



THE ROLE OF PROFESSIONAL DEVELOPMENT IN BOOSTING STUDENTS' PERFORMANCE

Cathyrine M. Pabua ¹, Michelle L. Mustacisa ²

¹ Elementary Education, Schools Division of Samar, San Jose de Buan, Philippines

² Elementary Education, Schools Division of Catbalogan City, Catbalogan City, Philippines

ABSTRACT

Professional development (PD) serves as a vital mechanism for enhancing teacher competence, instructional quality, and ultimately, student learning outcomes. This study determined the role of professional development (PD) in enhancing students' academic achievement in the District of San Jose de Buan, Schools Division of Samar, during the School Year 2025–2026. Employing a quantitative-descriptive, correlational, and comparative research design, the study examined the perceptions of teachers and school administrators regarding the role of PD in strengthening teaching capacity across six domains: content knowledge and pedagogy, learning environment, diversity of learners, curriculum and planning, assessment and reporting, and community linkages and professional engagement. Findings revealed that both teachers and administrators strongly agreed on the importance of PD in improving instructional effectiveness and professional competence, with no significant difference between their perceptions. Teachers' positive attitude toward PD emerged as the strongest predictor of their perception of its importance, while age and teaching experience showed weak negative correlations. Results also indicated a significant but weak correlation between teachers' perceived PD role and students' academic achievement, suggesting that PD contributed modestly to student performance. Challenges in accessing PD were rated as "slightly a challenge," primarily due to scheduling conflicts. The study recommends strengthening collaborative PD planning, promoting attitude-focused growth programs, and ensuring accessible and relevant PD opportunities.

Keywords: *Professional Development, Teacher Capacity, Academic Achievement, Educational Leadership, Instructional Improvement*

INTRODUCTION

Professional development (PD) is widely recognized as a critical factor in enhancing the quality of teaching and, consequently, student achievement. From the researcher's perspective, while effective teaching is central to student success, many educators lack access to ongoing, targeted professional development that equips them to meet evolving instructional demands. This study addresses the gap in understanding how specific, context-based professional development programs influence teacher effectiveness and student performance. Unlike previous research that often examines PD in general terms, this study focuses on the localized effects of targeted professional development in the District of San Jose de Buan, Schools Division of Samar, offering practical insights for both policymakers and educators aiming to optimize teacher growth and student learning outcomes.

Globally, research consistently underscores the importance of teacher professional growth for educational improvement. Effective teachers do more than deliver content; they engage, motivate, and support learners to reach their full potential. Studies suggest that sustained, job-embedded professional development, such as collaborative learning communities, coaching, and mentorship, is more impactful than isolated workshops (Darling-Hammond et al., 2017; Garet et al., 2001; Loucks-Horsley et al., 2019). Conversely, insufficient investment in professional development can erode teacher confidence and limit instructional effectiveness, creating barriers to school improvement (Guskey, 2022). These findings highlight that professional development is not only a tool for individual growth but also a strategic lever for systemic educational advancement.

At the national level, the Philippines continues to face challenges in teacher capacity-building. According to SEAMEO (2019), only 44.8 percent of teachers received training in teaching methodologies, while 34.6 percent received training in subject-matter expertise. Participation in professional development activities remains limited, with 65.5 percent citing lack of opportunities or resources. Despite this, 71.4 percent of teachers reported that PD activities moderately to significantly improved their teaching practices (Philippine Normal University, 2018). Such data indicate a pressing need to expand access to high-quality, targeted professional development that directly addresses teachers' instructional needs.

The District of San Jose de Buan highlights the local dimension of this challenge. The District Learning and Resource Development Report (2024) reveals that approximately 62 percent of elementary school teachers have not received professional development tailored to contemporary teaching demands. This gap negatively affects student learning, contributing to issues such as low motivation, limited engagement, and classroom management challenges. Local academic performance, while slightly above the national standard, shows fluctuating results: in SY 2022-2023, the district achieved an average grade range of 77 percent; in SY 2023-2024, 76.25 percent; and in SY 2024-2025, 78.40 percent (District Consolidated PROMEDS Report, 2024). These trends underscore the need for continuous professional development as a strategy for sustained improvement in student outcomes.

This investigation is further anchored on several key theoretical perspectives. Social Learning Theory highlights that teachers acquire new knowledge through collaboration and shared professional experiences, emphasizing the importance of teacher self-efficacy (Darling-Hammond et al., 2017). Program Evaluation Theory provides a framework for systematically examining the implementation and outcomes of these initiatives (Weiss, 1972). Additionally, Teacher Effectiveness Theory posits that improving teacher quality is the most significant factor in enhancing student learning outcomes (Hanushek, 2011).

