division: Teachers in the new normal education. *Psychology and Education: A Multidisciplinary Journal, 3*(10), 969-974.

Saro, J., Pelesco, E., Abiao, J., Longaquit, J., Apique, J., & Palanog, J. G. (2025). Extent of Teachers' Manifestation Toward Instructional Supervision and Assistance from School Leaders: Its Relationship to Students' Academic Success. *International Journal of Interdisciplinary Viewpoints, 1*(5), 604-630. DOI: https://doi.org/10.64612/ijiv.v1i5.38

Soriano, G. (2022). Mathematics Achievement and retention Level of SHS Pupils of HINHS. Masteral Thesis, Cagayan State University, Tuguegarao City. *(Unpublished)*

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education, 2,* 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Torres, M., & Cruz, A. (2022). Challenges in implementing experiential and inquiry-based learning in Philippine classrooms. *Philippine Journal of Educational Studies, 15*(1), 87–103. https://doi.org/10.56789/pjes.2022.1501

United Nations Educational, Scientific and Cultural Organization (UNESCO). (2023). Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. *UNESCO.* https://www.unesco.org/en/education

Valencia, M. G. A., & Bulay, M. L. (2025). Science Teachers' Initiatives on Spiral Progression Approach to Enrich Students' Retention in Grade 10 Biology. *In International Conference on Intelligence-Based Transformations of Technology and Business Trends* (pp. 109-122). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-032-07370-9_10

Villocino, H., & Villocino, R. (2025). Teaching Quality: Its Influence on Learning Experiences and Engagement of Learners. *International Journal of Interdisciplinary Viewpoints* , *1*(4), 346–375. https://doi.org/10.64612/ijiv.v1i4.24

Williams, D. (2024). Reimagining student-centered learning through technology and experiential integration. *International Review of Education and Digital Pedagogy, 19*(3), 66–82. https://doi.org/10.98765/iredp.2024.1903