Finally, Organizational Learning Theory explains how schools can foster a culture of collective reflection and innovation to improve overall performance (Argyris & Schön, 1978). To address these challenges, this study investigated the effectiveness of targeted professional development strategies on teacher skills and student achievement. By analyzing the relationship between teacher growth, instructional practices, and student performance, this research aimed to provide evidence-based recommendations for enhancing professional development programs. The study's significance lay in its potential to inform policymakers and educational leaders about the most effective approaches to improve teaching quality, ultimately contributing to better student outcomes at both the classroom and school levels.

Research Questions

This study determined the role of Professional Development (PD) in boosting students' achievement in the District of San Jose de Buan, Schools Division of Samar, for the School Year 2025-2026.

Specifically, the research sought answers to the following questions:

1. What is the profile of the teacher-respondents in terms of:
 - 1.1 age and sex;
 - 1.2 civil status;
 - 1.3 gross monthly family income;
 - 1.4 highest educational attainment;
 - 1.5 number of years in teaching;
 - 1.6 teaching position;
 - 1.7 performance rating based on the latest IPCRF;
 - 1.8 relevant in-service trainings; and
 - 1.9 attitude toward professional development?
2. What is the role of professional development in strengthening teachers' capacity as perceived by teacher-respondents and school administrator-respondents along the following parameters:
 - 2.1 content knowledge and pedagogy;
 - 2.2 learning environment;
 - 2.3 diversity of learners;
 - 2.4 curriculum and planning;
 - 2.5 assessment and reporting; and

- 2.6 community linkages and professional engagement?
3. Is there a significant difference between the teacher-respondents and school administrator-respondents' perceived role of professional development in strengthening teachers' capacity?
 4. What is the academic achievement of the student-respondents based on their general weighted average during the School Year 2025-2026?
 5. Is there a significant relationship between the teacher-respondents' perceived role of professional development in strengthening their capacity and the following:
 - 5.1 teacher-respondent profile variates;
 - 5.2 school administrator-respondents perceived role of professional development; and
 - 5.3 student-respondents' academic achievement?
 6. What are the challenges perceived by the teacher respondents in accessing professional development opportunities?
 7. What intervention program may be derived based on the significant results of the study?

METHODOLOGY

Research Design

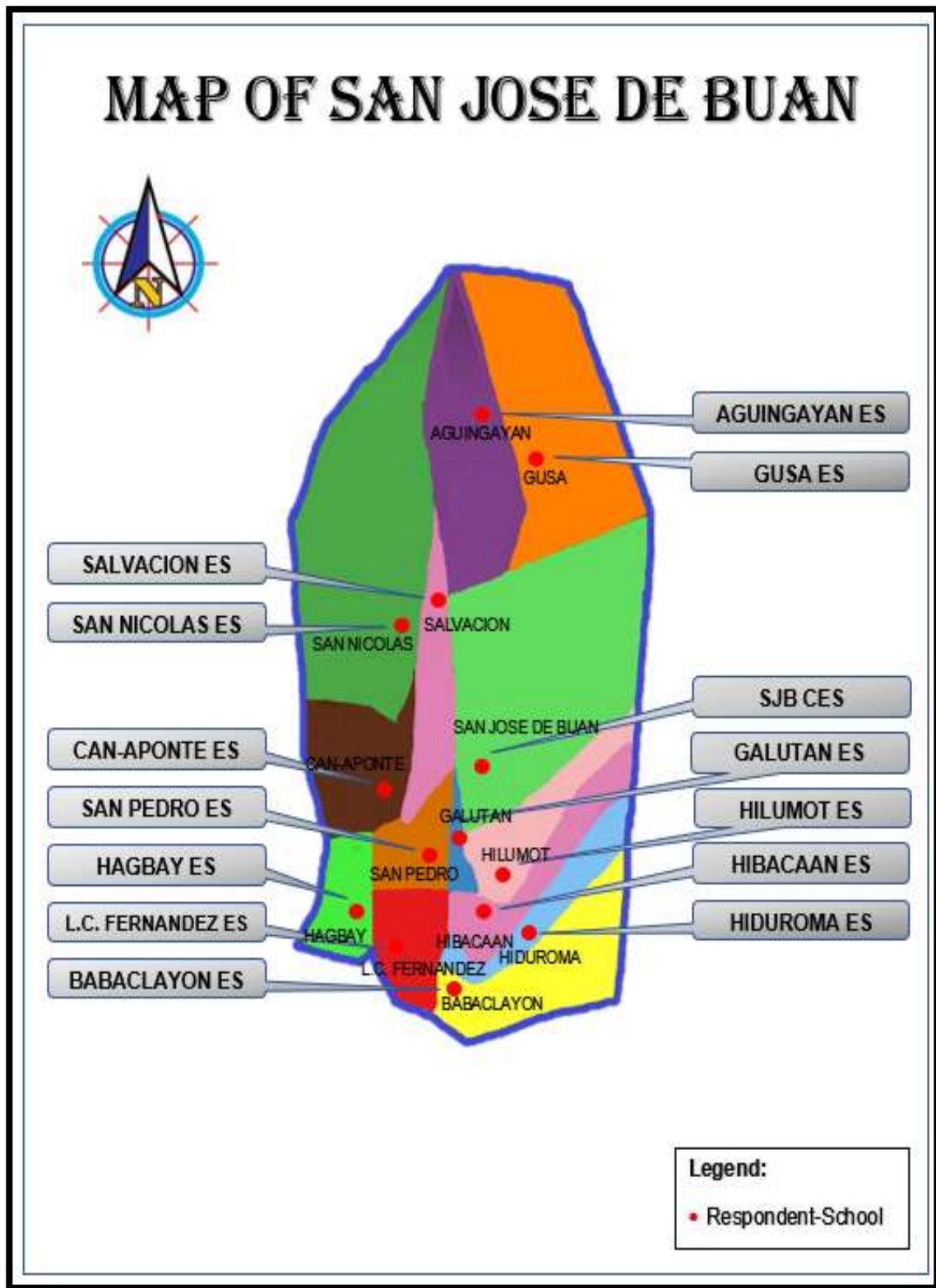
This study utilizes a quantitative research approach employing a descriptive-correlation design. The descriptive component is used to characterize the profile of teacher-respondents and assess their professional development priorities, while the correlation analysis determines the relationship between teacher capacity and student academic achievement.

Locale of the Study

The study is conducted within the District of San Jose de Buan, Schools Division of Samar. Historically, San Jose de Buan transitioned to an independent municipality in 1969 via Republic Act No. 5868 and is politically divided into 14 barangays. Therefore, the research involves 14 specific elementary schools.

Figure 1

The Map Showing the Locale of the Study



Respondents and Sampling Procedure

The respondents are elementary grade teachers in the District of San Jose de Buan for the School Year 2025-2026. The study utilizes total enumeration (purposive sampling) to involve the entire population, estimated at 106 teachers, ensuring a comprehensive representation of the district's teaching force.

Table 1
Number of Respondents of the Study by School

School	No. of Teachers (N)	No. of School Administrators (n)
Salvacion Elementary School	4	1
San Nicolas Elementary School	7	1
Galutan Elementary School	5	1
Gusa Elementary School	5	1
San Jose de Buan Central Elementary School	20	1
Can-Aponte Central Elementary School	7	1
San Pedro Elementary School	5	1
Hagbay Elementary School	5	1
LC Fernandez Elementary School	5	1
Babacloyon Elementary School	7	1
Aguingayan Elementary School	6	1
Hibacaan Elementary School	5	1
Hilumot Elementary School	6	1
Hiduroma Elementary School	5	1
TOTAL	92	14
Response Rate	100%	

Instrumentation and Validation

The research uses a structured questionnaire adapted with minor modifications from DepEd Memorandum No. 050, s. 2020. The instrument is divided into three parts:

Part I: Profile variates including age, sex, civil status, income, education, years in teaching, position, IPCRF rating, and training.

Part II: A 10-item checklist determining attitudes toward PD using a five-point Likert scale (5-Strongly Agree to 1-Strongly Disagree).

Part III: An assessment of PD priorities across seven domains: content knowledge and pedagogy, learning environment, diversity of learners, curriculum and planning, assessment and reporting, community linkages, and professional engagement.

Student achievement data are collected through official school records (GWA).

The instrument underwent expert validation by a panel focusing on face, content, construct, pragmatic, and convergent-discriminant validity to ensure clarity and relevance

Data Gathering Procedure

The process followed a systematic timeline from July to April. After securing formal approval from the Schools Division Superintendent, Public Schools District Supervisor, and school heads of the Division of Samar, the researcher administered the survey and collected GWA results between September and November 2025. Data were subsequently tabulated and analyzed using statistical software.

Statistical Treatment of Data

Descriptive and inferential statistical tools, both parametric and non- parametric was utilized in the analysis of data, which include Frequency Count, Percentage, Median, Mean Absolute Deviation, Weighted Mean, Mann-Whitney U-Test, Spearman's Rank Coefficient of Correlation or the Spearman's Rho, Point-biserial correlation and eta correlation.

Frequency Count. This tool was used to determine the personal characteristics of the teacher-respondents in terms of the magnitude of occurrences.

Percentage. This measure was used to convert the magnitude of occurrence of each variable concerning the total respondents using the following formula (Sevilla et al., 1992:200):

$$P = [f/N] \times 100$$

where: P refers to the percentage;
f refers to the number of occurrences; and
N refers to the total number of samples.

Mean. This was utilized to express the average of identified characteristics of the respondents, specifically on data measured on ratio and interval scales. The formula used was (Freud and Simon, 1992:35):

$$\mu = \frac{\sum fX}{N}$$

where: μ refers to the arithmetic mean or average;
f refers to the frequency of occurrence;
X refers to the identified variable; and,
n refers to the sample size.

Median. This statistical tool was used to express the middlemost point of some of the identified characteristics of the respondents specifically on the not normally distributed ratio and interval scale data. The following formula (Ferguson & Takane, 1989:35) was used:

$$M_d = \left(\frac{[1/2N - F]}{f} \right) i$$

where: M_d refers to the middlemost point of an array of observations;
 N refers to the total observations;
 F refers to the accumulated frequencies equal to or less than 1/2 of the total observations; and
 f refers to the number of occurrences in the assumed Midpoint step distribution.

Mean Absolute Deviation. This tool was used to describe the extent to which not normally distributed data varied. The following formula (Ferguson & Takane, 1989:35) was used:

$$MAD = \frac{\sum |X_i - \mu|}{n}$$

where: MAD refers to the mean average deviation;
 $|X_i - \mu|$ refers to the absolute difference between the observation and the mean; and
 n refers to the number of observations.

Weighted Mean. This statistic was employed to determine the collective appraisal of the teacher-respondents regarding their attitude and the factors affecting the strategies to strengthen teachers' capacity and the role of Professional Development (PD) in boosting student achievement of the teacher-respondents in terms of the identified areas.

The formula (Pagoso, 1997:111) that was employed is as follows:

$$\mu_w = \frac{\sum f_i X_i W_i}{n}$$

where: μ_w refers to the weighted mean;
 f_i refers to the frequency of a category of variable;
 X_i refers to the identified category of a variable;
 W_i refers to the weights that are expressed in a five--point scale; and,
 n refers to the sample size.

In interpreting the weighted mean for the attitude toward reading, the following set of five-point scales was used:

<u>Range</u>	<u>Interpretation</u>	
5	Strongly Agree	(SA)
4	Agree	(A)
3	Uncertain	(U)
2	Disagree	(D)
1	Strongly Disagree	(SD)

Furthermore, in interpreting the weighted mean for the strategies to strengthen teachers' capacity and the role of Professional Development (PD) in boosting students' achievement, the following five-point scale was used:

<u>Range</u>	<u>Interpretation</u>	
4.50-5.00	Strongly Agree	(SA)
3.50-4.49	Agree	(A)
2.50-3.49	Uncertain	(U)
1.50-2.49	Disagree	(D)
1	Strongly Disagree	(SD)

Mann-Whitney U Test. This was used to determine whether the ranks of one group tended to be higher or lower than those of another group. This test effectively assessed the null hypothesis that the two groups had identical distributions against the alternative hypothesis that they differed. Unlike the t-test, which compared means, the Mann-Whitney U Test compared medians or general shifts in distributions, making it appropriate for data that were not normally distributed (Field,2018).

Spearman's Rank Coefficient of Correlation. The Spearman's Rho was employed to associate linear relationship between two variables that are in a not normal distribution using the following formula (Walpole, 1997:460):

$$\rho = 1 - \frac{6\sum D^2}{N^3 - N}$$

where: ρ refers to the coefficient of linear association between paired ranks assigned to individual scores on two variables;
D refers to the deviation between paired ranks; and
N refers to the total number of paired observations.

Point Biserial Correlation. This statistical tool used to determine the strength and direction of the relationship between one continuous variable and one dichotomous variable. It is a special case of Pearson's correlation coefficient, expressed mathematically as equivalent to Pearson's r when one variable is dichotomous (Osborne, 2005):

$$r_{pb} = \frac{M_1 - M_0}{s_n} \sqrt{\frac{n_1 n_0}{n^2}}$$

Eta Correlation. This statistical tool was used as a measure of effect size primarily in analysis of variance (ANOVA). It quantified the proportion of variance in the dependent variable explained by the independent variable(s). Eta squared represented the strength of association between categorical independent variables and continuous dependent variables. Unlike Pearson's correlation, which captured only linear relationships, eta correlation accounted for both linear and non-linear associations (Lakens, 2013):

$$N^2 = \frac{SS_{\text{effect}}}{SS_{\text{total}}}$$

where: SS_{effect} is the sum of squares for the effect of interest (the variance explained by the independent variable)

SS_{total} is the total sum of squares (total variance in the dependent variable)

Interpretation guidelines for eta squared effect sizes commonly follow:

.01 = small effect

.06 = medium effect

.14 or higher = large effect

The researcher followed a decision rule in testing the hypotheses: the null hypothesis was accepted if the computed test value was less than the critical or tabular value, or if the p-value exceeded the significance level α . Conversely, the null hypothesis was rejected if the computed value was equal to or greater than the critical value, or if the p-value was equal to or less than α . The level of significance was set at $\alpha=0.05$ for a two-tailed test. To ensure precision and accuracy in data processing, appropriate statistical software packages were employed.

RESULTS

The results of this study are derived from the systematic assessment of 141 Kindergarten teacher-respondents and their respective students across the Districts of Hinabangan I, Hinabangan II, Jiabong, Motiong, San Jose De Buan, Wright I, and Wright II. Through a combination of personal distribution and online platforms, the data collection process achieved a 100% retrieval rate, ensuring a complete dataset for analysis. The findings are presented in a systematic order corresponding to the six research questions, beginning with teacher profiles and concluding with the proposed intervention program.

To ensure accuracy, all data were processed using specialized statistical software with hypotheses tested at a 0.05 level of significance. The analysis utilized specific five-point interpretation scales to categorize teacher attitudes and student developmental performance, ranging from "Excellent" to "Unsatisfactory" for ECCD outcomes. This methodological framework allows for a nuanced evaluation of how the ECCD Checklist identifies age-appropriate milestones and detects developmental delays among the Kindergarten population in the Schools Division of Samar.

Profile of the Teacher-Respondents

The teacher-respondents' profile covers personal and professional characteristics essential to understanding the study's context. The majority of respondents are in their mid-thirties, with a mean age of 36.24 years. The workforce is predominantly female (88.04%) and married (63.04%). Economically, 32.61% fall within the ₱30,000 to ₱34,999 income bracket. Professionally, 56.52% hold a baccalaureate degree with master's units, 65.22% are Teacher III, and 88.04% maintain an "Outstanding" IPCRF rating.

Table 2
Profile Variate of Teacher-Respondents

Profile Variate	Key Finding	Value/Percentage
Mean Age	Mid-thirties	36.24 years
Sex	Female	88.04%
Civil Status	Married	63.04%
Education	Baccalaureate with MA units	56.53%
Teaching Position	Teacher III	65.22%
Performance (IPCRF)	Outstanding	88.04%

As shown in Table 3, teachers participate most frequently in school-based and district-level trainings, while national-level participation remains the lowest. Despite these variations, teachers maintain a highly positive attitude toward professional development (Grand Weighted Mean = 4.63, "Strongly Agree").

Table 3
Relevant In-Service Training of Teacher-Respondents

Level	Weighted Mean	Interpretation
National	1.60	Sometimes
Regional	2.00	Sometimes
Division	2.71	Oftentimes
District	3.11	Oftentimes
School	3.60	Oftentimes

Perceptions on the Role of Professional Development

Both teachers and school administrators evaluated the role of professional development (PD) across six domains. As summarized in Table 3, both groups strongly agree on the vital role of PD in strengthening teacher capacity.

Table 4
Summary of Perceived Role of Professional Development (Grand Weighted Means)

Domain	Teacher Perceptions	Admin Perceptions	Interpretation
Content, Knowledge & Pedagogy	4.81	4.65	Strongly Agree
Learning Environment	4.87	4.92	Strongly Agree
Diversity of Learners	4.85	4.80	Strongly Agree
Curriculum and Planning	4.81	4.75	Strongly Agree
Assessment and Reporting	4.83	4.77	Strongly Agree
Community Linkages	4.85	4.82	Strongly Agree

The Mann-Whitney U Test results in Table 5 show that there is no significant difference between the perceptions of teachers and administrators across all domains, as all p-values exceeded the 0.05 level of significance.

Table 5
Comparison of Perceptions Between Teachers and Administrators

Indicator	U-Value	p-Value	Decision ($\alpha=.05$)
Content, Knowledge & Pedagogy	512.50	0.222	Accept Ho
Learning Environment	613.00	0.779	Accept Ho
Assessment and Reporting	608.00	0.741	Accept Ho

Student Academic Achievement

Student performance for the School Year 2025-2026 was generally satisfactory. Table 6 shows that half of the students achieved a General Weighted Average (GWA) between 85 and 89.

Table 6
Academic Achievement of Student-Respondents

Grade Range	Frequency	p-Value
95-99	4	4.35
90-94	21	22.83
85-89	46	50.00
80-84	21	22.83

Correlational Analysis

Statistical tests identified several significant relationships. The strongest correlation was between attitude toward PD and perceived capacity ($\rho = 0.673$, $p = 0.000$). Furthermore, a significant but weak correlation exists between the perceived role of PD and student academic achievement ($\rho = 0.228$, $p = 0.022$). No significant correlation was found between the perceptions of teachers and those of school administrators ($p = 0.324$).

Challenges in Accessing Professional Development

Teachers identified various obstacles to accessing PD, with an overall rating of 3.50 ("Slightly a Challenge").

Table 7
Primary Challenges in Accessing Professional Development

Challenge Statement	Weighted Mean	Interpretation
Conflict with work schedule	3.79	Slightly a Challenge
Additional work responsibilities	3.78	Slightly a Challenge
Expensive costs	3.75	Slightly a Challenge
Lack of relevant PD	3.25	A Challenge

While all items were considered challenges, scheduling conflicts and workload were identified as the most pressing barriers to professional growth.

DISCUSSION

The findings of this study provide a comprehensive look into the professional landscape of the District of San Jose de Buan, revealing a teaching force that is predominantly female, mid-career, and highly committed to professional growth. The majority of respondents holding Teacher III positions and pursuing master's units indicates a workforce that values academic advancement and long-term career stability. This professional maturity is further reflected in the "Outstanding" IPCRF ratings obtained by 88.04% of the teachers, suggesting that high instructional standards are already a localized norm.

A critical observation in the results is the localization of professional development (PD). Teachers participate "Always" in school-based in-service trainings (WM = 3.60) but only "Sometimes" at the national level. This aligns with the literature suggesting that sustained, job-embedded PD—such as collaborative learning within one's own school—is often more accessible and impactful than isolated, high-level workshops. The high frequency of school and district-level engagements highlights a strong reliance on local educational ecosystems to drive teacher growth.

Both teachers and administrators demonstrated a remarkable alignment in their perceptions of PD, with no significant difference found across any of the six professional domains ($p > 0.05$). Both groups "Strongly Agreed" that PD is most vital for the Learning Environment ($WM = 4.87$ for teachers; 4.92 for admins) and Diversity of Learners. This shared vision suggests a unified organizational culture in the district, where both leadership and staff prioritize the creation of safe, inclusive, and responsive classrooms as the primary goal of professional learning.

The correlation analysis offers the most significant insights for policy. The strongest predictor of perceived capacity enhancement was the teacher's attitude toward PD ($p = 0.673$, $p = 0.000$). This confirms that the effectiveness of any training program is heavily dependent on the "buy-in" and psychological readiness of the educator. Conversely, the weak negative correlations between PD perception and age/years of experience ($p = -0.219$ and -0.125 respectively) suggest that as teachers advance in their careers, they may perceive traditional PD as less novel or impactful. This highlights a need for differentiated PD that offers advanced leadership or specialized roles for veteran educators to maintain their engagement.

Regarding the impact on learners, the study found a significant but weak positive correlation between the perceived role of PD and student academic achievement ($p = 0.228$, $p = 0.022$). While this confirms that teacher growth does lead to "slight but meaningful improvements" in student GWAs, the "weak" nature of the association suggests that student achievement is a multi-faceted outcome influenced by other external factors not captured in this study, such as socio-economic status or school resources.

Finally, the identified challenges—primarily scheduling conflicts and workload ($WM = 3.79$)—serve as the rationale for the proposed Project LIGHT. By shifting toward more flexible, content-focused instruction and collaborative practices like Learning Action Cells (LAC), the district can mitigate the barriers of time and cost while sustaining the high positive attitudes teachers already possess. This intervention is designed to bridge the gap between "Outstanding" teacher performance and the "Satisfactory" academic achievement of students by institutionalizing a more reflective and data-driven professional culture

Conclusions

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

1. The teacher-respondents are generally in their mid-thirties, predominantly female, and mostly married, with a stable lower-middle family income. Professionally, they are well-qualified, mostly holding Teacher III positions with ongoing graduate studies and "Outstanding" performance ratings. While they are highly active in localized school and district-level trainings, their participation decreases at the national level, yet they maintain a highly positive and committed attitude toward professional growth.

2. Teachers strongly agree that professional development (PD) is a vital mechanism for strengthening their capacity across all seven professional domains, particularly in creating effective learning environments and addressing learner diversity. This indicates that educators view PD not merely as a requirement, but as an essential factor for improving instructional strategies, classroom management, and professional identity.

3. School administrators share a nearly identical perspective, strongly agreeing that continuous professional learning is the foundation for high teaching standards and quality education. There is a clear consensus among leadership that PD is instrumental for holistic teacher and learner development. There is no significant difference between the perceptions of teachers and school administrators regarding the role of PD. The statistical alignment ($p > 0.05$) suggests a unified organizational culture where both groups share a common appreciation for the importance of PD in enhancing educational quality.

4. The academic achievement of students in the District of San Jose de Buan is generally satisfactory and proficient, with the majority of learners meeting or exceeding expected academic standards through grades in the 85–89 range.

5. Several internal factors influence how teachers perceive the role of professional growth. A teacher's positive attitude is the strongest predictor of how much they value PD. Conversely, as teachers gain more experience or reach higher positions, they tend to perceive the impact of traditional PD slightly less strongly, suggesting a need for more specialized training for veteran staff. While teacher perceptions of PD do correlate with student academic achievement, the relationship is statistically significant but weak, implying that while teacher growth improves student outcomes, other external factors also play a role in student success. Furthermore, the perceptions of teachers and administrators are largely independent of one another.

6. Accessing professional development is perceived as "slightly a challenge". The primary obstacle is the conflict between training schedules and actual work responsibilities, whereas the relevance of the training itself is considered the least of their concerns. This suggests that the barriers to professional growth in the district are largely operational rather than content-based

Recommendations

Based on the conclusions of this study, the following recommendations are offered to enhance teacher professional development and student achievement:

1. *Strengthen Collaborative Planning.* The Department of Education Samar Division and school leadership should establish joint planning sessions between teachers and administrators to design training initiatives that align with both instructional needs and institutional goals.

2. *Promote Attitude-Focused Growth.* Schools should foster a culture of lifelong learning through motivational workshops and recognition programs, as a positive teacher attitude is the strongest predictor of successful professional growth.

3. *Provide Flexible Training Schedules.* To resolve the primary challenge of scheduling conflicts, PD programs should utilize midyear breaks, weekends, or asynchronous online modes to avoid compromising instructional time.

4. *Design Differentiated PD for Veteran Teachers.* Training should be tailored to the specific needs of experienced teachers, focusing on leadership roles, mentoring responsibilities, and advanced instructional innovations.

5. *Enhance Links to Student Outcomes.* Administrators should regularly monitor how strategies learned in PD are applied in the classroom and track their direct impact on student achievement.

6. *Institutionalize Collaborative Learning.* Schools should strengthen Learning Action Cell (LAC) sessions and professional learning communities to allow for peer-to-peer reflection and shared best practices.

7. *Establish Mentoring Systems.* Experienced teachers should be empowered to guide newly hired educators through structured coaching and mentoring programs.

8. *Ensure Resource Accessibility.* Education authorities must ensure that PD opportunities are well-communicated, inclusive, and localized to minimize participation barriers.

9. *Conduct Future Research.* Further studies should explore additional factors such as instructional supervision and leadership practices, or utilize longitudinal designs to determine long-term causal relationships between PD and student learning.

Proposed Intervention Program: Project LIGHT

As a direct response to the findings, the researcher proposes Project LIGHT: Leveraging Teachers Professional Development to Enhance Student Outcomes

Rationale and Objectives

Project LIGHT is designed to create a structured, supportive ecosystem that addresses the specific pedagogical challenges of the District of San Jose de Buan. The program aims to:

- Enhance instructional skills and content mastery through targeted SLAC and INSET trainings.
- Foster a collaborative school culture grounded in reflective practice and shared responsibility.

- Improve teacher capacity to address diverse learner needs to elevate student achievement.
- Establish ongoing feedback mechanisms to sustain long-term teacher growth.

Key Features and Strategy

The program emphasizes content-focused learning and active learning opportunities, where teachers engage in hands-on workshops and peer coaching. It involves school administrators to ensure that professional growth is aligned with school goals and receives necessary institutional support. The implementation strategy includes obtaining district-level approvals, conducting stakeholder conferences, and utilizing expert resource speakers from the division level.

Training Component and Budget

The core of the intervention includes a specialized training-workshop on the "Comics Approach in Reading Comprehension," which spans a year-round cycle of monthly SLAC sessions and reflective practice assessments. The estimated budgetary requirement for the program is ₱ 75,000, covering supplies, meals, and incidental expenses, to be funded through School MOOE, PTA funds, or local government support. Through this collaborative and data-driven approach, Project LIGHT seeks to bridge the gap between teacher growth and student performance.

Compliance with Ethical Standards

Strict adherence to the ethics of research was observed by the researchers. Informed consent was obtained from the research participants. Their well-being was safeguarded and their identities were anonymized. The study contains no substantial plagiarism and there was no conflict of interest in conducting this study.

Acknowledgments

The researcher extends deepest gratitude and appreciation to the individuals and institutions whose guidance and support were instrumental in the completion of this study.

The researcher expresses sincere thanks to Dr. Michelle L. Mustacisa, the research adviser, for providing invaluable guidance, expert advice, and the constant encouragement that strengthened the researcher's resolve to complete this work. Recognition is also given to Dr. Nimfa T. Torremoro, Dean of the Graduate Studies, for her exemplary leadership and academic direction throughout the process. The researcher is also grateful to the members of the oral defense panel, Dr. Letecia R. Guerra, Dr. Imelda M. Uy, and Dr. Janice R. Colebra, for their insightful suggestions and expertise which significantly improved the quality of this research.

Special appreciation is extended to the Schools Division Superintendent of Samar, the Public School District Supervisors, school heads, and the elementary teachers of the District of San Jose de Buan. Their cooperation and participation during the data collection process provided the essential foundation for this study.

The researcher also acknowledges Cristifa G. Llege and other colleagues for their steadfast support and companionship throughout this academic journey. Gratitude is further expressed to the researcher's family—parents, siblings, and daughter, Mary Francielyn P. Caballes—for their patience, inspiration, and unwavering moral support.

Finally, the researcher offers profound thanks to the Almighty God for the wisdom, strength, and divine guidance provided from the beginning to the end of this endeavor.

REFERENCES

- Argyris, C., & Schön, D. A. (1978). *Organizational learning: A theory of action perspective*. Addison-Wesley.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.
- Department of Education. (2020). DepEd Memorandum No. 050, s. 2020: DepEd Professional Development Priorities for Teachers and School Leaders for SY 2020-2023. Philippine Department of Education.
- District Consolidated PROMEDS Report, Quarter 3, School Year 2023-2024. San Jose de Buan District, Division of Samar.
- District Learning and Resource Development Report (2024). San Jose de Buan District, Division of Samar.
- Ferguson, G. A., & Takane, Y. (1989). *Statistical analysis in psychology and education* (6th ed.). McGraw-Hill.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage Publications.
- Freud, J. E., & Simon, G. R. (1992). *Statistical analysis for the social sciences*. Allyn & Bacon.
- Garet, M. S., Porter, A. C., Desimone, L. M., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915–945.
- Guskey, T. R. (2002). *Professional development and teacher change*. Teachers College Press.
- Hanushek, E. A. (2011). The economic value of higher teacher quality. *Economics of Education Review*, 30(3), 466–479.
<https://doi.org/10.1016/j.econedurev.2010.12.006>.
- Lakens, D. (2013). Calculating and reporting effect sizes to facilitate cumulative science: A practical primer for t-tests and ANOVAs. *Frontiers in Psychology*, 4, 863.
<https://doi.org/10.3389/fpsyg.2013>.
- Loucks-Horsley, S., Stiles, K. E., Mundry, S., Love, N., & Hewson, P. W. (2009). *Designing professional development for teachers of science and mathematics*. Corwin Press.
- Osborne, J. (2005). Point-Biserial Correlation coefficient. In *Encyclopedia of Research Design*.
- Pagoso, C. M. (1997). *Fundamental statistics for college students*. Rex Bookstore.
- Philippine Normal University. (2018). *Research on the status of teacher professional development in the Philippines*.

- Sevilla, C. G., Ochave, J. A., Punsalan, T. G., Regala, B. P., & Uriarte, G. G. (1992). An introduction to research methods. Rex Bookstore.
- Southeast Asian Ministers of Education Organization (SEAMEO). (2019). Teacher professional development in Southeast Asia.
- Walpole, R. E. (1997). Probability and statistics for engineers and scientists. Prentice Hall.
- Weiss, C. H. (1972). Evaluation research: Methods of assessing program effectiveness. Prentice Hall

APA Citation:

Pabua, C. M.& Mustacisa, M. L. (2026). THE ROLE OF PROFESSIONAL DEVELOPMENT IN BOOSTING STUDENTS' PERFORMANCE. Ignatian International Journal for Multidisciplinary Research, 4(8), 591–609. <https://doi.org/10.5281/zenodo.21873596>

Corresponding author: *mlmustacisa@gmail.com*